CHAPTER OVERVIEW

This chapter covers the following topics:

- Psychology and research
- Key themes
- Learned behaviour
- The developmental
- How is psychological research carried out?
- Evaluating psychological research

KEY TERMS

Applied
Behaviour
Conditioning
Empirical
Mental
Mind
Unconscious
Psychology is a hugely diverse discipline. Research and practice in this area ranges from examining the biological to the social, the applied to the theoretical. The term 'psychology' itself refers to an interest in understanding the workings of the mind, human behaviour and establishing general principles around ‘what makes people tick’: the way people act, feel or behave in specific contexts. Some key areas of research, teaching and practice within psychology include clinical psychology, counselling psychology, health psychology, neuropsychology, behavioural psychology, evolutionary psychology, developmental psychology, cross-cultural psychology, indigenous psychology, feminist psychology, positive psychology and social psychology.

PSYCHOLOGY AND RESEARCH

Psychological research extends beyond psychological disorders, distress and treatment. It is incredibly varied, spanning basic and applied areas, including various domains of practice, with many links to other disciplines (such as biology, neuroscience, mathematical sciences, sociology, gender studies and business). So what does psychological research do? Typically, psychological research seeks to understand and improve things. This can mean, for example, examining racism and sexism with the aim of combating prejudice, understanding the signs and reasons for depressive states and the best behavioural or therapeutic interventions for people displaying these, understanding the relationships between brain function and behaviour, examining the links between media exposure to violence and its effects on behaviour, and understanding how people construct (or put together and enact) their identities in different social contexts. In any of the varied research fields, the idea is to understand behaviour, to be able to contribute to theory and deal with (apply the theory to) the myriad issues people face in the contemporary social context.

RESEARCH ALIVE 25.1

TOPICS EXAMINED IN PSYCHOLOGY

The diversity of psychology as a discipline means that the topics examined, or areas researched, are also expansive. Some of the most common research areas include the following.

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The sorts of things that psychologists study, and how they go about that study, relate to the broad theoretical movements happening at any particular time within the discipline and wider fields of academia. The unconscious mind is a classic area of interest for psychological theory. Psychoanalysis, a set of theories established by Sigmund Freud (1856–1939) over 100 years ago, seeks to make sense of human behaviour through understanding the unconscious. Psychoanalysis is a difficult theory to test in an empirical way; however, the notion that some mental processes occur below the level of conscious awareness remains important in psychology.

**Unconscious**
The part of the human mind that the individual is unaware of.

**Empirical**
Relating to a scientific approach to defining knowledge based on objective information and processes.

**Mental**
Relating to the mind.
LEARNED BEHAVIOUR

From very early on in the development of the field, psychologists have had an interest in behaviour analysis and modification. Part of this research includes understanding how people learn to behave. Ivan Pavlov’s (1849–1936) well-known research on the salivation reflex in dogs documented how somewhat automated learning can take place in regular daily activities.

The type of conditioning described by Pavlov’s experiments is an involuntary process (examples are salivation, the eye-blink response, sexual responses, galvanic skin response and emotional responses) and because of its reflexive nature, it is somewhat limited in the behaviours it can be used to explain. Behaviour that is under voluntary control is called operant behaviour, and operant behaviours are learned through the consequences that follow them. The behaviourist B. F. Skinner (1904–90) was very interested in how particular behaviours occur under specific environmental conditions, based on the reinforcement and punishment that follow them. Traditionally, research in the area of behaviour analysis has been conducted in tightly controlled experimental settings (and often using non-human subjects). Today, the strong experimental tradition remains, and links to the biological sciences are strengthening. For example, applied behaviour analysis (Cooper, Heron, & Heward, 2006) is used in a large range of settings from clinical and community applications, to business and industrial environments (see http://www.abainternational.org).

RESEARCH ALIVE 25.2

GAMBLING IN AOTEAROA NEW ZEALAND

In some form, gambling has been a feature of New Zealand society (and its economy) virtually since the first European contact; it is generally viewed as a legitimate recreational or entertainment activity. Gambling includes a diverse range of activities in a variety of settings, many of which have substantially greater hours of operation and greater availability throughout communities than alternative recreational activities. ‘Pathological’ gambling was recognised as a mental disorder with its inclusion in the DSM-III (American Psychiatric Association, 1980) and subsequent revisions. The term ‘problem gambling’ has been used in a variety of ways; in most situations it is used to indicate all patterns of gambling that disrupt personal, family, or vocational pursuits (Lesieur, 1998).

In Aotearoa New Zealand, the vast majority of people seeking help for gambling problems cite electronic gaming machines (EGMs) as their primary mode of harmful gambling. The core feature underlying the operation of these
machines is a simple variable-ratio schedule of reinforcement (Skinner, 1953; Ferster & Skinner, 1957). That is, the EGM provides a win unpredictably based on an average number of plays. The EGMs also include more sophisticated features such as several schedules, other win-related features, graphical displays, lights and music. If you play a machine, even for a short period of time, you will encounter a win feature of some sort—these frequent albeit small wins encourage gamblers to continue playing. As you can see, the importance of operant conditioning (small wins) and respondent conditioning (sounds, music and graphics) are a key part of why people gamble more than they intend, and some develop harmful patterns of gambling.

The Gambling and Addictions Research Centre at AUT University investigates a range of issues related to how the features of gambling products might lead them to be more harmful or safer and how exposure to various gambling products has influenced gambling problems at a population level. Currently, large research projects are investigating issues such as the incidence and prevalence of problem gambling in a nationally representative sample, the effectiveness of various phone-based and face-to-face interventions for gambling problems, the impact of game features on gambler behaviour, the effectiveness of various regulated EGM-based interventions on gambling harm, the impact of gambling on Pacific peoples, and the relationship between problem gambling and family violence (see http://www.niphmhr.aut.ac.nz/research-centres/gambling-and-addictions-research-centre).

Some key researchers have extended the notion of learning to social contexts and situations to understand how people learn to behave in a variety of ways. For example, Bandura, Ross and Ross (1961) carried out a series of experiments looking at how ‘vicarious’ learning may occur in children. He showed videos to preschool children depicting an adult either attacking (hitting, punching) a blow-up clown ‘Bobo’ Doll, or sitting next to it quietly. The children who had witnessed the aggressive behaviour were then more likely to display aggression towards the doll. This indicated to Bandura that merely witnessing certain behaviours (even in the absence of reinforcement or punishment) could elicit that behaviour in people. Named social learning theory, this model posits that people learn from one another through modelling, imitation and mere observation, with or without directly encountering reinforcement or punishment (Bandura, 1977). Social learning theory has been applied in a variety of ways in psychological research, such as examining links between violence in media and aggression, childhood development, educational performance and anxiety disorders.
THE DEVELOPMENTAL

A significant part of psychological research has been devoted to understanding how people develop across their life span. A major focus of this research has been on understating human ‘attachment’. For example, Harry Harlow (1905–81) was able to demonstrate, through his experiments with infant rhesus monkeys, that ‘contact comfort’ from a mother or caregiver figure was more important than food and water. Infant monkeys were more drawn to a wire ‘mother’ that was covered in comforting ‘cloth’ than a wire ‘mother’ that was left bare but provided milk. Softness and closeness were thus identified as important parts of early development and attachment.

One of the most influential developmental psychologists was Jean Piaget (1896–1980) who proposed the theory of ‘equilibration’. After many years of working with children, he noted that cognitive development happens in stages (from birth to adolescence) where children seek to gain a balance between the information they receive, the experiences they have and the cognitive abilities they have: an evolving form of equilibration (Piaget, 1954). In one of his famous experiments, the liquid conservation task, Piaget was able to demonstrate that until children reach the age of ‘concrete operations’ they will judge the same amount of liquid poured in differently shaped beakers as more or less depending on the height of the beaker. The quantity of the beaker is not recognised as being ‘conserved’ despite the superficial changes in the shape of the container.

RESEARCH ALIVE 25.3
QUALITY OF LIFE RESEARCH

The World Health Organization Quality of Life Group (WHOQOL) defines health-related QOL as ‘individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept, incorporating in a complex way individuals’ physical health, psychological state, level of independence, social relationships, personal beliefs and their relationships to salient features of the environment,’ (WHOQOL Group, 1995, p. 1405). This multifaceted definition thus encompasses a wide range of aspects in people’s lives.

Complete measurement of the health status of a country requires more than experts analysing morbidity and mortality statistics and other socio-economic indicators, and more than the collective opinions by health professionals about the health of their patients. After all, one may be happy with one’s life in spite of illness or disease. Therefore, people should be asked directly about...
their QOL. In health service evaluation, subjective assessments compliment the more objective biomedical measures, and thus broaden the focus of measuring health by introducing more humanistic elements. Measuring subjective perceptions can also help improve communication between health professionals and their patients. For example, today, medicines to be approved by the US Food and Drug Administration and the European Medicines Agency often require QOL impact analysis.

WHOQOL questionnaires measure the extent to which people feel satisfied with their health and QOL irrespective of their level of physical functioning. The WHOQOL assessment thus takes into account individuals’ physical health, psychological state, their functional status to carry out tasks of everyday living, their social wellbeing, personal beliefs, and environmental factors. The core questionnaires are the WHOQOL-100 and the abbreviated WHOQOL-BREF, which have been developed with the collaboration of many field centres in different countries, and they thus possess very good cross-cultural applicability [WHOQOL Group, 1995, 1998]. Researchers at AUT University have recently founded the New Zealand WHOQOL Group [Billington, Landon, Krägeloh, & Shepherd, 2010], which conducts research in the area of QOL and assists other researchers using these tools. The WHOQOL-BREF has also now been validated for use with the general New Zealand population [Krägeloh, Kersten, Billington, Hsu, Shepherd, Landon, & Feng, 2013], and a version with specific New Zealand items is now also available [Feng, Krägeloh, Billington, & Hsu, 2011].

THE SOCIAL

Along with an interest in individual learning and development, psychological research has been eager to examine how people behave in particular social situations, under various conditions, in the presence (or imagined presence) of others. Social psychological research has traditionally been interested in understanding how power operates within society, how and why social injustices are carried out, how people respond to authority figures, and the processes of conformity.

In a similar vein, Haney, Banks and Zimbardo (1973) conducted what became known as the famous ‘Stanford Prison Experiment’ to map how social roles influence or dictate human behaviour in specific situations. For this study, a number of university students were recruited and assigned to the role of either prisoner or guard in a ‘mock prison’. Surprisingly, the participants not only took on these assigned roles, but took them on so well that the experiment had to be terminated much earlier than planned. The guards, with
all their allocated power, had become increasingly aggressive and cruel to the prisoners, who then became withdrawn, anxious and depressed. Although the participants were aware they were part of an experiment, ‘the role of guard and prisoner were so compelling and powerful … that this simple truth was overlooked’ (Aronson, Wilson, & Akert, 2013, p. 240) and their identity lost. Similar real-life events have recently occurred in places like Abu Ghraib prison during the second Gulf War, where guards who had little training or supervision were engaging in acts of abuse and dehumanisation towards the prisoners (Zimbardo, 2007). It would seem the roles assigned in society, whatever they may be, have great impact on how people enact their identities or behave in specific contexts.

**HOW IS PSYCHOLOGICAL RESEARCH CARRIED OUT?**

Methods used to carry out research in psychology vary significantly. There are experimental qualitative and quantitative methods. Research may involve human participants, animal subjects or social and textual resources. Researchers may use various machines that measure or map brain functioning (such as an EEG machine or MRI scanning), administer surveys or questionnaires, observe participants, conduct interviews, run focus groups or analyse clinical case material. The methods of data collection deployed, and the modes of analyses used, depend on the research topic, what the researcher is interested in examining, and the epistemological positioning of any given project. It is important to stress that psychology is a research discipline and any application derived from psychology needs to be grounded in empirical evidence.

Most psychological research follows the ‘scientific method’ (as used in the natural sciences). This means there is an interest in measurable phenomena, but these phenomena can include non-observable constructs such as personality or quality of life. Through the systematic collection and analysis of data, and consequent development of sets of models or related theories, psychologists seek to understand and explain human behaviour. Objectivity is seen as an important part of the research process. Research from this approach usually follows the principle of ‘hypothetico-deductivism’. Rather than ‘confirming’ a theory (A follows B) and putting claims to the ‘test’, psychological research works by looking for disconfirmation, or *falsification* rather than *confirmation*. Discovering which claims are *not true*, by a process of elimination of claims, moves researchers closer to the truth (Willig, 2008). Within this approach, well-controlled experiments (where the variables are controlled and manipulated by the researcher in laboratories or applied settings) are the ideal (but not only) approach, and direct measures of behaviour, brain function, physiology and self-report via surveys and questionnaires which include validated psychometric scales, are often used. This approach places heavy
importance on the reliability (are the results consistent or repeatable?) and validity of the measures (are we really measuring what we think we are?) to ensure results are objective and replicable.

**CASE STUDY 25.1**

**CRITICAL PSYCHOLOGY**

Alongside the mainstream or traditional methodological approaches described above, there is a critical branch of psychology that draws on postmodern theories [e.g., Post-structuralism, Foucauldian theory] and critical social theories [e.g., Marxism, feminism], in order to examine our world (and us within it) to foster social or political change [e.g., Parker, 2007]. Critical approaches tend to deal with issues of power and domination, stating that our society is structured unequally (through categories like class, gender, sexuality and ablebodiedness). It has criticised mainstream psychology for being too individualistic and experimental in its research endeavours and seeks to fully contextualise research socially, politically and historically.

What sets critical psychology apart is the Epistemology [theory of knowledge and theorising around what counts as ‘legitimate knowledge’], Methodology [considering how research should best proceed], and Method(s) [techniques or ways of gathering data] that it deploys. This type of research tends to be in-depth, exploratory, qualitative, discursive, and seek to identify and problematise many forms of dominant or taken-for-granted ‘truths’ that maintain unequal power relations within society (which have adverse outcomes on people’s health and wellbeing).

Much of the critical work in psychology comes from critical social psychology [Gough & McFadden, 2001], with its core origination being: a critique of the traditional scientific model for understating people [a preference for relativist/constructionist approaches], acknowledging the importance of language in shaping our realities, a focus on the analysis of power relations within society, a social change orientation, an emphasis on diversity within research, striving for ethically rigorous research and promoting researcher reflexivity [e.g., Farvid, 2010]. Critical psychology seeks to do socially and politically important work and has examined topics like modern racism [Wetherell & Potter, 1992], modern sexism [Gill, 1993], rape and sexual coercion [Gavey, 2005], sexual ethics [Beres & Farvid, 2010], and the inequalitarian portrayals of male and female sexuality in magazines [Farvid & Braun, 2006]. It has a solid following in Europe and Australasia and spans research in health, social, political and liberation psychology.
EVALUATING PSYCHOLOGICAL RESEARCH

Robust psychological research utilises appropriate research methods to answer its overall research questions. For example, exploring the relationships between two variables (such as the temperature in a room and the cognitive functioning of students in that room) might lead to devising an experiment within a quantitative framework to test this. Alternatively, investigating the personal narratives of people when it comes to their daily experiences (of sexual relationships or working life) might utilise interviews within a qualitative framework. The main thing to remember is that doing robust research means making methodological choices that are clearly justifiable and appropriate given the research topic, and that the research process is made transparent within any document reporting its findings.

SUMMARY

As a hugely diverse discipline, psychology spans a variety of research topics, interests and methodological approaches. This chapter has provided an outline of some of the classic theories and studies in the history of psychology and how they relate to research or psychological theorising today. Some current local research happening in Aotearoa New Zealand has been showcased to demonstrate how psychological theory is applied to research and practice in the contemporary context.

REFLECTION POINTS

• How do your interests line up with the sorts of things psychological researchers are interested in?
• What did you learn from reading about the classic studies in psychology?
• How relevant do you think the classic psychology studies are today?
• What is the relevance of some of the newer and local research?
• What sorts of methods can you use when doing psychological research?
• How would you go about evaluating research done in psychology?

STUDY QUESTIONS

1. What is psychology?
2. What is psychology interested in and why?
3. How does psychological research relate to health-care practice?
4. How does psychological research get carried out?
5. What makes for good psychological research?
ADDITIONAL READING


REFERENCES


WEBSITES

New Zealand Psychological Society:
http://www.psychology.org.nz

Psychologist's Board:
http://www.psychologistsboard.org.nz

British Psychological Society:
http://www.bps.org.uk

American Psychological Association:
http://www.apa.org