

WHAT IS PSYCHOLOGY?

Some people think that psychology is just common sense – but it isn't. In some ways, psychology can be seen as a test of common sense. Psychology has shown that what we have always strongly believed to be true often turns out to be wrong. And sometimes things that sound like wild ideas turn out to be true.

Psychology specialises in what are called *counter-intuitive* findings. These are the results from psychological research studies that you just didn't expect, which pleasingly and surprisingly contradict common sense. You read them, and you think, 'Well, how about that then?'.



The philosopher Voltaire said, 'Common sense is not so common'. He could well have added, 'and doesn't often make a lot of sense either'.

Decisions, decisions, decisions

You have probably had many experiences of having to make a decision about something important and agonising about it. Should I or shouldn't I?

For example, Cara's daughter recently couldn't decide whether or not she should break up with her boyfriend. I won't list the things he had done wrong but she really wasn't sure that he was the one. On the other hand she loved him.

She eventually decided to stay with the relationship but kept asking herself 'Did I do the right thing, am I better off without him?'



Psychologists have explained Cara's daughter's confusion. Let's begin with a study they tried.

They told students in their study: I am going to pay you £50 to spend an hour to turn the pegs on a board 90 degrees at a time.

(So far, this sounds a good deal. But there is a little more to it.)

When you have finished I wonder if you would mind telling some other students that you actually really enjoyed the task.

The two psychologists who did this study – Leon Festinger and James Carlsmith – demonstrated something quite surprising. What do you think the students said when they had to describe the task to another student? Those students who were paid a lot (it was actually \$20 but the study was done in 1959) were a bit negative. But students who were paid a measly \$1 gave a glowing account of what fun they had! If there is a budding psychologist inside you, you should be asking 'That's odd – I wonder why?'

Festinger and Carlsmith came up with a theory called *cognitive dissonance*. If you do a boring task for a lot of money and then have to tell someone it was fun, this produces no conflict in your mind ('I did it because I was paid a lot'). If you do a boring task and have to say it was fun but get very little money, you may be asking yourself, 'why did I do that?' – there is some conflict in your mind.

The students with conflict had to find an excuse for themselves about why they did such a boring task and lied, so they convinced themselves it wasn't actually that boring – and that meant they could justify their behaviour to themselves.

The theory of cognitive dissonance says that when we are faced with a decision that produces anxiety and conflict (dissonance), we want to reduce the conflict. One way to do this is to think that one option is much less desirable and then the anxiety vapourises.

Turning pegs for an hour.
Would you do it?

Cognitive dissonance, your first theory

'Cognitive' means in your mind, and 'dissonance' means conflict. These new and, we admit, somewhat challenging words may scare you. But you might well impress others with your big words. From here on, this is what you will be doing in your study of psychology:

- Learning about research studies that psychologists did.
- Learning about their theories.
- Learning great words to use at parties.

PSYCHOLOGY IS GREAT

Armchair psychology

People like to offer their own explanations for why people do what they do. Psychologists go beyond common sense and beyond personal opinions. The single thing that matters most in psychology is evidence. Real psychologists, as opposed to armchair ones, are expected to provide evidence for their every utterance (well, almost every one). Evidence doesn't come from personal experience, or subjective opinion. It comes from what we call **empirical evidence**, which is what research studies are all about.

Research studies are crucially important, and form the foundations of psychology. Psychologists do research studies – they write down what they did (**procedures**) and what they found (**findings**). Then other psychologists can read about the studies and criticise them or try something similar.

But let's not be too dismissive of that armchair theorising. That's the starting point of our psychological knowledge. We then use the evidence from studies to evaluate our theories, to change and develop them, to get as close to the truth about behaviour as we scientifically can.

The key word is **science**.

We think science is the best thing since sliced bread – but actually it isn't a 'thing', it's a process. It is a wonderful process that enables us to get closer and closer to understanding the world. This is the process:

Step 1: Identify a research question or issue. This usually stems from observing an interesting behaviour, or from a broader psychological theory.

For example (and lets take a simple example), have you ever heard the saying 'familiarity breeds contempt' or 'absence makes the heart grow fonder'? So which is true?

Step 2: Decide on a topic to study (your **aim**) and (if appropriate) form a testable **hypothesis**. Your observations lead you to decide on a topic to study. In some kinds of scientific research a formal statement is made – a hypothesis. This is a statement of what you believe is true. You state this so that you can test to see whether it is supported by evidence and thus may reflect reality.

In order to test the idea we need to go with one of the views – familiarity leads to increased liking rather than contempt. So here's our hypothesis 'You feel more positive about a word you hear ten times than something you hear just once'.

Step 3: Design a way to test your hypothesis. This is where it gets remarkable. The key feature of science (as you should know from GCSE) is that it is controlled. There are many different kinds of study but let's consider doing a controlled experiment like Festinger and Carlsmith's (previous page) – we get one group of people to do a task in one way and we get another group of people to do a task differently so we can compare them.

In fact Robert Zajonc (a well-known psychologist whose name just happens to be pronounced as 'Science' – yes, really) tested just such a hypothesis. He made up a list of words such as ZABULON and ENANWAL.

Participants* were asked to listen to a list of words. One group of participants heard the word ZABULON 10 times in the list and a second group heard it once. The opposite was true for ENANWAL.

At the end participants were asked to rate how much they liked all the words in the list.

Step 5: Analyse the results and draw conclusions. You may present your results in a bar chart or may do a statistical test to see if your hypothesis is supported.

Zajonc found that participants did rate the words heard more frequently as more likeable. So we can conclude that familiarity does not breed contempt.

Step 6: Evaluate and feedback. If the hypothesis has been rejected by the analysis, then it needs to be revised and retested. So we form a revised hypothesis ... Even if your hypothesis is supported, you might come up with further ideas to refine your original hypothesis ...

However, there are criticisms of this study. Can you think of any?

*When psychologists do research, the people in their studies are called 'participants'.

The even better news is, psychologists don't have all the answers. The truly great thing about psychology, the thing that really gets thousands of researchers and practitioners up in the mornings, is that there is still so much to learn and understand. There is still a lot of room for discussion and debate. And now you can join in.



Validity

If you did think about the study by Zajonc on the facing page, one thought might have occurred to you – participants would have realised that some of the words were repeated a lot. This may have led at least some participants to try to guess what the study was about and alter their behaviour.

Therefore the results of the study actually don't represent anything real. This is an issue of **validity** – which refers to whether something is real or just an outcome of a research study that actually doesn't represent reality. Validity is a difficult topic so don't expect to get it all at once. But it is an issue of central importance in psychological research so you will need to get it eventually.

Internal validity

Internal validity concerns things inside a research study. It may be the question of whether we are testing what we actually intend to test. In our familiarity example, do you think we were actually testing whether familiarity makes something more likeable?

Internal validity also concerns the question of 'control'. It might be that other factors affected our findings. For example, some people might have heard the words ZABULON and ENANWAL before (not likely – that's why they were chosen). But if they had, that would have spoiled everything. Researchers need to try to control everything that could cause problems. This is something discussed in Chapter 6.

External validity

External validity is concerned with things outside the research study. To what extent can we generalise our research findings to other situations? Do you think Zajonc's study could be used to explain why repeated adverts are very successful on TV?

Research methods in psychology

Psychologists use a variety of methods in their research – all of them aim to be scientific because they seek to be objective and controlled and repeatable. Often psychologists conduct **experiments**, which means they can draw conclusions about cause and effect. The main issue with experiments is they can be quite trivial; just looking at a few variables doesn't always represent real life (you might feel that about Zajonc's study).

One alternative is to simply **observe** what people do in their everyday lives – psychologists watch people through two-way mirrors or from behind a bush in a park (not very often). The problem here is that, frequently, there is just too much going on to allow us to draw useful conclusions. Other methods include **questionnaires**, **interviews**, **case studies** and also performing **correlational analysis**.

The key is using all kinds of different methods to study one aspect of behaviour and considering how the findings from the different kinds of study inform us.

As research methods are so important to psychology, they feature very prominently throughout the rest of this book.

Ethics in psychology

Ethics refers to standards of behaviour, behaving with due respect for the people (or animals) you are studying. Ethical issues matter in psychology because the potential for causing damage is so much greater in psychology than it is in, say, chemistry. The subject matter of psychology is behaviour and the participants in research studies are human beings. It is all too easy to carry out studies that could expose people to embarrassment, anxiety, stress or even worse forms of **psychological harm**.

So psychologists are always very careful to include steps to reduce this possibility, to make sure that the dignity and welfare of participants are protected. Ethical guidance is issued by professional psychological associations such as the British Psychological Society (BPS) or the American Psychological Association (APA). These organisations publish codes of conduct that psychologists and researchers have to follow in their research and professional practice.

Statistical analysis in psychology

We've seen that conducting empirical research is a fundamental activity of psychology, but it would all be wasted effort if we didn't have a way of knowing what our results mean. This is where statistics come in.

There are two types of statistics in widespread use in psychology – **descriptive statistics** and **statistical tests**.

Descriptive statistics summarise data. They include measures such as the **mean** and drawing **graphs**. Such methods allow us to get a quick snapshot of the patterns in our data.

Statistical tests are based on **probability** (see Chapter 6). The key thing for you to know is they tell us if any pattern in our results is just due to chance.



A mysterious student has been attending a class at Oregon State University for the past two months enveloped in a big black bag. Only his bare feet show. Each Monday, Wednesday and Friday at 11.00 am the Black Bag sits on a small table near the back of the classroom. The class is Speech 113 – basic persuasion ... Charles Goetzinger, professor of the class, knows the identity of the person inside. None of his students in the class do. Goetzinger said the students' attitude changed from hostility toward the Black Bag to curiosity and finally to friendship.

Taken from the Associated Press, Feb 27, 1967

When Zajonc (1968) wrote a report of his study described on the facing page he began with the story above. It suggests that familiarity doesn't breed contempt – it actually breeds liking for something. At least in some situations...

He called this the mere exposure effect.

In Chapter 4 we discuss approaches in psychology, so this is a very brief introduction to support you until you get to that chapter.

The idea of an 'approach' is that psychologists tend to have a general view of what causes behaviour. Some of them think that the way we behave is largely inherited, others believe it is largely learned through your life experience.

For example – think about football.

What is it that makes someone interested in football or good at it? Did they inherit some kind of football gene from their parents or did they learn to love it perhaps because their family enjoyed kicking a ball around?

Psychologists call this **nature** (what you are born with) or **nurture** (your life experiences).

There are other key differences in the main approaches described on this page.

Biological approach

The biological approach explains behaviour in terms of physical causes in our brains and bodies, and this includes our **genes**.

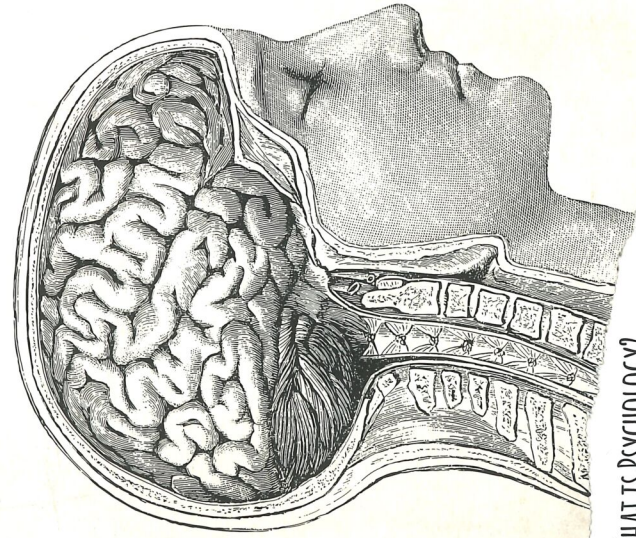
The most likely biological source of causes of behaviour is the brain, which produces chemicals called **neurotransmitters** (such as **serotonin**, which plays an important role in regulating our moods).

The **endocrine system** is also significant because it produces **hormones** (for example **adrenaline**) that have a big impact on our behaviour.

The methods used by this approach to investigate behaviour are physical too. **Brain scans** can show us the structure and functioning of the brain. Researchers then try to relate these to normal as well as abnormal behaviours. In the last 20 years the development of brain scanning techniques has led to a massive increase in understanding how the brain relates to behaviour.

Research on animals can be helpful too, because we can't deliberately make changes to the human brain to observe the effect on behaviour (no really, we can't, not for research purposes).

This approach to understanding behaviour is largely 'nature' – though many aspects of the brain and body and even your genes (surprisingly) can be changed by nurture.



Nature or nurture? Or nappies?

Behaviourist approach

The central concept of this approach is the influence of experience on our behaviour, and how we *learn* behaviours. Basically we are born as 'blank slates' and what we become is shaped by experience (sometimes termed 'the environment').

Basically we either learn through association (**classical conditioning**) or **reinforcement** (**operant conditioning**).

If you have cats you will know that they come running as soon as they hear a cupboard door being opened. They have learned to associate that noise with food.

You probably also know the usefulness of treats with animals – a small reward *reinforces* a behaviour and makes it more likely to happen in the future.

These are examples of classical and operant conditioning.

Whatever characteristics we might be born with, these take second place to the crucial roles of our experience and the environment.

Because this approach is most closely associated with scientific psychology, it's no surprise that **behaviourists** are cheerleaders for the **experimental method** in psychology because it involves precise and objective measurement of behaviour in controlled conditions.

The approach also uses research with animals, because it sees no significant qualitative differences between human and animal behaviour.

PS: There is also **social learning theory**, an extension of the behaviourist approach that incorporates indirect learning.



AS level students only need to study the biological, behaviourist and cognitive approaches. A level students go on to study the psychodynamic and humanistic approaches. We have covered all these approaches in Chapter 4.



The unconscious mind lies beneath

Psychodynamic approach

This is the approach that originated with Sigmund Freud, possibly the most well-known psychologist ever. He believed that the causes of behaviour lie within the **unconscious** mind, the part of the mind that is normally closed off to us but is extremely active. The iceberg metaphor has been used to represent this 'invisible' unconscious mind that has powerful effects (think Titanic).

There is constant dynamic conflict between parts of the unconscious and the conscious mind. We can get a brief glimpse of this conflict when we dream, which is why Freud advocated the use of dream interpretation to help us understand what's in the unconscious and why it affects us.

The approach also emphasises the importance of childhood experiences, which have a major impact on our personality development and our behaviour as adults.

Humanistic approach

The **humanistic approach** is firmly based on the concept of the self. This concerns issues to do with your self-concept (how you see yourself), and your **self-esteem** (how you feel about yourself).

The humanistic approach also emphasises the importance of being able to make our own rational choices. All of the other approaches suggest that our behaviour is, to a large extent, directed by other forces not always under our control – genes, the environment, our thought patterns, or our unconscious mind. Humanistic psychologists believe the goal of psychology is not prediction or control but to understand the whole person.



Cognitive approach

This approach focuses on thinking – our feelings, beliefs, attitudes and expectations and the effects they have on our behaviour.

The approach employs the 'computer metaphor' to explain how our minds work: like computers we process information.

The approach has been used to explain many things including mental disorders such as **depression**. According to the cognitive approach depression occurs because people *think* negatively – they put the worst possible interpretation on events and play down the good things that happen to them. They think it will never get better. According to the cognitive approach the depression lies in the way they are thinking rather than in reality.

Like behaviourist psychologists, cognitive psychologists use **lab experiments** as a key research method. But a big difference is that while behaviourists have no interest in what goes on inside the mind, cognitive psychologists are the opposite. The processes inside the mind are precisely what they are interested in and have an important link to the behaviours we observe.

Whatever works best

The distance from the biological approach to the humanistic perspective represents the huge range that is psychology.

Although researchers working in these two approaches may call themselves psychologists, they have very little in common in terms of their assumptions about behaviour, their preferred explanations, their philosophical viewpoints, the methods they use to investigate behaviour, or even the research questions they are interested in answering.

That's how broad a subject psychology is – and that's one reason why it's so exciting. These different approaches also reflect the undoubted truth that human behaviour is complex and is probably not going to be fully understood from just one approach.

Because of this, in recent years, there has been a growth of the eclectic approach.

This is preferred by psychologists who aren't committed to any one particular approach. The eclectic approach uses the assumptions, explanations and methods from many different approaches. Their slogan could well be: 'Whatever works best'.

Eclectic aims to select what is **BEST** in various approaches, methods, or styles