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This chapter will introduce the discipline of social psychology. It will outline what social psychology is about, provide some information about its history, and focus on the key topics that social psychologists study. It will also provide an introduction to how social psychologists do research, focusing on the research methods and techniques that social psychologists use. By the end of the chapter, you will have a basic knowledge of what social psychology is, and how it is done.

TOPICS COVERED IN THIS CHAPTER

» What is social psychology?
» Where does social psychology come from?
» Doing social psychological research
» The tools of social psychology
» Issues in conducting social psychological research
» Basic and applied research
» Cultural issues
» Research ethics
» Social psychology and other disciplines
» Dissemination of social psychology
» Critical thinking in social psychology
We will begin this chapter by defining social psychology and explaining how it is done, before guiding you through the many topics that have been studied by social psychologists in the following chapters. As we move through this chapter, we will discuss the origins and history of social psychology, from its emergence at the beginning of the 20th century, through the major influences on the discipline, to the current state of the art. The chapter then focuses on the ways in which social psychological research is done.

WHAT IS SOCIAL PSYCHOLOGY?

Scholars in many disciplines such as sociology, linguistics, social anthropology, philosophy and biology have long been interested in how people relate to one another and how they negotiate their way through a complex social world. The discipline of **social psychology** has drawn upon insights and knowledge from these academic subjects – and indeed other branches of psychology, such as cognitive, biological, developmental, organizational, clinical, health and personality psychology – to develop an understanding of how people navigate the complexities of their relationships with others and the social environment in which they live. Social psychology is broadly defined as the branch of psychology dedicated to the study of how people think about, influence and relate to each other.

As we will see throughout this book, social psychology has cast light on many aspects of human thought, feeling, behaviour and relationships. Its insights are applied to help people deal with depression, improve their personal relationships, reduce aggression, conserve natural resources and improve social harmony. Social psychology has informed social debate, raising popular awareness of many of its core concepts. Thus, terms like ‘cognitive dissonance’ (covered in Chapter 4) and ‘prejudice’ (covered in Chapters 11 and 12) are familiar to many people. A number of social psychologists have published bestselling books outlining what social psychology has to offer on topics such as how to persuade people (Cialdini, 2008, 2016), how to be happy (Gilbert, 2007; Haidt, 2007), the power of unconscious thought (Bargh, 2017; Wilson, 2002) and the limits of classical economic theory (Ariely, 2011). Other authors have published engaging popular books that draw heavily on social psychology in putting forward arguments about human nature (e.g., Harari, 2014).

The contribution of social psychology has been based on a set of unique strengths. Like other social sciences, it is concerned with issues of wide social importance, including aggression, tyranny, inequality, social harmony and social change. As a branch of psychology, it often uses experiments and related methods to test causal explanations of behaviour. As we shall see, causality is difficult to determine without using these methods. For the most part, social psychological experiments are done with individuals or small groups. Thus, rather like physics, social psychology strives to relate the very large and the very small, attempting to explain interactions between complex social and political processes and the intimate details of individual lives and minds. Also, for the most part, these experiments focus on just one or two causal variables at a time. Compared to other social sciences, social psychology has an emphasis on building relatively simple explanations of social phenomena. As we outline in this chapter, experimentation is not the only method that social psychologists rely on (or should rely on), but experiments are more important to social psychologists than to most other social scientists. This means that social psychology has a lot to offer policy makers, who are trying to address the social causes and cumulative effects of individual decision-making in domains such as crime, taxation and health.
Let us consider an example. We know that people who are in regular contact with members of different racial or religious groups tend to have fewer negative feelings towards such groups: that is, higher levels of contact are associated with lower levels of prejudice (see Chapter 12). However, this knowledge, by itself, is not enough to answer the chicken-and-egg question: do higher levels of contact result from, or are they caused by, lower levels of prejudice? And therefore, should those who want to reduce prejudice, such as schoolteachers, company managers or government agencies, engineer contact between members of different social groups? Or would this be useless, or worse than useless, and actually backfire? If increased contact is caused by low levels of prejudice rather than the other way around, forcing prejudiced people into contact with other groups may achieve nothing, except making the situation worse.

To find reliable answers to these questions, it is necessary to experimentally manipulate contact in a controlled way. If we find that participants who are exposed to contact subsequently show lower levels of prejudice than similar participants who are not, then we can begin to have confidence that there may be a causal relationship between the two factors. Maybe contact does reduce prejudice.

Running just one experiment is never enough, however, since human behaviour is so variable, and the measurement of human behaviour is so difficult, that apparently significant differences can emerge by chance. In other words, the results of any one study might be a fluke. They might also be a product of exactly how the experiment was conducted, such that different results would be observed in a different place, or with different methods. Replication is therefore a crucial ingredient in any science. Where experimental results are replicated, we can become increasingly confident in our conclusions (or less confident, if results vary). There are two main types of replication: direct replication and conceptual replication. Direct replications (also know as exact replications) tell us whether the original results can be relied upon in similar situations: for example, the same type of contact between the same groups produces the same changes in prejudice. They are usually attempted to ensure that the results of the original study were not the result of chance or, sometimes, poor research practices. Conceptual replications tell us whether the original results generalize to other situations: for example whether different types of contact produces the same results, and whether contact is beneficial between different sorts of groups (let’s say, religious vs. racial groups).

Although we have described direct and conceptual replication as two kinds of replication, it may be more accurate to think of replications as falling on a continuum (McGrath, 1981). Strictly exact replications are impossible in social psychology since it is the study of how human psychology interacts with social and historical contexts: time and place (Pettigrew, 2018). By definition, the replication study will recruit different participants and be run at a later date than the original study, and usually it will also happen in a different place, e.g., at a different university, often in a different part of the world (Crandall & Sherman, 2016; Stroebe & Strack, 2014).

Studies in social psychology do more than reveal whether basic causal relationships between two factors, like contact and prejudice, exist. They can also show when (under what circumstances) and how they exist. For example, as we shall see in Chapter 12, bringing members of different groups into contact works better when members meet as equals, rather than when one group has the upper hand. In social psychology, this is referred to as an interaction effect (see Figure 1.1a). That is, the two causes (contact and equality of status) interact with each other to predict levels of prejudice. Put differently, the effects of contact on prejudice depend upon, or are moderated by, equality of status. To test this idea, social psychologists might put members of different groups together, and vary whether they meet as equals, or where one group has higher status than the other. Social psychologists can also test for mediation, which refers directly to why or how a causal relationship works (see Figure 1.1b). For example, experiences of contact might make people less anxious about interacting with the other group, and dispel their fears that members of the other group do not like them. If you feel less anxious about interacting with people, and do not believe
they harbour bad feeling towards you, chances are you will feel more positive towards them: we tend to like people who like us (Chapter 7). The logic then is that reductions in anxiety mediate between contact and prejudice towards the other group. Contact reduces anxiety, which in turn reduces prejudice.

As we hope you are beginning to see, social psychology is a challenging but intriguing and rewarding discipline. No two individuals, social encounters or relationships are exactly the same. Any number of forces operate at once to shape social events, including moods, attitudes, values, stress, the weather, religion, culture and so on. To deal with this variety and complexity, a range of sub-topics are studied under the umbrella of social psychology. In this book, we approach the different sub-topics of social psychology as they have been grouped and studied by social psychologists over the history of the discipline. Of course, there is a significant amount of overlap in the way social psychologists study these particular topics. For example, a researcher interested in communication may also focus on relations between and within groups. A researcher interested in attitudes may also focus on social influence and persuasion. The topics are not therefore mutually exclusive, but can nevertheless be organized into general areas that social psychologists have studied in an attempt to understand human social behaviour (see Figure 1.2).
Specifically, some social psychologists study processes occurring within the individual, that is, aspects of the self, beliefs and attitudes. The study of these topics is approached in this book as the study of thinking and feeling (Part 1), focusing on how people understand themselves and others, and how they judge the social world. Other social psychologists study relationships between others, as presented in the part on relating (Part 2), focusing on the study of communication, persuasion and close relationships. Furthermore, some social psychologists study people’s belonging to small and larger social groups, studying how groups influence who we are and how they influence our behaviour (Part 3). Others apply basic social psychological knowledge to social issues such as aggression, social harmony and justice, and address societal problems in areas such as business, education and health (Part 4). What ties these sub-disciplines together is the general aim to further knowledge about the relationships between people and the social world. The focus on how people are affected by the actual or implied presence of others (Allport, 1954a) is what makes this branch of psychology social.

Here, we first focus on social psychology as a scientific discipline that uses the scientific method of collecting data, or results, to devise and empirically test theories about human nature. Just like the so-called ‘hard sciences’ such as biology and physics, many social psychologists empirically put theories to the test to make discoveries, draw conclusions and refine theories for future investigations. They test what are thought to be more or less universal laws of human nature. Researchers are typically aware that people from different cultures, or with different personalities and experiences, may behave differently. However, they normally assume that even these differences can be explained by more general principles. The discipline therefore develops through the same processes as other sciences. Of course, we can use the word ‘discipline’ here with two different meanings. First, social psychology is a discipline, or subject area of study. Second, as a scientific discipline it also requires the rigour that is needed for scientific enquiry. We therefore spend some time towards the end of the chapter focusing on the methods with which the science of social psychology is done.

However, not all social psychologists consider the discipline to be a science. Specifically, critical social psychologists argue that there are no universal laws when it comes to human nature (e.g., Harré, 1997). Critical social psychologists argue that when contexts change (e.g., time and place), so do social rules and conventions. According to this perspective, it is impossible to explain human behaviour using universal principles because these principles constantly change depending on the context. The term ‘critical’ is not explicitly meant to imply that mainstream social psychologists are uncritical. Instead, the term is one that is used in sociology (critical theory) which concerns the examination and critique of society and culture. Towards the end of the chapter, we focus on some of the methods used by critical social psychologists to study key issues in social psychology.

The two ‘camps’ of social psychology, although both address similar issues and are concerned with the same types of social problems, are often in a ‘battle’ with each other (e.g., Teo, 2015; Stainton Rogers, 2011). A minority of social psychologists adopt both approaches, but, typically, social psychologists identify themselves as either mainstream or critical social psychologists and, indeed, both feel strongly attached to the epistemological assumptions they make and the methods they use. However, although the two approaches may seem antagonistic and impossible to integrate, it is essential for students of social psychology to understand and appreciate the strengths (and limitations) of both approaches. We explore these throughout the chapter and the book.

WHERE DOES SOCIAL PSYCHOLOGY COME FROM?

Although social psychology has drawn on insights from other areas of psychology and other academic disciplines, it is itself a relatively recent discipline. To understand social psychology, some knowledge of its historical context is necessary. This section provides an overview of where social psychology has come from and how it has evolved over the decades. We also present some of the challenges that have faced the discipline over the years.
Early social psychology

The basic questions in social psychology have been the interest of scholars for many centuries. However, it is possible to trace some of the early influences for the discipline of social psychology as we know it today. In the 18th century, British scholars such as David Hume ([1741]1985) and Adam Smith ([1759]2007) wrote about matters related to social psychology. For example, Hume wrote about how people learn to explain events in their lives, by observing what causes tend to correspond with what effects. Hume’s writings were, in many respects, the beginning of ‘attribution theory’, the study of how people explain events, which we will encounter in Chapter 3. Smith wrote about emotions and morality, and their influence on how people trade and exchange goods with each other. His writings have been influential in the social psychological study of emotions (Chapter 4) and justice (Chapter 14). Eighteenth-century German scholars, such as Immanuel Kant, Wilhelm von Humboldt and Johann Friedrich Herbart, and the French scholar Auguste Comte also wrote about issues that are of interest to modern-day social psychologists. Kant wrote about the self and the self-image, Herbart argued that society was a vital aspect of human existence (Chapter 8), Humboldt stressed the relationship between language and thought (Chapter 5), and Comte argued that social processes could be examined using the same methods as those used in the natural sciences (Chapter 1, and throughout this book). Thus, social psychology has its origins in the British, German and French scholars of the 18th century. Indeed, Herbart and Comte are viewed by many as being the ‘fathers’ of social psychology.

In the late 19th century, a group of German scholars, largely inspired by the writing of Herbart, began to study the concept of the ‘collective mind’. In contrast to the ‘individual mind’, which was the focus of early forms of general psychology, the collective mind referred to the way in which people think about society, but also the way groups form a ‘mind’ of their own. Specifically, people who belong to the same social group or groups tend to think in the same way, have the same values and observe the same norms. This discipline was referred to as Völkerpsychologie (folk psychology or ‘psychology of the people’) and is also associated with the work of Wilhelm Wundt, who argued that individual and social psychology were distinct phenomena, and that individual consciousness was influenced by social customs and morals. Völkerpsychologie also had a significant influence on how early theorists viewed the behaviour of groups. As you will see in Chapter 10, when group behaviour is discussed in detail, theorists such as Gustave Le Bon ([1896]1908) and William McDougall (1920) viewed the group as possessing a ‘group mind’, in which ideas and notions become ‘contagious’, much like a disease, and spread throughout the group. According to this view, people in large groups can lose a sense of their individuality and often behave in primitive or antisocial ways that they would not even consider when acting alone. As we will see, this perspective led to a rather pessimistic outlook on groups and group behaviour. However, these early ideas helped us to appreciate that in order to understand human behaviour, we need to appreciate individuals as part of collectives and groups (Asch, 1951).

Social psychology began to assert its individuality as a discipline with a series of texts written by various authors (e.g., Baldwin, 1897; Bunge, 1903; McDougall, 1919; Orano, 1901), each exploring a variety of social psychological topics such as emotions, morals and individual character. McDougall (1919) argued strongly for the separation of social psychology from sociology and anthropology, while also arguing that social processes should be studied experimentally. Arguably, however, social psychology was first established as a distinct discipline at the beginning of the 20th century with the publication of Floyd Allport’s (1924) Social Psychology – an influential book that was subsequently adopted by teachers of psychology for many years. Inspired by the growth of experimental psychology in the USA, Allport argued that social psychology would develop as a discipline if it approached its questions as an experimental science. Others followed this perspective (e.g., Murphy & Murphy, 1931), and this North American approach to social psychology rapidly replaced the German tradition.
Early work in social psychology was also strongly influenced by **behaviourism**. In the early 20th century, there was a surge of research, especially animal research, focusing on the impact of positive and negative events on behaviour. Put quite simply, behaviourists argued that behaviour that was followed with a reward would continue, whereas behaviour that was followed by punishment would not. Animals (and people) could therefore be ‘trained’ to perform desired behaviours as long as they were rewarded for performing them (Figure 1.3). Much research supported this premise, showing that, for example, pigeons could be trained to move around in a circle, or nod if the behaviour was reinforced with a food reward (Skinner, 1938).

The behaviourist approach has been very influential in social psychology. Many social psychologists argue that people are more likely to think, feel and act in ways that are rewarded – or ‘reinforced’. They are also more likely to think, feel and act in ways that they see other people being rewarded for. For example, children develop negative attitudes about social groups from observing their parents (Aboud & Doyle, 1996; Castelli, Zogmaister & Tomelleri, 2009; Gibson, Rochat, Tone & Baron, 2017; Hughes et al., 2006). Children who watch TV programmes or play video games in which characters’ violence is rewarded become more violent than children who do not (Anderson, 2002; Eron, 1963; Huesmann, Moise-Titus, Podolski & Eron, 2003; see Anderson, Bushman, Donnerstein, Hummer & Warburton, 2015 for a review). Although the behaviourist approach explains a great deal of social behaviour, it has also been criticized for being simplistic. It is difficult to reconcile some more complex social phenomena (e.g., thoughts, attitudes, emotions) with the simplicity of the behaviourist approach. For example, a reward may not necessarily lead to behavioural reinforcement for all the right reasons. A child who is rewarded with treats to practise the cello may play the cello but rather unwillingly. They may be more motivated by the **extrinsic reward** (the treat) rather than the intended **intrinsic reward** of learning to play the cello well. If you are motivated only by extrinsic rewards, there’s a good chance you will not enjoy the task as much, or do it as well, as someone who is motivated by intrinsic rewards (Deci & Ryan, 2000).

Partly as a consequence of this limitation, **Gestalt psychology** emerged, emphasizing the importance of looking at a whole object and how it appears to people, rather than focusing on specific aspects of the object. The word ‘Gestalt’ comes from German and means ‘shape’. It is
a word used in English to refer to the concept of ‘wholeness’. Using the example in Figure 1.4, a Gestalt psychologist would argue that it is impossible to see the Dalmatian by focusing on any of the black or white spaces in the picture, nor can it be identified in parts (e.g., the tail, feet, head). When asked to focus on the picture as a whole, the image of the dog emerges to the perceiver and it appears all at once. It can only be perceived and appreciated as a whole object.

How is this relevant to social psychology? Gestalt psychologists argued that perception was important in determining attitudes and behaviours. In particular, Kurt Lewin created a framework called force field analysis (Lewin, 1943) that expressed human dynamics in the form of a map (see Figure 1.5). The map consists of a person’s needs, desires and goals, and arrows indicate the directions and strengths of these forces. All these social forces operated as a Gestalt. Lewin’s theory inspired the work of many other social psychologists, such as Muzafer Sherif, Solomon Asch and Leon Festinger, whose work you will read about throughout this book.

**Historical context**

It is also important to consider the historical context surrounding the development of social psychology. Earlier, we mentioned William McDougall (1919), whose arguments were largely influenced by Darwinian evolutionary theory – a perspective that was a dominant theme in anthropological and sociological research at the time. However, his arguments about human nature based on evolutionary theory were often ideologically driven and supremacist. Specifically, his social scientific explanations, and others at the time, were motivated by the desire to explain...
Lewin argued that behaviour is kept in a kind of equilibrium, being held in place by forces that drive change and forces that restrain change. If the number and length of the lines is roughly equal, change is unlikely. If you want to achieve change, you can increase the driving forces (e.g., by attending more classes, or doing more independent reading and exercises), or you can decrease the restraining forces (e.g., by procrastinating less, or taking on less paid work, if possible).

The social backgrounds of the scholars themselves have also strongly influenced the development of social psychology. For example, we spoke earlier about Kurt Lewin’s contributions to the influence of Gestalt principles on social psychology. Lewin was born into a Jewish family in Poland and served in the German army during the First World War. Forced to leave Germany in response to Hitler’s Nazism, his subsequent research focused on the social problems and other factors that contribute to stereotyping and prejudice. Similarly, the research of Muzafer Sherif into group processes and group conflict (see Chapter 9) was surely influenced by his own experience of Nazi persecution.

The atrocities of Nazi Germany have had a significant influence on social psychology. Much of the theory and research in social psychology has been inspired by the Holocaust. For example, the early work on social influence and conformity (see Chapter 9) was largely a result of researchers wanting to explain why people so readily complied with the requests of their superiors, and what processes could possibly explain the atrocities that occurred. Also, the study and theories of social loafing and bystander intervention (see Chapters 10 and 14) have been informed by the events of the Holocaust. For example, how do we explain why people sometimes idly stand by and let bad things happen? This impact can also be seen in the range of topics that social psychologists study – many of which involve the study of ‘evil’ or antisocial behaviours, such as aggression and discrimination. More recently, however, social psychologists have started to focus on positive social behaviours such as charity work and volunteering. Indeed, a branch of psychology has developed in recent years – positive social psychology – which focuses on the positive aspects of human nature, such as what makes people happy, what
factors contribute to life satisfaction, and the study of people qualities (e.g., Seligman, 2002, 2019; Seligman & Csikszentmihalyi, 2000; Seligman, Steen, Park & Peterson, 2005; see also Lomas, 2016).

Social psychologists continue to be influenced by real-world social problems and social events. For example, many social psychologists study the impact of modern media and technology on social interaction (e.g., Bargh & McKenna, 2004; Joinson, McKenna, Postmes & Reips, 2007; Waytz & Gray, 2018; Whitty & Young, 2016). Social interaction within the workplace is also an important area of research (e.g., Haslam, Postmes & Ellemers, 2003; Katz & Kahn, 1978; Steffens, Haslam, Schuh, Jetten & von Dick, 2017), as are the social psychological factors that influence health behaviours such as the decision to quit smoking (e.g., Fishbein, 1982; Scholz, Staler, Ochsner, Rackow, Hornung & Knoll, 2016; Stroebe, 2000), and the social factors that predict general wellbeing (Haslam, McMahon, Cruwys, Haslam, Jetten & Steffens, 2018). Some social psychologists study the topical issues of rioting and hooliganism (e.g., Cronin & Reicher, 2009; Stott, Adang, Livingstone & Schreiber, 2007; Stott, Ball, Drury, Neville, Reicher, Boardman & Choudhury, 2018). In short, social psychologists ‘move with the times’ and study important social problems as they emerge. In Chapter 15, we go into depth on some of the ways in which social psychologists address social problems.

**TIME TO REFLECT**

We have talked about how social psychology has been inspired by events such as the Holocaust. From what you know about social psychology so far, can you think of two other examples of societal issues, events or problems that might be investigated by a social psychologist?

**DOING SOCIAL PSYCHOLOGICAL RESEARCH**

**The need for empirical investigation**

Much of social psychology focuses on real-world questions and issues. For example, we want to understand the origins of prejudice and discrimination. We want to know why some people are shy at parties and others are more outgoing. We want to understand how to form better friendships and relationships. We want to know how to persuade someone to go out on a date. The list goes on. Because many social psychological questions lie at the heart of human nature, people have often already formulated some of the answers for themselves. However, with this ‘lay understanding’ of social psychology comes a problem – many social psychological findings are seen as ‘common sense’.

Much of this perception stems from what is known as **hindsight bias**, or the ‘I knew it all along’ effect. This refers to the tendency for people to see a given outcome as inevitable once the actual outcome is known (Bernstein et al., 2011; Blank, Musch & Pohl, 2008; Bradfield & Wells, 2005; Fischhoff, Gonzalez, Lerner & Small, 2005). It is particularly relevant to social psychology because much of the research in social psychology deals with everyday, ordinary aspects of human thinking and behaviour. Therefore, when a person reads about a social psychological finding in the newspaper, they are likely to see it as something that was obvious, or easy to predict. However, this is, quite simply, a bias. People who are naive to the outcome are significantly less likely to predict it. Some important findings in social psychology may seem obvious in hindsight. We highlight a few examples in the Exploring Further activity below.
Here are some common findings in social psychology. Are they obvious, or only in hindsight? You may like to cover the right-hand column and examine the accuracy of your predictions.

<table>
<thead>
<tr>
<th>Question</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is it true, as noted by a common English idiom, that familiarity breeds contempt? Or, do birds of a feather flock together?</td>
<td>In general, we tend to like people with whom we are more familiar. Familiarity is associated with increased liking (Chapter 7).</td>
</tr>
<tr>
<td>Does thinking about death make a person feel more helpless, patriotic or selfish?</td>
<td>They are likely to feel more patriotic. Thinking about the inevitability of death makes people think more about the values that are important to them (Chapter 8).</td>
</tr>
<tr>
<td>If someone asked you to do a favour for them, would you like them more or less?</td>
<td>If we do a favour for someone, findings suggest that we grow to like them more (Chapter 4).</td>
</tr>
<tr>
<td>If someone asked you to write an essay that went against your beliefs, would you feel better about it if you were paid nothing, a little, or a lot?</td>
<td>People tend to feel better about being untrue to their attitudes if they are paid nothing at all, or just a small amount (Chapter 4).</td>
</tr>
</tbody>
</table>

As we mentioned earlier, most people see themselves as lay social psychologists. Indeed, people do have a reasonable intuitive understanding of social behaviour even though they fall foul of the hindsight bias. However, a key difference between laypeople and social psychologists is that social psychologists – that is, mainstream social psychologists – devise theories to answer questions scientifically. They use a wide variety of research methods to test hypotheses, or testable predictions, about human social processes.

Researchers begin by asking a research question. For example, social psychologists might ask if powerlessness makes people more likely to believe in conspiracy theories, or if money makes people happy. The research question guides the research that is done. However, a social psychologist typically has an idea what to expect. The use of the scientific method involves the formulation of testable hypotheses (that is, what the social psychologists expect) that are based on theories and previous research, and the testing of those hypotheses with the aim of answering the research question. A simple depiction of the scientific method is presented in Figure 1.6.

A great deal of social psychological work is theory driven, that is, the research question itself derives from a set of assumptions and propositions that organize the findings of previous research. For example, we will talk at length in later chapters about research that has been derived from theories such as social identity theory, system justification theory and social dominance theory. Theories are often modified as a result of the findings of empirical research. For example, if hypotheses are not supported, this means that the theory is also not supported. Either the theory is incorrect (and needs to be revised) or a new investigation needs to be conducted that takes care of some potential flaws in the original investigation. Sometimes, when a study suffers some methodological flaws, these can influence the results and the study may not be a fair test of the hypotheses. Either way, research methods and theories are often modified as a result of empirical findings.

It must be noted, however, that a theory can never be ‘proven’ to be true. If a theory is supported by empirical findings, its predictive value is strengthened, but it can never completely
The discipline of social psychology

be shown to be true, or be the one and only explanation for the phenomenon of interest. Instead, it can be said not to be false. As Popper (1959) argued, scientific theories cannot be proven beyond doubt but they should nevertheless be falsifiable. It must therefore be possible to set up empirical investigations that disprove the theory. A theory can be seen as a plausible explanation of a phenomenon if researchers have failed to disprove it. As you read through this book, you will be able to identify many social psychological theories. As you encounter these theories, perhaps you can take some time to think about ways in which they might be falsified.

On the other hand, some research is only loosely based on theory and is instead driven by a particular social phenomenon or social event. For example, we mentioned earlier a research question involving the connection between powerlessness and beliefs in conspiracy theories. This type of research question is more driven by the motivation to explain a phenomenon (conspiracy beliefs) than applying a particular theoretical perspective. Or, a social psychologist may want to explain why the people of the USA almost universally rejoiced in the death of Osama bin Laden in May 2011, but responses in some parts of the world were quite different. Why are people’s perceptions of terrorism often so dissimilar? Research in social psychology is sometimes driven by a specific event rather than a theory. Of course, theories are crucial to the formulation of specific hypotheses, but the basic research question itself is sometimes driven by curiosity concerning a particular phenomenon.

Once the research question has been proposed and the hypothesis formulated, the social psychologist then needs to decide how to make the research happen. This leads into a discussion of some of the research ‘tools’ or methods at the disposal of social psychologists.

**Critical social psychology**

As mentioned earlier, not all social psychologists use the scientific method of hypothesis testing. In the 1960s and 70s, many social psychologists became concerned about the prominence of experimental social psychology focusing on social processes that occur at the level of the individual. European researchers such as Henri Tajfel (1972) and Serge Moscovici (1972) argued that because hypothesis testing tends to focus on rules that can predict individuals’ thinking and behaviour, social psychology was becoming less ‘social’ or, more specifically, less about social issues (see also Pepitone, 1981; Taylor & Brown, 1979). This was viewed as a ‘crisis’ for social psychology and researchers such as Tajfel and Moscovici conducted research endeavouring to put the ‘social’ back into ‘social psychology’. You will learn more about this crisis later in the Critical Focus box.

This perspective also led to the development of what we now know as critical social psychology, which focuses on the contexts of social behaviour and emphasizes the study
of human behaviour with respect to people’s interactions with others. Critical social psychologists often see empirical work in social psychology as driven by a particular agenda, specifically an individualist agenda, and so argue that it is not ideologically neutral. Of course, these are debatable points. Most social psychologists would refuse to accept the criticism that social psychology as an empirical science is asocial. Throughout this textbook you will undoubtedly appreciate the breadth and depth of the investigations conducted by experimental social psychologists in particular. Also, it is a bold statement to criticize a scientist for having an explicit research agenda. Most would argue that empiricism is about discovery, rather than simple confirmation of something we think we already know. However, the scientific method is not the only way of gaining knowledge about social psychology and how the social world is determined, in part, by the interactions of people within it (Teo, 2015; Stainton Rogers, 2011).

A significant minority of social psychologists are critical social psychologists. Many can be further classified as working in the area of discursive psychology, which argues that discourse (e.g., talk, written language) is the primary means by which people construct, communicate and interpret social meaning (e.g., Edwards and Potter, 1992; Tileagă & Stokoe, 2015; Wiggins, 2016). Another type of social psychology relates to social constructionism, which is informed by postmodernism (Nightingale & Crombie, 1999). Social constructionism emphasizes the way that social phenomena develop in social contexts. A social construct is a concept or activity that is a product (construct) of a particular group (Gergen, 1973, 1999; Jameson, 1991; Nicholson, 1990). Critical social psychologists are informed by Marxist theory and feminist theory (e.g., Bardwick., 1971; Burman, 2011), and by some of the influential work by Moscovici (1961) on social representations, or the study of shared beliefs and values that are held by a culture or group. This research challenges the assumption that people all share a common view, because they often come from radically different cultures with different shared assumptions. Thus, what we may call mainstream social psychologists and critical social psychologists have quite different origins. One thing they do agree on, however, is that the social world is both an antecedent and consequence of the individuals and groups within it.

**TIME TO REFLECT**

In the conflict between discursive or critical social psychology and its ‘mainstream’ counterpart, do you see echoes of the early division between German ‘folk psychology’ and American experimental social psychology?

**CRITICAL FOCUS**

**The 1970s ‘crisis’ in social psychology**

With the development of cognitive psychology in the 1950s and the shift away from behaviourism, the so-called ‘cognitive revolution’ took place. This brought a new set of research tools and empirical methods to the discipline of social psychology. Methods used by cognitive psychologists to study perception and memory became useful to social psychologists interested in many topics such as emotions, attitudes and stereotyping, allowing easy measurement of social psychological processes with individuals in the laboratory.

This led to the development of the new sub-field of social cognition in the 1970s and 80s, which rapidly became...
prominent within the field (Taylor, 1998). This development switched the focus of social psychology away from ‘macro’-level investigations of social issues to ‘micro’-level investigations of social phenomena as they occur at the level of the individual. For some social psychologists, this was seen as an important development that signalled the emergence of social psychology as a scientific discipline. Some argued that the discipline flourished, moving towards an integrated theoretical understanding of cognitive and social processes, and advanced applications of social psychological theory to important societal problems. Reliable and replicable findings in social psychology were an indicator that the discipline had come of age (e.g., Devine, Hamilton & Ostrom, 1994; Fiske & Taylor, 2008).

However, for some social psychologists, this emphasis on cognitive processes came at an unfortunate cost. Specifically, it was argued that as a consequence of using cognitive methods and analysing individuals, social psychology had become less ‘social’ (Ross, Lepper & Ward, 2010). In focusing on social processes as they occur within the individual, it was argued that the discipline had lost sight of the socially important issues that it was originally developed to address. It reduced complex social phenomena to something much less meaningful (e.g., what does a click of a button really tell us about prejudice?).

Many prominent European and American social psychologists have criticized social psychology for addressing issues of social importance with investigations at the level of the individual. For example, Tajfel (1972) emphasized the importance of the social group in social psychology, arguing for a more collectivist approach than the individualistic approach of contemporary North American social psychology. Other theorists, such as Bruner (1990) and Moscovici (1972), emphasized the importance of culture, arguing that culture is both the ‘tool and constraint of action and thought, the meeting point of the social and the individual’ (Liverta-Sempio & Marchetti, 1997, p. 6).

Also, Gergen (1989) argued that reducing real-world phenomena to cognitive representations of the world means that social events ‘cease to exist for the discipline as legitimate foci of concern’ (p. 463). Finally, in his history of social psychology, Allport (1954a) criticized experimental social psychology for its triviality and lack of generalizability. He argued that most studies in experimental social psychology are ‘snippets of empiricism, but nothing more’ (p. 68). Further, Allport wondered if the objective scientific methods chosen by experimental social psychologists can tell us very much at all about practical problems and social concerns. The new emphasis on the study of social phenomena at the level of the individual seemed to go against Kurt Lewin’s attempt to make the discipline socially useful.

Argument about the ‘crisis’ in social psychology continues to this day. In particular, many critical social psychologists argue that the crisis continues and that mainstream experimental social psychology still does not take the word ‘social’ seriously enough (Pancer, 1997). Alternative approaches, such as discursive psychology (e.g., Potter & Wetherell, 1987), ethogenics (Harré, 1979) and humanistic psychology (e.g., Shotter, 1984), attempt to understand people as constructions or products of their history, culture and environment. According to this standpoint, all behaviour should be understood within a social context, paying attention to historical, cultural, socioeconomic and political factors. It is argued that investigations at the level of the individual often fail to take such factors into account.

Questions
1. Think critically about the ‘crisis’ in social psychology, perhaps drawing up a table of the pros and cons of experimentation. What can we learn from experimentation and what can we not learn? Are there some issues in social psychology that are simply not suited to experimentation?
2. Think about the role of culture in social psychology. To what degree does culture hinder the arguably reductionist approach to social phenomena taken by experimental social psychologists?
3. Some alternatives to experimentation argue for more ‘deconstructionist’ approaches to the study of social psychology, analysing individuals’ complex psychological responses in the form of text. Arguably, such analyses are subjective. What are the advantages and disadvantages of subjectivity in social psychological investigations?

THE TOOLS OF SOCIAL PSYCHOLOGY

Once a research question has been proposed and a hypothesis has been formulated, a social psychologist needs to work out the best way to make the research happen. For most social psychologists, this means designing a study to put the hypothesis to the test. This is no small feat. There are many decisions that need to be made, first of which is the type of methodology that will best enable the social psychologist to test their hypothesis. A research methodology
Qualitative methodology
Research approach based on interpretations of data generally obtained by observation, use of archives or interviews. Data are typically verbal (e.g., spoken or written words), but interpretations of pictures, movement and other behaviours may feature.

Quantitative methodology
Research approach based on the systematic measurement of events or phenomena and the statistical analysis of data.

Data
Information, observations, measurements or responses that are collected, scientifically analysed and interpreted.

Qualitative research methods generally involve the collection of information in naturalistic settings. For example, a researcher may observe natural behaviour or language. They assign meaning to what they observe and interpret the behaviours and language in relation to their inherent meaning. On the other hand, quantitative methods involve the collection of numerical data – information, quantifiable observations, measurements or responses – for scientific analysis and interpretation. Typically, quantitative social psychologists attempt to control features of the empirical setting in order to directly test the factor of interest.

The choice of whether to use quantitative or qualitative methodology depends largely on the research question being asked. For example, if a researcher wishes to conduct an in-depth examination of a particular social phenomenon, they may be more likely to opt for qualitative methods. If, on the other hand, they are interested in the effect of a discrete event on a particular phenomenon, they may want to measure the factor and therefore conduct a quantitative investigation. The choice of research methodology can also be driven by epistemological assumptions. As we discussed earlier, critical social psychologists do not necessarily believe that there are ‘universals’ of human nature, so quantitative investigations that attempt to generalize principles across humans are not seen as appropriate. Critical social psychologists, therefore, almost exclusively utilize qualitative methods. Other researchers, however, believe that qualitative methods do not allow researchers to draw conclusions about human nature. If this is viewed as a key goal of social psychology to a researcher, then they will not opt for qualitative methods. On the other hand, there are many social psychologists who use a mixture of both quantitative and qualitative methods.

Quantitative methods
Surveys and questionnaires

Surveys and questionnaires are among the most common research methods used in social psychology. These tools involve simply asking people a series of questions that the researcher has carefully designed and put together to address a specific research question or questions. In surveys, participants are often asked a series of questions in the form of an interview in which the investigator records the participants’ answers. Alternatively, the survey can be conducted in the form of a questionnaire, where the participants record their own responses. A survey or questionnaire can ask for open-ended responses, that is, participants are asked to give their responses freely, in their own words. Responses may then be analysed using qualitative analytical techniques (see later in this chapter), or the researcher may code for specific predetermined responses and analyse the data quantitatively.

On the other hand, some questionnaires ask participants for numerical responses. The researcher carefully chooses the questions asked of the participants in order to test hypotheses. Participants are asked to record their responses to items on what is often referred to as a Likert-type scale, where participants respond with a number indicating their level of agreement or disagreement with a statement. These survey responses are averaged to obtain numerical scores for each participant on the variables of interest. In survey and questionnaire terminology, the relationship between one ‘variable’ (the predictor variable) on another (the criterion variable) is examined.

Surveys and questionnaires are a reasonably straightforward way to tap into people’s attitudes, values and beliefs and this is one reason for their popularity. Also, they allow researchers to collect a large amount of data, so for the social psychologist interested in making broad
conclusions about human nature, they are able to generalize their findings to the broader population. However, surveys and questionnaires are not without their disadvantages. In particular, the investigator chooses the questions to ask in the first place. Question choice may be subject to bias, in that the experimenter chooses a set of questions favouring a particular approach when others may have been fairer. When responses are not anonymous, participants may be reluctant to answer questions honestly and their responses may be subject to demand characteristics – they may respond in the way they think the investigator wants them to respond. Further, as we shall see in several chapters, people are not always conscious of all their attitudes (Nisbett & Wilson, 1977), and so are unable to report them in surveys and questionnaires. Also, questionnaires often fall prey to ‘response set’ – the tendency for people to always respond in the middle of a scale, or to agree to statements without thinking. Sometimes, this can lead to inflated responses (so-called ‘ceiling effects’) or responses that are too low (so-called ‘floor effects’). All these can influence how the results are analysed and interpreted.

The use of surveys and questionnaires also raises the issue of correlation versus causation (see Ethics and Research Methods box), which is addressed by the use of experiments.

**ETHICS AND RESEARCH METHODS**

**Correlation versus causation**

The use of questionnaires raises an important issue in social psychological research – that of correlation versus causation. In many areas of research, social psychologists are interested in examining the relationships between variables. Are increased values on one dimension (e.g., sexism) associated with increased values on another (e.g., prescriptive attitudes towards the behaviour of pregnant women, that is, the things that pregnant women should and should not do)? Are religious beliefs associated with happiness?

Correlational research examines the natural association between two or more variables, as in these examples. Such associations differ in their strength: some variables are strongly correlated with each other, whereas others are only weakly associated. Also, some variables are positively correlated, that is, as values on one variable
increase, values on another variable also increase (see (a) below). However, some variables are **negatively correlated**, meaning that as values on one variable increase, values on the other decrease (see (b) below). Correlations range in size from –1 (perfect negative correlation), through 0 (no correlation), to 1 (perfect correlation). As a general rule of thumb, a correlation of 0.2 (or –0.2) is a small relationship, a correlation of 0.4 (or –0.4) is a moderate relationship, and a correlation of 0.6 (or –0.6) is considered a strong relationship. The figures below show what correlational relationships might look like in a **scatterplot** – a graph of values of one variable on the x-axis, set against values of the other variable on the y-axis. Each dot on the graph represents one participant’s responses on both variables of interest. In short, correlational studies enable researchers to examine how strong the relationships between variables are.

Part (a) of the figure demonstrates a hypothetical strong **positive correlation** between the number of years a person has been educated and their income level. The more years a person studies, the more money they are likely to earn. Part (b) of the figure demonstrates a hypothetical strong negative correlation between the number of hours a student watches TV and their average mark on leaving university (out of 100). The more hours a person watches TV per week, the lower their grades are likely to be.

Correlational research does not, however, inform the researcher about **causality**. In other words, a researcher may hypothesize that sexism causes people to be more prescriptive about the behaviours of pregnant women, or that religion causes happiness, but cause cannot be established. It might be that attitudes towards the behaviour of pregnant women predict sexism, or there may be some third factor involved. It may be that religious beliefs increase people’s use of social support networks and it is this factor that makes people happier.

**Longitudinal research** is a type of correlational research that goes some way towards establishing causality. In longitudinal studies, researchers measure the same variables at different points in time on the same group of individuals. For example, a researcher might want to know how identical twins reared apart differ on a range of variables such as intelligence. If the twins are tracked over many years, it can be assumed, because they share the same genetics, that changes in other variables over time are likely to have been caused by upbringing. However, even with a longitudinal design such as this, it is possible that other variables can change over time which may affect the outcome variables of interest. That is, they cannot be sure that changes in variables such as intelligence are purely because of upbringing. The optimal way to determine whether changes in one variable bring about changes in another is to conduct **experimental research** in which levels of one variable are manipulated. We will talk more about this in the section ‘Experiments’ below.

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**Longitudinal research** involves repeated observations of the same variables over short or long periods of time.

**Experimental research** examines the effect of one variable on another variable(s).

**Independent variable (IV)** In an experiment, the IV is the variable that is manipulated and is hypothesized to cause a specific outcome in the dependent variable.

**Dependent variable (DV)** In an experiment, the DV is the variable that is measured and is hypothesized to be influenced by the IV.
Experiments

Survey and questionnaire studies enable social psychologists to answer a wide range of research questions, but, crucially, they do not allow researchers to infer causality (see Ethics and Research Methods box). This is often an important question in social psychology. To be sure about which variable ‘causes’ which, social psychologists conduct experiments in which they control factors in order to measure the direct effect of one variable on another. In an experiment, the variable that is manipulated is called the independent variable (IV). The IV is hypothesized to be the cause of changes in the dependent variable (DV), which the experimenter measures. The experimenter chooses how to manipulate the IV and the number of IV levels there should be. A condition is one level of the IV. For example, in a classic study of aggression (Chapter 13), Bandura, Ross and Ross (1961) had children watch adult models interacting with a doll (the Bobo doll). The experimental manipulation was the aggression displayed by the adult towards the doll. Either the adult showed aggression towards the doll, or interacted with the doll in a non-aggressive way.

In an additional control condition, there was no adult model. In this example, there were therefore three levels of the IV: the adult model was aggressive, non-aggressive, or there was no adult model. Bandura et al. measured the aggression levels of the children (the DV), finding that children displayed more aggression after watching the adults behave aggressively towards the Bobo doll compared to the non-aggressive condition or the control condition.

This example shows a good level of experimental control, allowing the researcher to stringently test their hypothesis. That is, by comparing the children’s aggression across the three conditions, it is possible to conclude with some certainty the extent to which viewing an aggressive model interact with the doll influenced their levels of aggression. Sometimes, however, complete experimental control is not possible or necessary. For example, social psychologists often want to investigate the effect of naturally occurring variables (e.g., age, gender, marital status) on various outcomes (e.g., life satisfaction). In such experiments, where the IVs of interest occur naturally, the researcher can take advantage of this and measure the DVs of interest. DVs in experiments can also be measured in a variety of ways, such as behaviours, physiological measures, such as heart rate and brain activity, and self-reported attitudes.

One way to conduct an experiment is in a laboratory, which ensures as much experimental control as possible. This does not necessarily mean a laboratory as you may think of it in terms of other sciences such as chemistry and physics. Sometimes, a social psychology laboratory is simply a room with desks, chairs and a computer. It does not have to be anything more...
than a quiet space for participants to complete an experimental task. However, although we have separated questionnaires and experiments in our discussion, many questionnaires are, in fact, experiments. It is possible to manipulate IVs through verbal instructions in a questionnaire, or by presenting participants with a verbal scenario or story. It is also possible to use online questionnaire software to conduct experiments so that participants can complete the experiment remotely rather than in a laboratory. Not all experiments are conducted by stern scientists wearing white lab coats.

There are various pros and cons of taking an experiment into the laboratory. As we have already mentioned, laboratory experiments allow a researcher as much control over the experiment as possible, therefore allowing for a stringent test of a hypothesis. However, one of the drawbacks is that the experiment can become artificial, thereby compromising the similarity between the experiment and the corresponding natural circumstances of interest in everyday life. This is known as the external validity (or mundane realism) of an experiment. In other words, when an experiment is so tightly controlled in a laboratory, some would argue that it cannot tell us a great deal about human nature in general, which is subject to many complexities that are eliminated in the laboratory.

At the same time, this level of control can be looked at another way – in controlling as many factors as possible, an experimenter is able to focus on one or more specific variables of interest. While it may not be natural per se, the researcher is able to speak with some confidence about the influence of the variable(s) that has been manipulated. In particular, an experiment is said to be high in internal validity (or experimental realism) if the researcher can be confident that it is the manipulated variable that is having the effect (if any) on the dependent variable(s) in the experiment. Poor external validity is not, therefore, always problematic. Sometimes, creating a bare and artificial experimental setting allows researchers to make specific theoretical and practical points, which would be difficult to make with the presence of other ‘noise’ in the study. If the ‘noise’ is controlled, and the conditions for participants are different in no way apart from the way determined by the manipulation, then the researcher can be confident that they have fairly put their hypothesis to the test. However, the manipulation must be meaningful and realistic to the participants. For example, understanding the instructions in a manipulation is crucial; otherwise participants’ misunderstanding will probably influence the results. For this reason, experimenters often include manipulation checks in their studies. Researchers include these so that they can be confident that participants have understood the manipulation and have responded appropriately. The internal validity of the study is therefore acceptable.

For some research questions, however, external validity is crucial. In many cases, field experiments are conducted in the ‘real world’, but participants may not be aware that they are participating in a study. For example, an experimenter might go out to a shopping centre to examine people’s reactions to invasions of their personal space. They may manipulate the magnitude of the invasion but the experiment has a more ecologically valid feel to it because the participants do not know they are participating in a study. If the study was conducted in a laboratory, the participants may get wise to the experimenter’s motives and the study may not be a valid test of the hypothesis. Thus, field experiments are important and useful.

Both within and outside the laboratory, experiments have advantages over other methods when social psychologists want to make conclusions about human nature. The main reason for this is that through the random assignment of participants to conditions (levels of the IV), the experimenter can be confident that participants in the different conditions are similar. So long as you have enough people, and you randomly assign them to one of two groups, you can be confident that the two groups of people will have much the same age, attitudes, gender and any other traits that might affect the results of your study. Thus, you can be confident that if the two groups of people act differently, it is because of the condition they are assigned to – not
because of some other difference between the two groups of people. Except for the influence of the IV, there should be no other differences across experimental conditions.

It is also important that experiments are designed in such a way that they avoid confounding, where variables are too closely related within the experiment and it is difficult to know which one is having an effect. For example, imagine an experiment with two different conditions, but everyone in the first condition was female and all participants in the second condition were male. The experimenter cannot be sure which variable is having an effect on the DV: the manipulation of the IV, or differences due to gender. Experimental conditions must therefore be identical in every way apart from the crucial differences that occur with the manipulation of the IV.

There are a number of downsides to conducting experiments. For example, experiments are often subject to demand characteristics, as can be the case for surveys and questionnaires. Participants’ behaviours and responses may be an artefact of the experimental situation itself rather than a response to the experimental manipulation. For example, participants may infer that the experimenter sees a particular mode of responding as socially desirable, and respond accordingly, which may bias the results (Rosenberg, 1969). Similarly, participants may become apprehensive about their responses, which may influence the findings. In both cases, the participants have some knowledge of the hypotheses. It may not be the most accurate knowledge, but it is sufficient enough to have a potential effect on the outcome of the experiment. Thus, it is important for the participants to be as blind to the hypotheses (and research conditions) as possible. Experiments are also subject to experimenter effects – effects that occur because the experimenter may inadvertently give the participants ‘clues’ to the hypotheses. We will see an example of this in Chapter 3, where an experimental procedure designed to make university students walk slower, as if they were older adults, worked only when the experimenters hired to run the study knew about the hypotheses – that is, what was expected to happen (Doyen, Klein, Pichon & Cleeremans, 2012). Of course, this is not generally intentional. The researcher simply has knowledge of the experimental conditions and may unintentionally communicate their expectations to participants, potentially biasing the experiment. Therefore, as far as possible, the experimenter should also be blind to experimental conditions. When both experimenter and participant are blind to conditions, this is known as the double-blind procedure.

EXPLORING FURTHER

Identify the dependent and independent variable(s) in the following examples:

1. An experiment designed to examine the influence of imagined contact with a group on attitudes towards the group.
2. An experiment investigating how advertisement effectiveness is influenced by advertisement length and mode of presentation.
3. An experiment where people judge the attractiveness of faces of different ages and genders.

Techniques that can be quantitative or qualitative

Observations

Some research questions can be answered by merely observing what people do. Much of social psychologists’ research is informed by observations from which they learn about a particular phenomenon, make hypotheses and then conduct further research. However, observations are often used as a research tool without the use of other methods. For example,
social psychologists sometimes use the technique of **participant observation** where they ‘get close’ to people and observe what they do. This type of research is similar to that conducted by anthropologists, who often study groups (e.g., religious, cultural and occupational groups) and societies by living and interacting with them for an extended period of time and directly observing their behaviour. For example, you may be familiar with the influential work of anthropologist Margaret Mead, who spent a great deal of time in South Pacific and Southeast Asian cultures studying attitudes towards sex and coming of age. Using this technique, the researcher typically observes natural behaviour and does not intervene; staying neutral and non-intrusive so as not to influence what is being observed. The technique of observation is sometimes called the **field study** method.

This method can also include the researcher conducting interviews (see Figure 1.8), discussions, reviewing life histories and reviewing personal documents. Sometimes, observations are purely qualitative, from which researchers draw out themes of observations and interactions, but sometimes observational studies can involve the collection of quantitative data. As mentioned earlier, in social psychology observations are typically used as a tool to generate and develop hypotheses. Unlike anthropologists, for whom observations are a primary research method, social psychologists typically use observations more informally with the view to using the information gathered to develop other investigations to test hypotheses. There are good reasons for this. Although observations provide a rich set of information, what an investigator observes is, again, their choice and potentially subject to bias due to a lack of objectivity. If a researcher’s goal is to describe human social psychological processes in general, it is difficult to do so based on observations of a small group of people. The observer may also accidentally interact with the people who they are observing, which can also bias the findings.

**Case studies**

Case studies allow a researcher to analyse a specific event, individual or group, in-depth. They involve a range of the tools we have discussed already, such as observations, surveys, interviews and questionnaires. As such, they have quantitative and qualitative aspects. The advantage of
conducting case studies is that they allow for a detailed examination of the subject of interest. They are often used to examine phenomena that would be difficult to control in the laboratory, such as cults, criminal behaviour and people’s responses to tragedies.

Archival studies

Archival studies involve going back to the ‘archives’ (as the name suggests) and examining evidence for a hypothesis among existing data. Archives can be many things, such as newspaper reports, political speeches, statistical records and court proceedings, which already exist and can be gathered over a long period of time. Of course, the original information was collected without the hypothesis in mind, so it cannot be biased in terms of how the information was collected. Information can be gathered relatively easily too, but the investigator needs to know what they are looking for, and how to look for it, in order to conduct archival research. Archival research is a rather underutilized tool in social psychology but it can tell us many things. To give one example, Mullen (1986) conducted an archival investigation of 60 newspaper reports of lynching events during the 1800s. Mullen coded the reports for information regarding group composition (number of victims and number of lynchers) and the atrocities performed (occurrence of hangings, shootings, burnings and other atrocities). Results suggested that as the size of the lynch mob relative to the number of victims increased, the mob became more aggressive and performed more atrocities.

Archival research such as this has the advantage of being able to inform social psychologists of social psychological phenomena as they have occurred in the past, and as they occur or change over a period of time. However, archival methods often involve laborious data collection. The researcher is also limited by the amount, and nature, of the information collected originally and may require vital information that is missing. Archival investigations are, therefore, sometimes unreliable. They are also able to answer a smaller range of research questions and so are used primarily to complement the other methods of social psychology.

Qualitative methods

Thematic analysis

As the name suggests, thematic analysis identifies themes in a set of data, usually derived from an interview. The analysis consists of two phases. First, the researcher identifies, analyses and describes patterns or themes within the data and, second, the researcher uses the themes to make further interpretations. This is a complex process of identifying initial themes and then revising and extending the list of themes several times before concluding the analysis and producing a report (Braun & Clarke, 2006; Braun, Clarke, Hayfield & Terry, 2018; Terry, Hayfield, Clarke & Braun, 2017). This is one of the most common qualitative methods used in social psychology.

Conversational analysis

Conversational analysis focuses closely on conversational interactions, producing a detailed analysis, classification and notification of the talk. The aim is to examine what people are doing with the language they use, as well as what they are hoping to achieve. Conversational analysis not only analyses the content of what people are saying, it also analyses how people conduct the conversation, such as how they take turns and use pauses, interruptions and so on. It is designed to give a detailed analysis of how people use language and tailor their talk for specific situations. Typically, conversational analysis uses naturally occurring conversation such as interactions between doctors and patients (Chan, Wong, Ching & Lam, 2016; West, 1984) and in police interrogations (e.g., Stokoe, 2010). Typically, a researcher devises a research
question or problem and then collects data via video or audio recorded conversations. The researcher does not intervene in the data collection to ensure that the analysis examines natural talk in interactions. Once the data have been collected, a researcher transcribes the conversation and, based on an inductive data-driven analysis, examines patterns in the conversation. Thus, rather than an experiment or observational study where hypotheses are formulated prior to the study taking place, the outcomes and conclusions drawn from conversational analysis are driven by the data itself.

**Narrative analysis**

Narrative analysis focuses on how people understand the world through the stories they tell to others (De Fina & Georgakopoulou, 2015). It is based on the idea that telling stories helps people to make meaning out of complex and often chaotic situations (Gergen & Gergen, 1984). Typically, a researcher conducting a narrative analysis will identify some research question or problem and identify the events or situations that will enable them to answer that question. The narratives then need to be collected. The researcher identifies who they want to hear stories from, designs an interview and then conducts the interview. Afterwards, the researcher transcribes the interview and interprets it (Parker, 2005).

**Discourse analysis**

Advocates of discourse analysis in social psychology argue that language is the means by which people create their social world and that ‘text’ and ‘talk’ ought to be the principal focus of social psychology. For example, Potter (1996) has argued that language constructs social and psychological life, rather than being simply a way for researchers to study how people see the world. Discourse analysis therefore studies language – language obtained from conversations, interviews and text (e.g., newspapers). The text is analysed and interpreted within the context in which it was produced. The researcher can then draw conclusions about what the person is communicating about their thoughts, feelings and experiences (e.g., Edwards & Potter, 1992; Potter, 1996; Potter & Wetherell, 1987; see Riley & Wiggins, 2019 for an overview).

Discourse analysts have developed discourse-based alternatives to the study of many mainstream topics in social psychology. For example, memory and causal attribution have been examined through everyday event reporting (Edwards & Potter, 1992, 1993; Middleton & Edwards, 1990). The role of emotions in relationships and actions has been studied through how people call upon emotional states in their personal narratives, such as disputes, and in counselling situations (Edwards, 1997, 1999). Discourse analysis has also been used extensively in the study of prejudice (e.g., Augoustinos & Potter, 2017; Condor, 1988; Potter & Wetherell, 1987; van Dijk, 1993) and crowds, collective action and protest (Canning, 2018; Drury & Reicher, 2005; Reicher, 2001, 2004). In general, discourse analysts argue that by examining an entire discourse, it is possible to see people doing the kinds of things for which psychology has a set of explanations and definitions (Edwards, 2005). This is the main point of departure between discourse analysis and mainstream social psychology. While mainstream social psychologists argue that the unit of analysis can be the individual, the group or a specific cognition (e.g., attitude or emotion), discourse analysts argue that the basic unit of analysis should be the talk. The cognitions and psychological constructs that social psychologists investigate are assumed by some discourse analysts to exist only through talk (e.g., Edwards, 1997; Potter, 1996; Potter & Wetherell, 1987). This view poses problems for mainstream social psychology, which is one reason why the discourse analytic approach is often critiqued, and the two approaches are often perceived to be at odds with one another (Giles & Coupland, 1991). Perhaps more optimistically, mainstream and discourse analytic approaches may be able to inform each other to gain a clearer understanding of how social psychological processes occur and are brought about through communication.
There are two main types of discourse analysis. The first, *micro-discourse analysis*, examines text and talk in fine detail with the aim of understanding what is occurring in particular interactions (e.g., how women deal with sexism). This analysis focuses on the features of the language use, discourse, verbal interaction and communication, and considers the text's syntax, structure and rhetorical devices. From this, researchers can generalize about the discursive practices that people use in specific situations. *Macro-discourse analysis*, on the other hand, aims to identify different discourses that occur surrounding a particular event or topic. It is concerned with understanding the broad, societal currents that influence the text being studied. At the middle level, *meso-discourse analysis* attempts to bridge the gap between the smaller details and the societal influences on the text.

**Interpretative phenomenological analysis (IPA)**

Interpretative phenomenological analysis (IPA) is based on the principle of phenomenology. This philosophy emphasizes the relationship between the world inside the mind and the greater world outside. It considers how people's conscious experience of existing within the world is made up of their feelings, relationships and experiences (e.g., Smith, 2011; Smith, Flowers & Larkin, 2009). This technique consists of extracting people's descriptions of concrete experiences, or narratives about these experiences. IPA uses data obtained from methods such as interviews, and sometimes from other forms of text such as letters. In analysing the data, the researcher attempts to identify themes within the text and specifically looks for recurring themes. These themes are then organized into a hierarchy to establish if participants' responses suggest that some themes are more important than others. IPA enables researchers to compare the data from one participant with that of others to establish if there are themes and experiences that are common across people. For example, Rhodes and Smith (2010) gave an interpretative phenomenological analysis of the experience of depression using a case study of one man who had been diagnosed with depression. Interviews with the man were analysed using IPA, enabling the researchers to describe the origins of the illness and the complex effects that followed. A good round-up of qualitative methods used in psychology, including IPA, can be found in Willing and Stainton Rogers (2017).

**ISSUES IN CONDUCTING SOCIAL PSYCHOLOGICAL RESEARCH**

We have already discussed some of the issues that occur when conducting social psychological research. For example, experimental social psychologists are often confronted with the dilemma between making their research externally valid, that is, meaningful to something in the 'outside world', and controlling aspects of the context which are not of interest, thereby making the experiment more rigorous but less ecologically valid. We have also discussed the importance of both the participant and experimenter being blind to conditions, in case knowledge of the study objective can bias responses or the way in which the study is run. There are other issues of importance, which we will discuss briefly here. The first relates to how the participants for the studies are selected or sampled.

**Sampling**

How participants are selected or sampled for social psychological research is important. To illustrate why this is the case, consider a hypothetical study where a researcher wants to examine the relationship between self-esteem and dieting behaviour among women. The researcher sends the survey to subscribers of a high circulation women's fashion magazine. Why might this not be such a good choice? Well, potentially, this could be a biased sample. One could argue that women who subscribe to fashion magazines are already more focused on issues related to appearance
and weight – more so than most women – so they may not be a representative sample from which to test a general hypothesis about female respondents. To take a representative sample, the researcher would be wise to cast the net more widely in order to test their hypothesis on a range of women with different interests and not such a narrow sample.

Samples should also, where possible, be random. Put differently, from a population of interest, everyone should have an equal chance of being able to participate in the research (see Figure 1.9). For example, in a study of British attitudes towards the government, a researcher could not sample from only one region of Britain. A quick glance at the distribution of seats in the House of Commons across the UK (Conservative, Labour, Liberal Democrat, Plaid Cymru, Scottish National Party, Democratic Unionists and so on) suggests that the different regions vote quite differently. A sample of people from the southeast of England may have more positive attitudes towards a Conservative government (because they largely vote for this party), whereas the results may be entirely different in the northern regions of England, Scotland, Northern Ireland or Wales. So, in order to give a fair test of a hypothesis, it is important to sample randomly from the population of interest. Another way this can become a problem is through the issue of self-selection. This problem arises when participants select themselves for participation in a study because they are particularly interested or have a vested interest in the topic. For example, if a researcher advertises to the general public a study on conspiracy theories, they may attract a larger number of people who have a personal interest in conspiracy theories, thus potentially not being a representative sample of the population as a whole. Self-selection can influence the result in unpredictable ways. Again, researchers must be careful in their recruitment strategies to avoid potential biases creeping into the study.

Of course, random sampling is not always possible. As you will notice throughout this book, social psychologists often make claims about human nature in general based on testing convenience samples of undergraduate participants, or participants who have been recruited from crowdsourcing platforms such as Amazon’s Mechanical Turk or Prolific. Indeed, critical social psychologists see this as a key weakness of quantitative social psychology and it is a valid point. Not all research questions can be answered by testing the responses of undergraduate psychology students or small and non-representative samples of the population. On the other hand, it is important to consider the research question. Much of social psychology is concerned

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**Random sampling** Taking a random group of participants from a population (e.g., giving every British adult the chance to participate in a study of British attitudes towards the government).

**Self-selection** A problem arising when results in a study become difficult to interpret because participants with certain attitudes or characteristics disproportionately select themselves to participate in the research.

**Convenience sampling** Taking a group of participants from an available subgroup (e.g., undergraduate participants).

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**FIGURE 1.9 Sampling** In social psychology, sampling should be representative of the population of interest and, where possible, be random.
The discipline of social psychology

with how people think, feel and behave with respect to social situations. Many of the processes of interest should be (and are) universal. In such cases, samples of undergraduate psychology students or participants recruited via crowdsourcing platforms should respond no differently to others. This is a point worth considering as you read this book. In general, convenience samples are used frequently in social psychological research because they are just that – convenient – and mean that the researcher does not have to go to great lengths to randomly or representatively sample from larger populations. In many cases, there may be no disadvantages in testing these smaller subsets of the population.

Another issue related to sampling is exactly how many participants are needed in a social psychological study. In general, this depends largely on the nature of the study. If it is a questionnaire or survey study, there are guidelines for the number of participants that are required based on the number of questions being asked and the level of statistical significance the researcher uses as their guideline. We will say more about this later. However, it is useful to note that it is not always necessary to sample a large number of people in order to draw conclusions about a population as a whole. More often than not, a smaller random sample or small convenience sample is enough to draw valid conclusions. For example, the UK population at the time of the 2017 general election was approximately 66 million, and yet exit polls consisted of a random sample of only a few thousand voters across the country. Apart from some notable examples, exit polls tend to provide accurate predictions of electoral outcomes.

Thus far, we have discussed the issue of sampling in quantitative research. Sampling in qualitative studies is a different matter. In qualitative work, sampling is not random – it is purposive. As we have discussed earlier, critical social psychologists do not deal in universals of human nature and therefore do not have the goal of generalizing their findings. Instead, these researchers are more concerned with people’s experiences, so samples will be chosen specifically for people who have had the experiences of interest. The sample does not need to be representative of some larger population. Also, a study may only use one person as a participant (case study) who has been chosen for a particular reason.

**Reliability and validity**

**Reliability** is the extent to which the way a variable is measured, usually in a scale (e.g., extraversion), is likely to bring about consistent results. There are two types of reliability. The first, test-retest reliability, is the similarity in measurements taken by a single person at different times. In other words, if a person responded to an extraversion scale twice, the scale would be deemed to be reliable if the responses were consistent between the first time and the second time, assuming that the conditions for taking the test were the same. The second, internal consistency, refers to the consistency across items within the scale. In other words, do all the items in the scale measure the same thing? Typically, scales designed to measure social psychological and personality constructs have at least two items, so the internal consistency of a scale can be determined by the correlation between the items within the scale. If the coefficient (Cronbach’s alpha statistic is most common here) is high, then the scale is said to be internally consistent. As a general rule of thumb, a Cronbach’s alpha score of 0.7 or above signifies a reliable scale (Nunnally, 1978).

Reliability is different to validity. Specifically, while a scale may be reliable, this means that it is consistently measuring something, but we do not necessarily know what. A researcher cannot be sure that the scale is measuring what it is supposed to be measuring; in other words, its construct validity (Cronbach & Meehl, 1955). Construct validity can be assessed in various ways (for more detail, see Boag, 2015; Shaffer, DeGeest & Li, 2016; and especially Flake, Pek & Hehman, 2017 for a summary of current ‘best practice’; for an example of testing construct validity in measures of mindfulness, see Goldberg et al., 2016; for an example in the measurement of narcissism, see Miller, Lynam & Campbell, 2016). A construct valid measure should be reliably correlated with other measures of the same variable. For instance, a scale of
extraversion (and there are many) is highly unlikely to be construct valid if it is correlated only weakly with other extraversion scales. Ideally, it should also be associated with other indicators of extraversion. For example, a person scoring highly on an extraversion scale should also show behavioural signs of extraversion. Measures of validity typically reveal lower correlations than those for reliability. A scale may satisfy Nunnally’s (1978) criterion of a correlation of 0.7, but the relationship between a scale of extraversion and a person’s number of friends may only be 0.4. That is, a scale can be deemed valid even though the correlation between the responses on the scale and responses on the phenomenon or phenomena of interest is fairly low. Social psychologists may also begin to examine the validity of their measures right from the beginning of scale development. Specifically, they will examine the items they have chosen for what is known as face validity—a qualitative appraisal of whether the scale measures the phenomenon or phenomena of interest. If the items have been developed from a particular theoretical perspective, then the researcher will qualitatively appraise the items for their content validity to determine whether all phenomena of importance to the theory have been covered.

Statistical significance

One of the most important aspects of quantitative social psychology is its test of statistical significance. When a researcher has a finding, such as a predicted difference between two experimental conditions or a significant correlation between two variables, this is interesting, but is it meaningful? Is the finding of sufficient importance to be able to make conclusions about it?

To answer these questions, quantitative social psychologists determine the statistical significance of their findings. This determines the probability that the finding of interest could have occurred by chance alone. The researcher sets the highest possible significance level—indicated by a probability out of 100—they would be satisfied with. Convention in social psychology is that the probability (or p value) needs to be less than .05 (a chance of 1 in 20) or .01 (a chance of 1 in 100) for the result to be of statistical significance, and therefore of social psychological significance.

We will not talk about the specific tests that social psychologists use to determine statistical significance because this is the realm of statistical textbooks. Suffice it to say, quantitative social psychologists use a range of statistical tests to establish the reliability of their findings. A significant finding typically occurs because of the size of the difference between experimental conditions, or the size of a correlation. However, the size of the sample also matters. For example, some very small correlations can be significant when the sample size is large. Statistical significance may not always be the best index of the actual importance of a research finding.

**BASIC AND APPLIED RESEARCH**

Another key distinction in social psychological research is that of basic versus applied research. Basic research focuses on fundamental questions about people’s thoughts, feelings and behaviours. For example, a social psychologist may investigate why people help others, what factors cause them to fall in and out of love, and what persuasive techniques are most effective. Such questions lie at the heart of human nature. Basic social psychology is typically oriented towards using the findings to develop further theoretical understanding on a topic. However, many social psychologists conduct applied research, which takes information that is learned from basic research and applies it to particular problems or issues, often with the aim of enhancing the quality of everyday life. Applied research typically focuses on areas such as health, business, law, the environment and politics. For example, applied social psychologists can help employers hire more suitable employees. They can also design interventions to address social problems, such as excess energy use, prejudice, smoking, criminal behaviour, or educational issues (see the Social Psychology in the Real World box).
Basic and applied psychology are closely related and there is a two-way relationship between the two. Specifically, basic research may mean that researchers develop theories that result in the development of interventions – efforts to change people’s behaviour. One good example of this in social psychology is the work associated with the theory of planned behaviour, which is a

**SOCIAL PSYCHOLOGY IN THE REAL WORLD**

**Social psychology at work in the classroom**

The work of social psychologist Carol Dweck has been influential in the field of education, helping practitioners to understand what kind of praise and criticism ‘work’ best to keep children motivated and focused on their learning. In particular, Dweck (1999) and Kamins and Dweck (1999) have argued that praise can be distinguished between comments that are aimed at evaluating a person’s traits or the person as a whole (e.g., ‘You are a clever girl!’), and comments that focus on the person’s effort or strategies (e.g., ‘You found a good way to do it’). Kamins and Dweck (1999) showed that praising a child in person terms after they succeed leads to helpless responses to subsequent failures more than when the feedback relates to the concrete process through which the success was reached. Comparing the two groups’ responses on measures such as persistence on the task, self-esteem and motivation, the children who had been praised in process terms showed more positive outcomes than the children who had been praised in person terms.

Dweck and colleagues argued that ‘person praise’ leads children to interpret their achievements in trait terms and encourages a fixed mindset of success more so than ‘process praise’, which focuses more on effort and behaviour. Following person praise, failures may signal that outcomes are due to poor ability or negative traits, thus undermining performance evaluations, affect, motivation and leading to a helpless response. These findings are striking because the differences in the wording of the feedback are generally so small (e.g., ‘You are a good drawer’ versus ‘You did a good job drawing’) that the person giving the feedback may not even notice the difference. Further, even if teachers do notice the difference, they may not be aware that the different forms of feedback have contrasting implications. Based on these findings, it is unsurprising that the education sector strongly promotes process-related praise (rather than person-related) in interventions to improve students’ performance (Rathvon, 2008). Many intervention programmes, such as the online interactive ‘MindsetWorks’ programme, apply the findings of Dweck’s work in order to help students to develop a growth mindset of intelligence and help them deal with academic challenges. Take a look at Dweck’s (2017) article in which she describes her career investigating this topic, but also take a look at a recent analysis suggesting that the effects of the different kinds of feedback are small (Sisk, Burgoyne, Sun, Butler & Macnamara, 2018).

**Questions**

1. We know the effects of ‘person praise’ and ‘process praise’. What do you think the impact of giving students ‘no praise’ might be?
2. Can you think of other domains in which Dweck’s work may be applied?
3. Do you think that a child’s mindset can be changed?
4. Shortly, we will talk about research ethics and this research is a good way to start you thinking about ethical issues in social psychological research. Conducting research with children can sometimes be an ethical minefield, and conducting work on praise and criticism of children creates a variety of ethical issues. For example, how did the experimenter ensure that the children in the ‘person’ condition did not continue to feel helpless after the experiment finished? Read one of Dweck’s empirical articles and see how she dealt with such issues.
theory about the link between attitudes and behaviour (Ajzen, 1985; see also Chapter 4). Much of the basic research associated with this theory identifies the various pathways in the theory, how attitudes become accessible and how (and when) attitudes predict what people do. However, the theory has been applied in many studies to the study of the relationships between beliefs, attitudes, behavioural intentions and behaviours in many applied fields, such as advertising and health (e.g., Albarracín, Johnson, Fishbein & Muellerleile, 2001; Ajzen, 1988; Armitage & Conner, 2001; Conner, Kirk, Cade & Barrett, 2003; Hagger, Chan, Procterou & Chatzisarantis, 2016; Sheeran & Taylor, 1999). Basic research can, therefore, inform applied research that attempts to improve some aspect of people's lives. However, it is also the case that the results obtained from applied research can enable basic social psychologists to further develop theories. For example, practically testing the theory of planned behaviour in health settings gives researchers an idea of what aspects of the theory work and what aspects need to be modified. So, it is perhaps unsurprising that many social psychologists have both basic and applied interests.

CULTURAL ISSUES

Another important issue to consider in social psychology is the influence of culture. We have spent some time thus far discussing how the majority of social psychologists are interested in the ‘universals’ of human nature, of which there appear to be many. However, there are some key social psychological phenomena and processes on which cultures differ. For example, all cultures have norms and standards of behaviour, but these are not necessarily the same across cultures or are expressed differently across cultures. Gender roles differ across cultures (e.g., Croft, Schmader & Block, 2015; Dasgupta, 1998; Fischer, Rodríguez Mosquera, van Vianen & Manstead, 2004), as do nonverbal behaviours (e.g., Matsumoto, 2006). In general, cultures can have a strong influence on how people think about themselves and the social environment (Matsumoto & Hwang, 2016; Matsumoto & Yoo, 2006). Try the Exploring Further activity below before you read on.

EXPLORING FURTHER

Take a piece of paper and write down ten things that define who you are. After you have made your list, tally up the number of ‘I’-related statements you used and how many of your self-descriptions relate to personal traits (e.g., ‘I am friendly’, ‘I am a student’). Compare this with the number of times the self is defined in terms of collective aspects (e.g., ‘sister’, ‘grandchild’). How do you think your responses are influenced by your cultural origins? If you come from a different culture to some of your friends, compare your responses to theirs. Is there a difference in the number of ‘I’ self-descriptions you used compared to your friends? This exercise can reveal how culture influences the self-concept – a key area in social psychology.

One of the most important features of culture that determines differences in social psychological phenomena is whether it is an individualist culture or a collectivist culture (Fiske, Kitayama, Markus & Nisbett, 1998; Hofstede, 1980; Markus & Kitayama, 1991, 1994; Triandis, 1989, 1995). Individualist cultures are characterized by their independence. People within individualist cultures see themselves as distinct social beings, separate from each other and having characteristics that make them distinct from others. Social relationships are important, but are seen as voluntary. Collectivist cultures, on the other hand, are characterized by their interconnectedness with others. People within collectivist cultures see themselves...
as social beings who are inextricably linked to others, and having characteristics that are responsive to the social situation. Social relationships are vital and involuntary – they are part of what makes a person who they are. You can probably guess which countries fit broadly into each category. Western cultures such as Britain, Australia, New Zealand and the USA are individualist cultures, while Eastern cultures, such as China, Japan, Korea, and many Latin American cultures, are more collectivist. Although there is some evidence that individualism is increasing across the world (Santos, Varnum & Grossman, 2017), significant cultural differences still exist.

<table>
<thead>
<tr>
<th>TABLE 1.1 Characteristics of individualist and collectivist cultures</th>
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<tr>
<td><strong>Individualist</strong></td>
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<tr>
<td>Uniqueness</td>
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<tr>
<td>Expressing one's own views</td>
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<tr>
<td>Promotion of one's own goals</td>
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<tr>
<td>Directness</td>
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Source: Markus and Kitayama (1991)

The key differences between individualist and collectivist cultures are given in Table 1.1.

Given these differences, it is probably not surprising to learn that social psychological phenomena depend heavily on the cultural orientation of the people involved. We discuss these differences in more detail throughout the book. For example, in Chapter 2, we discuss how people's concept of self differs across the two broad types of culture. In response to the question 'Who are you?', people from individualist cultures tend to respond with more 'I'-related statements (e.g., 'I am clever', 'I like reading books'), whereas participants from collectivist cultures tend to respond with statements related to group membership or relationships (e.g., 'I am a Muslim', 'I am a mother') (Dhawan, Roseman, Thapa & Rettek, 1995; Heine & Lehman, 1997; Kitayama, Markus, Matsumoto & Norasakkunkit, 1997; Trafimow, Triandis & Goto, 1991; Yik, Bond & Paulhus, 1998). This distinction begins early in life, with children at age six years displaying this cultural difference (Wang, 2006). This is just one example of social psychological evidence from one culture that may not automatically apply to all cultures.

Researchers need to examine theories and test hypotheses across different cultures and put away the assumption that people in different cultures all think and act the same way. A great deal of information can be missed if culture is not taken into account. As you read this book, you may justifiably criticize social psychology for being too 'Western'. Most of the studies you will read about are based on data collected in white, English-speaking countries (in particular the USA), and therefore a lot of social psychological knowledge we have is drawn from a relatively homogeneous group of participants. So, when we learn about 'universals' of human thought and behaviour, while many phenomena are probably universal, we can only ever really be sure that we know about 'universals' of White, American undergraduate students or people who sign up to research via crowdsourcing platforms, unless hypotheses are tested more broadly. It is important to keep this issue at the back of your mind as you read about evidence drawn from social psychological studies.

**RESEARCH ETHICS**

Social psychologists carry out their research with human participants, or utilize data that have been provided by human participants. Thus, it is vital that research is carried out with the safety and privacy of participants firmly in mind. All social psychologists receive training in research
When conducting research with human participants, it is vital that they have given their informed consent to take part in the research. This principle ensures that participants know exactly what is going to happen in an experiment or study and then they give their consent. In other words, participants should only be asked to agree to take part after they have been fully informed about the purpose of the study and how it will be conducted. However, this principle is difficult to observe when research is conducted with children as participants, because it is not always possible to communicate the intentions and methods of research to children in a way they completely understand. In such cases, it is possible to gain the consent of parents and carers, who act in the children's best interests and make the informed decision about consenting to participate in the research.

The principle of informed consent is further complicated by the use of deception, a methodological technique frequently used in social psychological research. Deception occurs when a participant is misled about some aspect or aspects of the research – typically something about the purpose of a particular feature of the research method – or is not made fully aware of the specific purpose of the study. Deception is an important feature of social psychological research and does not make the research unethical. In some cases, it is difficult to test a hypothesis unless deception is used. For example, social psychological research often makes use of confederates – members of the research team who pose as participants and follow a predetermined procedure set up by the experimenter – to test how people interact in specific situations. The participant is misled to think they are interacting with a real person when, in fact, they are not. However, this type of method allows experimenters to control specific aspects of the experiment and test the effect of only those that are of interest.

In such situations where the use of deception is crucial to test hypotheses, the deception can be deemed to be appropriate if the following conditions are met:

1. A non-deceptive method to study the same phenomenon does not exist.
2. The study has the possibility of making a significant contribution to scientific knowledge.
3. The deception is not expected to cause the participant any harm or significant emotional distress.
These factors are typically judged by an ethics committee. You may also come across the term ‘institutional review board’, which is used in the USA and Canada to refer to ethics committees. Ethics committees closely examine research proposals and determine whether the proposed research is ethical. In a case where deception is proposed, the committee decides, according to the three criteria above, whether the deception is justified. If some aspect of the study is deemed to be overly detrimental to the participants, it will be refused ethical clearance. In such cases, the researcher needs to make changes to the procedure and then resubmit the proposal for further evaluation.

Ethics committees do an important job. However, they did not always exist and many famous studies in social psychology were conducted without ethical clearance. In Chapter 9, for example, you will read about Stanley Milgram’s obedience studies, where participants were told that their task was to deliver strong electrical shocks to another participant. The shocks were never given, but the participants were led to believe that the recipient (a confederate) was experiencing extreme pain. Many of the participants exhibited signs of emotional distress as a result of taking part in this procedure. One might speculate as to whether such an experiment would be granted ethical clearance today. This would indeed pose some serious questions for an ethics committee. However, even in such an extreme case, the committee would carefully consider the pros and cons of the study – does the knowledge that could potentially be gained from the study outweigh the negative aspects? In the case of Milgram’s studies, one would have to say ‘yes’. Much of what social psychologists now know about obedience and compliance come from Milgram’s studies. Even today, studies running – and largely affirming – Milgram’s results receive ethical clearance, as you will later read.

Another key principle of conducting ethical research is to fully debrief participants at the conclusion of the study. It is important to let research participants know the true nature of a study, its purpose and hypotheses so that they know exactly why they did what they did. Note that debriefing can also be important to ensure that participants have understood an experimental manipulation, so it serves the purpose of maintaining internal validity during the study as well as upholding ethical standards after the study. Participants are also free to withdraw their consent and have their personal responses removed from the study if they are unhappy with any aspect of the study. As mentioned earlier, these principles are in place to protect the participant from harm or emotional distress and protect their privacy. Following ethical guidelines also means that research participants are treated with respect.

SOCIAL PSYCHOLOGY AND OTHER DISCIPLINES

Social psychology is closely related to other branches of psychology, such as personality, clinical, cognitive, forensic and cyberpsychology. Social psychology is also closely related to academic disciplines outside psychology, such as biology, neuroscience, sociology, social anthropology.
and economics. In this section, we outline some of the ways in which social psychology has been influenced by these disciplines and sub-disciplines, as well as the impact that social psychology has had on them.

**Personality psychology**

Also referred to as the study of individual differences, personality psychology, a close relation of social psychology, is referred to as the study of how people come to be who they are (Murray & McAdams, 2007). Whilst personality psychology mainly focuses on aspects of the individual, and social psychology on aspects of the situation, the two perspectives are tightly interwoven in psychological explanations of human behaviour. Furthermore, social psychologists are often interested in individual differences, and psychologists who study personality and individual differences often link their work to the study of social psychological processes.

**Clinical psychology**

Clinical psychologists attempt to understand, prevent and relieve psychologically based problems and promote wellbeing. For example, clinical psychology focuses on understanding and helping people with psychological disorders, such as bipolar mood disorder, schizophrenia, depression and phobias. Social and clinical psychology are linked in many ways and the treatments used by clinical psychologists are often informed by social psychological findings. For example, social psychologists study the processes underlying addictive behaviours (e.g., Fishbein, 1982; Stroebe, 2000), eating disorders (e.g., Harrison, 2001; Stice, 2002), relationship satisfaction (e.g., Pearson, Watkins, Kuyken & Mullan, 2010; Vinokur, Price & Caplan, 1996) and the practice of safe sex (e.g., Armitage & Talibudeen, 2010; Sheeran, 2002).

**Cognitive psychology**

Cognitive psychology is concerned with the study of mental processes. More specifically, it is the study of how people perceive, remember, think, speak and how they solve problems. Cognitive psychology has close links to social psychology and, indeed, a sub-discipline called social cognition, which we discuss in some detail in Chapter 3 and throughout this book, is a combination of social and cognitive psychology. It is the study of how people think about themselves and the social world and, in particular, how they make decisions and judgements concerning the social world. One of the main elements of theories in social cognition is that social processes occur as a result of ‘cognitive elements’, such as stereotypes, that are represented in the brain. Social cognition applies many theories and paradigms from cognitive psychology, focusing on areas such as reasoning, attention and memory (Greifeneder, Bless & Fiedler, 2017).

**Forensic psychology**

Forensic psychology is a sub-discipline that deals with both psychology and the legal system. It is a popular topic among students, thanks, in part, to fashionable television and cinematic portrayals of forensic psychologists, such as in *Cracker* and *Silence of the Lambs*. Forensic psychology is a rapidly developing scientific branch of applied psychology, drawing on clinical, cognitive and social psychology to address legal and criminal issues (Pozzulo, Bentell & Forth, 2013). Social psychology plays an important role in theories of criminal behaviour and therefore closely informs a great deal of research conducted in forensic psychology.
Cyberpsychology

Cyberpsychology deals with the psychological phenomena associated with emerging technology and human-technology interaction. As a significant proportion of the world is now connected to the Internet and communication technology is advancing so quickly, investigations of online social behaviour are becoming increasingly important and of interest to many social psychologists (Attrill, 2015).

Biology and neuroscience

Biologists examine the nature, function and evolution of living things. They examine how genetic factors influence people and what they do. As such, there is a significant link between biology and social psychology. In particular, recent years have seen the rise in prominence of evolutionary psychology, which approaches the study of human behaviour based on the assumption that the things people do (and think about) are a result of human evolution and, therefore, a result of human biology (e.g., Buss, 2015; Neuberg, Kenrick and Schaller, 2011). Put simply, social behaviour and social thinking have biological roots. The general argument underlying evolutionary psychology is that traits and behaviours have evolved to help humans solve recurrent problems in ancestral contexts. Social psychologists have also become interested in the parts of the brain that are associated with various social psychological phenomena such as emotions and problem solving (Harmon-Jones & Inzlicht, 2016). They use neuroimaging techniques, such as positron emission tomography, event-related potentials (ERPs) using electroencephalography (EEG), and transcranial magnetic stimulation, to examine where in the brain various social processes occur. Known as social cognitive neuroscience, or social neuroscience, this is a fast growing sub-discipline in social psychology. The use of functional magnetic resonance imaging (fMRI) (Figure 1.10) in social psychological research has exploded since 2000, and social psychologists now have a great deal of knowledge about things such as how people react to social rejection (e.g., Eisenberger, Lieberman & Williams, 2003),

![FIGURE 1.10 fMRI scans of the brain](image)

fMRI is a technique used widely in social neuroscience research to isolate parts of the brain associated with social psychological processes.
how people understand the self (e.g., Kelley et al., 2002), reactions to social interactions (e.g., Iacoboni et al., 2004), and social cognitive processing (e.g., Amodio & Frith, 2006). We will discuss some of these findings in social cognitive neuroscience throughout this book.

**Sociology and social anthropology**

Social psychologists address many of the same issues as sociologists and social anthropologists. For example, all three disciplines study the effects of culture, group membership, language and intergroup behaviour. However, these topics are approached in different ways. Specifically, while social psychologists typically focus on the effects of culture, groups and so on, on individual members of a group (or indeed the individual’s effect on cultures and groups), sociologists and anthropologists typically focus on the group or culture as a whole – how they are organized and how they function and change (Giddens & Sutton, 2013). The insights gained from sociology and social anthropology influence the theories and research of social psychology, and vice versa.

**Economics**

Social psychological principles are being used increasingly in the study of economics. Economics is often concerned with how people make trade-offs between various resources and options. For example, an economist may study how people choose to save versus spend their earnings, or how they take risks in order to make monetary gains. Social psychological research on decision-making processes is applicable to these sorts of economic questions. Of particular interest to social psychology, economists study why people make choices that are not always best for them. For example, why do people donate to charity when it is not in their own financial interests? The field of behavioural economics uses insights gained from psychology (including social psychology) to understand how people make such economic decisions (e.g., Kahneman, 2003). In 2002, psychologist Professor Daniel Kahneman was awarded the Nobel Prize in economics, largely due to his focus on issues relevant to both psychology and economics, such as fairness in the marketplace. Together with Amos Tversky, Kahneman developed prospect theory, which describes decisions between alternatives when the choice involves risk or uncertain outcomes (Kahneman & Tversky, 1979; Tversky & Kahneman, 1992). The theory describes how people evaluate potential gains and losses in making decisions, including financial ones.

**DISSEMINATION OF SOCIAL PSYCHOLOGY**

The primary means by which social psychologists communicate their findings to the scientific community is through publishing their work in scientific journals. As you progress through your studies, you will become familiar with all the major journals (and many others). There has been a marked increase in the number of social psychological journals in recent years.

Many of the major journals publish work on personality and social psychology alongside each other, again reflecting the closeness of these two disciplines. Examples of such journals are the *Journal of Personality and Social Psychology, Personality and Social Psychology Bulletin* and *Social Psychological and Personality Science*. Other journals focus specifically on social psychology, such as the *Journal of Experimental Social Psychology*, the *European Journal of Social Psychology* and the *British Journal of Social Psychology*. Other journals and volumes publish reviews of social psychological research, where authors consider the state of the art on a particular topic of research. Examples of such outlets are *Advances in Experimental Social Psychology and Personality and Social Psychology Review*. Finally, some journals focus on specific aspects of social psychology such as *Group Processes and Intergroup Relations, Social Influence, Law and Human Behaviour, Social Cognition and Sex*
The discipline of social psychology

Social psychologists often disseminate their research in book chapters. Also, social psychologists are increasingly making use of tools such as Facebook, Twitter, ResearchGate, LinkedIn and other online tools such as blogs to share their research and insights. Many researchers make their findings available publicly before they publish them in academic journals, using pre-print repositories such as PsyArXiv which is hosted by the Center for Open Science. The British Psychological Society runs a brilliant research digest (BPS Research Digest), providing a weekly highlight of some of the most interesting papers in psychology, many of which are social psychology papers. In summary, social psychology has a significant presence within psychology, across other disciplines and within the general public.

Critical thinking in social psychology

Critical thinking is crucial to learning and doing social psychology, just as it is crucial in related disciplines. A trained social psychologist should be able to read each theoretical claim and ask, is it logical and coherent? Does it fit in with what we already know about related topics in social psychology? What is the evidence for it and how convincing is that evidence? How much evidence is there, and what is the quality of the evidence? Does it really support the theory? As a student of social psychology, you are therefore encouraged to evaluate what you learn critically. In doing so, you will have a clearer picture of a research topic and take an important skill with you into the next phase of your lives (Chapter 15). In this section, we discuss what critical thinking is, steps you can follow to do it successfully and some specifics about theories, studies and social psychology to bear in mind.
Critical thinking is a difficult concept to define, but it embraces the ability and willingness to analyze arguments or evidence (i.e., break them down into parts and categorize them), synthesize them (i.e., incorporate multiple pieces of evidence into one argument, or put together aspects of different arguments), and evaluate them (i.e., determine whether arguments are logical, and evidence is sound) (Moseley, Elliott, Gregson & Higgins, 2005). It is very important to remember that critical thinking is not negative thinking – it also involves an appreciation of the strengths of theory and research. After reviewing many definitions of critical thinking, Griggs, Jackson, Marek and Christopher (1998) describe it in these terms:

a process of evaluating evidence for certain claims, determining whether presented conclusions logically follow from this evidence, and considering alternative explanations.

Critical thinkers exhibit open-mindedness, tolerance of ambiguity; and a skeptical, questioning attitude. (p. 256)

Critical thinking is itself a psychological variable. As such, it can be measured (Facione, 1990; Facione, Facione & Giancarlo, 1996; Halpern, 2010; Ku, 2009). Like many other variables, it can be changed (Dwyer, Hogan & Stewart, 2014). As you become more educated, you become more of a critical thinker (Huber & Kuncel, 2016). This is especially true when teachers explicitly encourage you to think critically (as we are doing now), and engage in practices that facilitate it. These practices include engaging you in dialogue and teaching concepts in the context of real-world issues that you find interesting (Abrami et al., 2015). Like other variables, it differs between people: some people are more critical thinkers than others (Jiang, Gao & Yang, 2018). Like other variables, it is correlated with other differences between people: as Griggs et al. (1998) suggest, people who are more open-minded (see Chapters 4 and 11) turn out to be more critical (Stanovich & West, 1997; Stenhouse et al., 2018).

As a psychological variable, critical thinking is also strongly related to creativity. This relationship is so strong that when Wechsler et al. (2018) had participants complete established measures of critical and creative thinking, they could find no clear distinction between the two (using a statistical technique called factor analysis). In other words, the measures of critical and creative thinking seemed to be measuring the same thing. This makes sense, because critical thinking often relies on imagination. In particular, Epstude and Roe (2008) argue that counterfactual thinking – imagining alternatives to what has happened – is crucial to critical thinking. To evaluate how well a theory explains something like reductions in prejudice, for example, it helps to be able to imagine alternative explanations. To evaluate how convincingly a study supports researchers’ conclusions, it helps to be able to imagine how the results could have been different if the study were run differently, or in a different situation.

A radical, and we think very useful, version of this principle of counterfactual thinking was put forward by the critical social psychologist Billig (1996) under the influence of the philosopher Hegel (Maybee, 2016). Billig argued that every argument should be considered against (at least) the possibility of its opposite (see also Manning, Levine & Collins, 2007). In Chapter 14 we discuss an example: many studies between the 1960s and 80s found that people are much more likely to intervene to help strangers in emergency situations when they are alone, than when they are surrounded by other people. This research on what is termed ‘bystander intervention’ seemed to support an intuitive, rather simple view of human nature: individuals are inherently good (De Freitas et al., 2018; Newman, Bloom & Knobe, 2014), but are corrupted by the influence of groups (think ‘peer pressure’ – see also Chapter 9). But what if we imagine that the opposite is true – that groups (at least sometimes, or in some respects) might be a good influence on people, and that people may be more likely to help when surrounded by others than when alone?
Imagining that the opposite is true is exactly what led researchers in the 1990s and 2000s to devise studies showing that there are indeed situations in which the presence of others increases, rather than decreases, a person’s willingness to help. For example, when the person who needs help belongs to the same social group as the potential helper (e.g., is a fan of the same sports team). Here, then, is evidence that in general, and in the specific bystander intervention situation, groups can be a good influence on people. This work improved our theoretical understanding of the social psychology of groups.

We recommend that you always keep Billig’s (1996) principle in mind when learning about social psychology. Try to imagine how the story told by a theory or a study might not be true, or the whole truth, or even that the very opposite may be true. One of the most important functions of a textbook is to provide a comprehensive summary of a discipline. This means there simply is not space for us to critically evaluate all of the theory and research that is covered in your coursework; in your own work, you will normally be expected to produce a more critical evaluation of most of the material. We have, however, provided a variety of examples: the Critical Focus boxes in each chapter in this book take a close and critical look at findings and theories in the field, and you will also encounter critiques of theories and studies in the main text. For example, in Chapter 13 we discuss the ‘warrior gene’ hypothesis. A specific mutation of an identified gene may be associated with aggression, leading some scholars to name it the ‘warrior gene’ – a notion that was successfully used by a murderer with this mutation to get his sentence reduced. But, to have the ‘warrior gene’ is, in fact, to be one of 34 per cent of White people. If the warrior gene was really deserving of its name, we would expect one in every three White people to be extremely violent. Being informed about the prevalence of this genetic mutation, imagining what life would be like if this common gene really did what it has been claimed to do, and comparing this imagined reality to real life, quickly reveals that the theoretical claim is overblown.

We now propose some specific processes to enhance your critical thinking in social psychology, and the success, enjoyment and personal growth that you can take from your studies. Our proposals are indebted to scholars who have studied critical thinking and how it can be encouraged in university education, and above all Halpern (1998) who outlines these steps, and more besides.

1. Ask ‘What additional information do I need before answering the question?’

Whether the question is one in your own mind, set in an essay question or one that you are trying to examine in your own research, an essential part of any learning process is acknowledging that you do not yet know everything you need to know. Becoming more informed will sharpen and improve your critical thinking, and your awareness of alternative theories, methods and findings. That said, do not be afraid of noting your own intuitive reactions to the topic early in the process – these might turn out to be valuable insights. Sometimes, researchers get so ingrained in ways of thinking and doing research on a topic that they neglect other possibilities.

In this book, we get you started by providing a lot of information on the core topics of social psychology, as will other materials provided in your course, such as lectures and reading lists. When you are answering an essay question, you should always start by reading through lecture notes and any readings recommended by your lecturer. Throughout this book we also cite thousands of articles, most of which should be accessible through your institution’s library or other Internet sources. You can find these listed in full in the References section at the end of this book.
2. Ask ‘Which information is most important, and which is least important?’

Asking these questions focuses your mind on the type of information you should be seeking, and prioritizing in your thinking and writing. The quality of the evidence is important. Theories, and in particular research evidence, put forward in scientific articles cited throughout this book have usually passed a basic test of quality: these are reviewed by journal editors and other experts before they are published. That said, no theory or study is without its flaws and omissions and none should ever be exempt from critical thinking. The relevance of the information to your question is also extremely important. Ask yourself ‘Does this piece of information help me to understand the question?’ If you are writing an essay or literature review, ask yourself ‘Does it help me to answer the question, to convince and inform the reader of my argument?’ Give priority – and usually longer coverage – to pieces of information where the answer is emphatically, yes.

3. State the problem you are trying to solve in at least two ways

Many essay questions, and a lot of interesting and important real-world problems, are rather open-ended. Seeing the problem from different perspectives, and finding ways to narrow it down, are essential parts of critical thinking (Buunk & van Vugt, 2008). Of course, it is extremely important, if you are answering an essay question in your coursework, that you make sure your answer addresses the actual question. However, to do that really well, it is worth taking some time to carefully read the question and to think about what it is asking you to do, and the different ways the question could be framed. For example, if your question or problem is ‘Does contact between groups reduce prejudice?’, inspired by Billig (1996), you could try flipping the question on its head, and ask ‘Does contact between groups ever increase prejudice?’ This will encourage you to look for cases – and there are several – where contact can make things worse, and to critiques of contact as a

EXPLORING FURTHER

We also recommend two free-to-use Internet services: Google Scholar and ResearchGate. Google Scholar is a huge, easy to search database of just about everything published in academic research. You can search by the title of a paper, by author or by journal, and also using key words that appear in the article, abstract or title. Basic searches produce many results. Combining search terms will narrow down your searches (the ‘advanced search’ option is recommended). You can also change settings in Google Scholar to ask for ‘library links’. Search for your institution in it, and Google Scholar will provide you with a link to articles that are held by your library. Another free-to-use service is ResearchGate. You can create a profile on this service, and then search for authors or articles. Authors often post pre-prints (copies of articles that are not yet published) or versions of articles and chapters that might not be held by your library. In databases like these, you can see how many times a given article or chapter has been cited, which gives you an indication of how much influence it has had. You can click on the ‘times cited’ links to see what articles and chapters, specifically, have cited it. This allows you to travel backwards and forwards in time to see what the most up-to-date research is showing, and where ideas and methods originated. We have used both Google Scholar and ResearchGate extensively in the preparation of this book, and we both have profiles on these databases.
method. This gives you, and your reader, a more critical, nuanced understanding of the topic. Another way to frame the question is ‘How much does contact reduce prejudice?’ – considering how big the effect is gives you and your reader an understanding of how wise it is to use contact to reduce prejudice, and weigh costs and benefits of the technique against alternatives. Yet another way is ‘When and how does contact reduce prejudice?’, which will draw your attention to the psychological processes that make contact work, and determine when it perhaps is not likely to work. Finally, you might ask ‘Does contact reduce prejudice at the cost of important side effects?’ For example, some research suggests that contact can reduce support among members of minority and disadvantaged groups for changes that would improve their situation (Chapter 12). Sometimes, researchers focus too much on just one outcome, and forget to study other ones. Ideally, social psychological studies of interventions on outcomes like prejudice should also look out for side effects, in the same way as drug trials do. Unfortunately, this is rare.

4. **List two solutions for a problem, and present two arguments that support a conclusion and two that do not support a conclusion**

Halpern (1998) suggests that you should entertain both sides of an argument. Seeing the limitations of both may lead you to adopt some new, third position. Even if you come down clearly on one side of an argument, you will be in a better position to defend it from counterarguments and apparently contradictory evidence. The steps we have outlined thus far, including reading to discover alternative theoretical perspectives, methods and findings, and using your imagination to reframe the question and imagine other possibilities will help you do this.

5. **Ask ‘What two actions would I take to improve the design of a study that was described?’**

As we have suggested, no one study can ever deliver the final word on a topic. Its results could have been a fluke, its IVs and DVs may have failed to capture important aspects of the things they were designed to manipulate or measure, and may instead have manipulated or measured things that they were not designed to measure (confounding). The results of a study may hold true in some contexts (the laboratory, a certain country or culture) and not others (Pettigrew, 2018). Its sample may be too small, or too unrepresentative of the intended population. Thinking about what you would change about a study to improve it can help you turn criticisms into constructive suggestions. The key to doing this well is to think about how and why the results might be different if you made a certain change – which again, is a matter of informed imagination. It is not critical thinking to merely claim that a study’s sample is unrepresentative of some more general population. Nor is it critical thinking to assert that the results of a study do not generalize to other situations because it was an artificial laboratory study. These might be valuable starting points, but the key is to articulate how and why, specifically, this might have affected the results, and how different samples or methods might produce different findings.

So, what factors, specifically, should you look for when you are critically evaluating evidence and studies? For the most part, you should focus on *visible factors* that might give cause for concern. These are things that you can see, from reading a theory or study, comparing it to other theories and studies, and using your growing critical thinking skills. There are also *invisible factors* operating in the background that can compromise the quality of theory and research. They are invisible in the sense that it is very hard to demonstrate that they have compromised any one theory or study.
Visible factors

We have already covered most of the visible threats to the validity of theory and research. Is a theory logical and consistent with what we already know? Are the materials and procedure of a study appropriate: are its IVs and DVs valid, or are there important mismatches between them and the real-life variables they are intended to capture, or theoretical descriptions of those variables? Are the samples sufficiently large and representative? Does the study establish causation, or do its authors make inappropriate causal claims from correlational data?

Another critical visible factor that we have touched on is whether a study has been replicated, directly or conceptually. Many of the strongest articles in social psychology report more than one study, showing that an effect can be replicated, at least by the same team of researchers. Your confidence in any finding should increase if it has also been replicated by independent researchers, and your doubt should increase if it has not. Often, different studies produce different results, and these differences are hard to explain. This is partly because each study provides only a probabilistic measurement, or estimate, of an effect (such as the relationship between contact and prejudice). This estimate is subject to error as a result of variations we do not understand – essentially, random error. This is the same principle that applies to any measurement of a psychological variable: each time you measure prejudice, aggression or intelligence, the score will vary more or less randomly, and although the measure will produce a very specific score, it should not be read as an exact measurement of the true score. Rather, it has a margin of error around it. In sum, variability affects the results of studies, just as it does the measurements that are used in studies. This is one of the main reasons replication is so important (although not enough to guarantee safe conclusions: Fabrigar & Wegener, 2016; Francis, 2012; Schmidt & Oh, 2016).

Invisible factors

We have just seen that by reading social psychological research widely and carefully, it is possible to make a solid case that a given theory or study is flawed. While flaws in logic and methods may be readily visible, there are other factors that threaten the validity of theory and research that are much harder to ‘see’ directly. It is useful to be aware of them in order to maintain a healthy, sceptical attitude, and imagine specific alternative interpretations and ways of doing research.

Incentives

Social psychologists, like all researchers, work in an academic environment that offers them incentives (Spellman, 2015). Most are professionally obliged to publish, and are rewarded for publishing their research, especially, in high-prestige journals, such as Proceedings of the National Academy of Sciences, Psychological Science and Journal of Personality and Social Psychology. It has always been easier to publish statistically significant findings than non-significant findings. Further, researchers may have built a reputation by putting forward a theory, and their career progression will not necessarily be suited by results that fail to support their theory. The editors and reviewers of journals may also prefer studies that produce significant results, or offer support for their preferred theories. These and other pressures may influence researchers to design their research in ways that unfairly favour their research hypothesis, or to engage in some of the questionable research and theoretical practices described below.
**Biases**

In this book, we will consider how a range of factors bias the way people think about themselves and their social worlds. Although social psychologists study these biases, this does not necessarily make them immune. One potential bias, for example, is that social psychologists – like academics in general, and perhaps especially in the social sciences – tend to have left-wing political views. Right-wingers (or conservatives) are massively underrepresented in the social psychological community (Cardiff & Klein, 2005; Inbar & Lammers, 2016; Klein & Stern, 2005; Tierney, 2011). Some scholars argue that this ‘liberal skew’ biases the selection of topics, the methods and even the findings and conclusions of research (Duarte et al., 2015). Others argue that mainstream social psychology (e.g., Gjorgioska & Tomicic, 2019), or other areas such as evolutionary social psychology (e.g., Reicher, 2011), or specific theories about relationships between men and women (e.g., Rudman & Fetterolf, 2014, 2015), are subject to neoliberal or conservative bias, and serve to justify inequality. As you read different papers, you may become aware that the research appears to be informed by political values. If you are reading a theory or article that seems to be suffused with left-wing assumptions and values, it is worth asking ‘How might a conservative thinker evaluate this research, and what conclusions would they draw from it?’ Likewise, if you are reading a theory or article that seems friendlier to right-wing thinking, take the perspective of a left-wing thinker.

**The file-drawer problem: also known as publication bias**

Since researchers decide to withhold their non-significant results (for reasons we have just discussed), or because they find it difficult to get them accepted for publication by scientific journals, non-significant results are less likely to be published. As a result, they never see the light of the day, and languish in a literal or metaphorical ‘file drawer’ (Rosenthal, 1979). This means that people reading only the published research will get a misleading picture of research findings: one that suggests a given effect is larger than it is (see also Critical Focus box in Chapter 2).

**Questionable research practices**

Under the influence of incentives and biases, scientists, including social psychologists, have engaged in research practices that distort their results (Agnolie, Wicherts, Veldkamp, Albeiro & Cubelli, 2017; Fanelli, 2009; LeBel et al., 2013; Martinson, Anderson & De Vries, 2005). These are known as Questionable Research Practices, or QRPs (National Academy of Sciences, National Academy of Engineering & Institute of Medicine, 1992). Usually, they serve to increase the likelihood that results will be statistically significant, even if there is no ‘true’ effect.

One such practice is known as HARKing (Hypothesizing After Results are Known; Kerr, 1998). Odds are, if you drop a packet of dried spaghetti on your kitchen floor, you will see a clump or what appears to be some kind of pattern somewhere in the mess rather than an even distribution. HARKing is like saying, ‘I knew that *exactly that* pattern would form’. Likewise, if you perform 20 independent statistical tests on your data, odds are that one of them will emerge as significant at \( p < .05 \). A \( p < .05 \) result that you did not predict is not necessarily impressive. It might be true, and may deserve investigation with further studies, but pretending that you predicted it in advance artificially increases how impressive it looks. Since some apparently significant pattern is always likely to emerge in a complex dataset, HARKing can lead to misleading conclusions.
Another questionable research practice is analysing results while data are being collected, and stopping when the analysis yields a $p < .05$ result. Or, to get to an originally planned sample size (say, 100 participants), finding that $p$ is a bit more than .05, and ‘topping up’ your sample with a few more participants, in the hope that this causes $p$ to drop below that threshold. This strategic stopping technique is wholly inappropriate: because of natural variation, at some point an apparently significant effect will probably emerge before disappearing again, even when no true effect exists. If you stop at exactly that moment, the $p < .05$ result is highly misleading. Stopping and HARKing are just two examples of p-hacking (Simmons, Nelson & Simonsohn, 2011): techniques applied by researchers, deliberately or otherwise, that artificially inflate the statistical significance of their results. Other techniques include omitting dependent variables that did not produce significant results, or running analyses different ways and reporting only the ones that return $p < .05$.

The replication crisis and reforms in social psychology

Concerns about questionable research practices, distortion and inflation of statistical significance have long surrounded science, and gathered fresh momentum with the publication of a searing review paper by the biomedical and statistical researcher Ioannidis (2005), entitled ‘Why most published research findings are false’. In social psychology, these concerns were greatly heightened by the discovery of evidence of extensive fraud by a (seemingly) eminent social psychologist Deiderik Stapel (Aldhous, 2011), who was found to have fabricated data in numerous studies. This produced a concerted effort to try to understand the extent to which social psychology was affected by questionable research practices (e.g., Open Science Collaboration, 2015) and has involved, among other things, collaborative efforts by many research laboratories to replicate social psychological studies.

The Open Science Framework (2015) found that as few as one-third of selected psychological studies replicated, and fewer than that, around a quarter, of social psychological studies. That said, the studies were not selected at random, and replications were conducted in a single lab meaning that some – though not this much – variability in results could be expected, even if the originally observed results were true. A ‘Many Labs’ replication project examined 13 social psychological studies by replicating each one across multiple laboratories and aggregating results. This found that the results of 10 of the 13 studies could be replicated, two could not, and one was marginal (Klein et al., 2014). A second ‘Many Labs’ project attempted to replicate 28 social psychological findings and found that roughly half replicated. Further, the effect sizes
The discipline of social psychology in the replication studies were generally smaller than in the original studies – though this does not necessarily indicate questionable research practices, and can arise from innocent statistical phenomena (Klein et al., 2018).

These results highlight the need to always be critical, and to entertain doubt, about the studies that you read. However, we firmly believe that they should not give you cause to think that most of the results and conclusions in this book are false. For the most part, we emphasize theories that have been supported by different kinds of studies by different labs.

Some social psychologists are more pessimistic about the state of the discipline, and some are much more optimistic, even doubting that there really was a crisis in social psychological research (e.g., Fiedler & Schwarz, 2016; Gilbert, King, Pettigrew & Wilson, 2016). For some research into social psychologists’ attitudes to the replication crisis and the reforms that have followed, take a look at Washburn et al., 2018.

Some studies of questionable research practices in disciplines where the problems are similar – or worse – indicate that although these practices are relatively common, their effect on results is relatively small (e.g., Head, Holman, Lanfear, Kahn & Jennions, 2015). A comprehensive and rigorous analysis of the methods and results of social psychological research suggested that social psychological studies do produce reliable evidence – albeit not perfectly – and that their reliability may be improving after the implementation of reforms (Motyl et al., 2017). Where there have been particular concerns about failures to replicate major findings, we frequently note as much in this textbook, for example in the special features in Chapters 3, 4 and 5.

Many reforms have been proposed and implemented by social psychologists (e.g., Munafò et al., 2017; Nosek et al., 2015). They have also been built into the journals in which social psychologists publish, including leading journals for which we have served as associate editors, such as the Journal of Experimental Social Psychology (Giner-Sorolla, 2016) and Personality and Social Psychology Bulletin (Crandall, Leach, Robinson & West, 2018). These reforms mean that it is increasingly difficult to publish work that does not employ strong research practices.

As part of these reforms, social psychologists make increasing use of the meta-analysis of multiple studies. These can help to quantify the impact of the file-drawer problem, and to overcome the uncertainty and limitations of any one study. Another positive step is the more widespread use of larger sample sizes, calculations of ‘statistical power’ that enable researchers to determine that their sample sizes are fit for purpose, and greater awareness of the pitfalls of analysing data while they are being collected (Simmons et al., 2011).

Other positive steps include the increasing adoption of open scientific practices. There are now portals such as the Open Science Framework (OSF: https://osf.io) in which researchers can lodge all of their materials, and within ethical constraints, their data, for anyone to see. Researchers can post a plan of their methods, hypotheses and data analyses before they start to collect their data. They are not always immediately public but are time-stamped and later become visible. This effectively prevents researchers from HARKing and several other questionable research practices, and also alerts researchers to research that may not have produced significant findings. A further positive development is the increasing ease with which non-significant findings can be published. Prestigious journals are now more open to publishing
non-significant findings, and may sometimes agree to publish research even before its results are known. New journals have sprung up that are open to the publication of non-significant findings, such as the Journal of Comprehensive Results in Psychology, Collabra, Frontiers in Psychology and Plos One. Authors are also increasingly able to make their papers publicly available before they are accepted for publication in journals, in repositories such as PsyArXiv and, indeed, ResearchGate.

These reforms demonstrate the self-correcting nature of science (Rutjens, Heine, Sutton & van Harreveld, 2018). False theories and false findings should eventually be rooted out by further research; practices that produce them should eventually be superseded by better practices. Social psychologists have put themselves at the vanguard of scientific reform by turning the tools of science upon itself. Specifically, they have used theories of motivation and decision making to understand how bias can influence science, and to quantify the seriousness of that influence. In our opinion, the reforms have made social psychologists more aware of the biases that may affect them and their colleagues, and more aware of good practices and pitfalls in research.

EXPLORING FURTHER

If you want to check whether the findings reported in an article have been replicated, either directly or conceptually, remember that you can use academic databases like Google Scholar to find the article and the articles that have subsequently cited it. You can search within these citing articles with the word ‘replication’ and you should be able to find relevant papers. Also, websites like Curate Science (curatescience.org) keep databases of attempts to replicate published findings; also check out the articles and websites of Open Science Collaboration (2015) and the Many Labs projects we referred to earlier.

In summary, critical thinking is a process that involves awareness of the limitations of your own knowledge and the uncertainty that surrounds any theory or finding. Using logic, creativity and your increasing knowledge of a topic, critical thinking means forming balanced conclusions about what we know and what remains to be found out. Important steps in critical thinking include:

» working out and searching for the information you need to solve a problem or answer a question
» prioritizing that information according to its quality and relevance
» framing the question or problem in different ways and from different perspectives
» being aware of, and imagining, alternative methods, findings and conclusions
» being aware of less visible threats to the validity of research and theory, including the role of incentives and biases
» assessing the relevance of theory and research to the real-world phenomena they seek to address.

This may all seem daunting – but critical thinking is a skill that can be developed. Always bear in mind that the first step in your thinking is to be informed; to be able to understand and describe key theories and findings. This is the foundation for critical thinking and an essential part of your written work. How intensively critical your work is after that is a matter of what the task or essay requires you to do, your time and your (growing) ability.
This chapter provided a broad introduction to the discipline of social psychology, outlining its history, topics and methods. You will have learned that:

» Social psychology is the study of how people think about, influence and relate to each other. It aims to further knowledge about the relationships between people and the social world, focusing on how people are influenced by the actual or implied presence of others.

» The majority of social psychologists adopt the scientific method, empirically putting theories to the test to make discoveries and refine theories. Critical social psychologists challenge the scientific approach, arguing that there are no universals of human nature.

» Social psychology is a relatively recent discipline, having emerged in its own right in the late 1800s and early 1900s. Early work was influenced by behaviourism, focusing on the impact of positive and negative events on behaviour.

» Social psychology has also been deeply influenced by social events such as the Holocaust, and this continues to this day. Also, the social backgrounds of the scholars themselves have strongly influenced the development of social psychology.

» Much of social psychology focuses on real-world questions and issues. Because of this, many social psychological findings are seen as 'common sense' – a result of what is known as the hindsight bias or the 'I knew it all along' effect. Perhaps also because social psychological findings can be intuitive, people see themselves as 'lay social psychologists'. The key difference between laypeople and social psychologists is that the latter devise theories to answer questions scientifically. Doing social psychology requires the generation of research questions and hypotheses that are tested using a variety of methods and critical thinking.

» Although most social psychologists adopt the scientific method, others have argued that hypothesis testing leads researchers to think less about the social context and so social psychology becomes less about social issues. In the 1970s, what was viewed as a 'crisis' in social psychology led some researchers to put the 'social' back into the discipline. This led to the development of critical social psychology, which gives more attention to social contexts and people's interactions with others.

» Social psychologists have a wide variety of research 'tools' or methods at their disposal. Once they have formulated a research question, they need to choose whether to conduct a quantitative investigation, a qualitative study, or to use both methods. Quantitative methods include surveys and questionnaires, and experiments. Qualitative methods include thematic analysis, conversational analysis, narrative analysis, discourse analysis and interpretative phenomenological analysis. Methods common to both approaches include observations, case studies and archival studies.

» There are several issues to consider in social psychological research. For example, how participants are sampled is important and, ideally, samples should be random in experimental research. A measure should be reliable, such that it brings about consistent results. Also, it should be valid, in that it measures what it is supposed to be measuring. When conducting a study, it is also important to consider if the findings are statistically significant, or determining the probability that the finding of interest could have occurred by chance.

» Another key distinction in social psychological research is that between basic research (focusing on fundamental questions at the heart of human nature), and applied research (applying social psychological findings to social problems or issues).

» Cultural issues are important in social psychology and it cannot be assumed that all people think and act in the same way. 'Western' social psychology often ignores key cultural differences between people – such as individualism and collectivism – that determine social outcomes.
Social psychologists must also conduct their work ethically, that is, they must carry out their research with the safety and privacy of participants in mind.

Social psychology has close links with many other sub-disciplines of psychology, such as cognitive, clinical and personality psychology. It also has close relationships with disciplines outside psychology, such as biology, neuroscience, sociology, social anthropology and economics.

Social psychologists disseminate their research primarily through publications in scientific journals. However, they also publish book chapters, present their work in talks, and are making increasing use of social networking opportunities.

Critical thinking is an essential skill in social psychology that is associated with creativity and can be developed through instruction and practice. It involves imagining alternative theories, methods and conclusions, and appraising the strengths, weakness and relevance of theory and research.

Over the last decade, social psychology has experienced a new ‘crisis’ of confidence about the robustness or replicability of research. This has led to several reforms to the way social psychological research is conducted and published.

In Chapter 2, we begin our journey into the specific topic areas of social psychology, starting with the social self – the study of how people understand who they are.

**REVIEW QUESTIONS**

Having read this chapter, here are some essay-style questions which you can attempt in preparation for your examinations:

1. Critical thinking and weighing up evidence is crucial to social psychology. Explain, with examples, why this is the case.

2. Imagine that you are designing a study to examine media representations of gender roles over the past 30 years. Design a study that would enable you to do so and explain and justify your choice of research methods.

3. Sampling is a crucial issue in social psychology. Explain, with examples, why in some situations it is acceptable to test hypotheses using White undergraduate participants, and why sometimes it is not.

Visit the website for this book to access to a wide range of resources, including videos and self-test multiple choice questions, to help you get to grips with this chapter:

www.macmillanigh.com/sutton-social-psychology-2e
Allport, G.W. (1954a). The historical background of modern social psychology. In G. Lindzey (Ed.), *Handbook of social psychology* (vol. 1, pp. 3–56). Reading, MA: Addison-Wesley. For those of you who like to read the classics, this is Allport's history of social psychology, covering work up to the early 1950s.

Forshaw, M. (2012). *Critical thinking for psychology*. London: Wiley Blackwell. Introduces one of the key skills we have highlighted in this chapter: critical thinking. Explains what is expected from students, how to construct critical arguments and, using exercises, highlights the importance of critical thinking in psychology.


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