

What is Psychology?



An introduction for
A Level students.



What is Psychology? *.*

Write a definition here of what you think psychology is:



Intro to Psychology Case Study: Why did Mia steal the money?

Mia is 16 and has been accused of stealing £80 from a teacher's desk during lunch. CCTV shows her going into the room, but it does not clearly show her taking the money. Later that day, Mia was seen buying food for several friends and topping up her phone. When questioned, she first denied everything, then said she "only took it because nobody would miss it".

Mia has had a difficult year. Her mum recently lost her job, and Mia has been helping to look after her younger brothers after school. She often seems tired and has started missing homework deadlines. Teachers say she used to be hardworking, but recently she has become withdrawn and defensive.

Mia's friendship group has also changed. She now spends time with older students who often brag about stealing from shops and "getting away with it". One of them has told Mia that school rules are "a joke" and that "everyone looks after themselves". Mia wants to fit in with this group and has been teased in the past for being "boring" and "too sensible".

There may also be family influences. Mia's older brother has been in trouble with the police for theft, and Mia has sometimes heard family members say that people with money "don't understand real problems". Mia has also said that teachers "always judge people like me anyway".

On the day of the incident, Mia had argued with her mum before school, skipped breakfast, and was upset because her phone had run out of credit. She had also been embarrassed in class when a teacher asked why she had not completed her homework.

Afterwards, Mia seemed guilty but angry. She said, "I know it was wrong, but everyone acts like I'm already a bad person, so what difference does it make?"

List as many reasons as you can for Mia's behaviour::

To what extent was Mia responsible for stealing the money?

What is Psychology? ✨*

Psychology is the scientific study of the mind and behaviour.

This means psychologists are interested in what people think, feel and do. They try to understand why people behave in certain ways, how the brain and body influence behaviour, and how experiences, relationships and society shape who we become.

Psychology looks at questions such as:

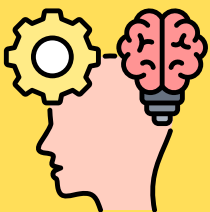
- Why do people obey authority?
- How reliable is memory?
- Why do people develop mental health problems?
- How do children learn?
- What makes people happy?
- Why do some people become aggressive or criminal?
- How can behaviour be changed or improved?



Psychology is a science because psychologists use **research methods** such as experiments, observations, interviews, questionnaires and case studies to collect evidence. Rather than simply guessing why people behave as they do, psychologists try to test ideas carefully and draw conclusions from data.

A key idea in psychology is that behaviour is rarely caused by one thing. For example, a person's actions may be influenced by their biology, childhood experiences, family, friends, culture, thoughts, emotions and the situation they are in at the time. Psychology helps us explore these different explanations and consider how they interact.

Approaches to psychology



- **Biological approach:** Explains behaviour through genes, brain structures, hormones, neurotransmitters and evolution.
- **Psychodynamic approach:** Explains behaviour through childhood experiences, the unconscious mind and conflicts within personality.
- **Behaviourist approach:** Explains behaviour as something learned through conditioning and experience.
- **Cognitive approach:** Explains behaviour by focusing on internal mental processes such as memory, thinking and schemas.
- **Positive approach:** Focuses on free will, human strengths, happiness, wellbeing and what makes life fulfilling.





The Scientific Method



How does the scientific method work?

Psychology studies behaviour in a **scientific way**. This means psychologists do not just guess why people behave as they do — they collect evidence and test ideas carefully.

Theory → Hypothesis → Study → Results → Conclusion

- A theory is an **explanation of behaviour**.
- A hypothesis is a **clear, testable prediction** based on that theory.
- Psychologists then carry out a study, collect evidence, and decide whether the results support the hypothesis.



Key features of science

Objective

Research should be fair and unbiased. Psychologists try not to let personal opinions affect the results.

Empirical

Evidence should come from what can be observed or measured, rather than just what people believe.

Falsifiable

A scientific idea must be testable in a way that means it could be proved wrong.

Replicable

Other researchers should be able to repeat the study to check whether similar results are found.

Observations about human behaviour

Choose one of the observations below and devise a simple way of testing it scientifically.

- People are more likely to help someone if other people are watching.
- Students remember information better when it is presented with images rather than words alone.
- People are more likely to copy the behaviour of someone they see as popular or confident.
- People concentrate better in silence than when music is playing.
- People are more likely to conform when they are in a larger group.
- Students are more motivated when they are given praise rather than criticism.
- People are more likely to believe information if it is shared by someone they trust.
- People become more competitive when there is a reward available.
- People are more likely to remember emotionally shocking information than boring information.
- People behave differently online compared with face-to-face.

Pick one observation and design a way to test it.

You should decide:

- What is your aim?
- What is your hypothesis?
- Who would your participants be?
- What method would you use? For example, experiment, observation, questionnaire or interview.
- What would you measure?
- How would you try to make it fair and unbiased?
- Are there any ethical issues?



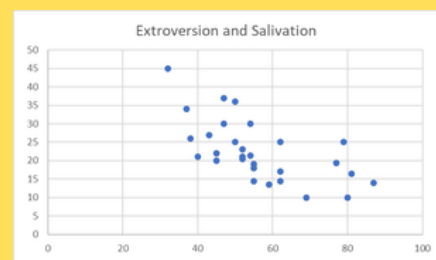
Carry out the following study in class and complete the summary sheet that follows.

Lemon & Personality Study

This is a fun twist on a well-established study that effectively illustrates correlational research. Building on Eysenck's renowned work on personality, this experiment tests the hypothesis that introverts and extroverts will have different biological reactions to stimuli. Since introverts are generally more sensitive to stimulation, we anticipate that they will produce more saliva when confronted with the intense stimulus of biting into a lemon. The enjoyable aspect is measuring salivation by licking a piece of paper!

INSTRUCTIONS

- Ensure you have enough lemons to provide each class member with a slice. Depending on the size of the lemons and the thickness of your slices, you can expect to get between 8 to 16 slices per lemon. I also suggest preparing some tissue paper to clean up any lemony spills.
- I recommend starting with a questionnaire to help students determine their extrovert/introvert score. You can use the one provided on the next page, making sure to reverse the scores for introvert questions 3, 5, 7, 9, and 10. Alternatively, there are several excellent online surveys that serve the same purpose. The students will only need one score that reflects their level of extroversion, with a higher number indicating greater extroversion.
- Next, you can conduct a lemon tasting activity. Provide each student with a piece of paper, preferably coloured, so that the saliva becomes more visible!
- Instruct the students to take a bite of the lemon slice and hold it in their mouths for at least five seconds. After that, they should begin licking the paper in long lines until they run out of saliva.
- They will then need to measure the total length of their saliva lines using a ruler, giving them a single figure in centimetres. This measurement will represent their saliva output, which can subsequently be correlated with their extroversion score. We would anticipate observing a negative correlation, where higher extroversion scores correspond with lower salivation scores.



Introversion/Extroversion Personality Test

Here's a 10-item survey to measure introversion and extraversion, based on concepts from established scales like the Big Five Personality Traits and the Eysenck Personality Questionnaire. Respondents can answer each item on a 5-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree).

1. I enjoy being the center of attention in social gatherings.

Strongly Disagree 1 2 3 4 5 Strongly Agree

2. I find myself energized after spending time with other people.

Strongly Disagree 1 2 3 4 5 Strongly Agree

3. I feel drained or exhausted after long periods of social interaction.

Strongly Disagree 1 2 3 4 5 Strongly Agree

4. I am comfortable speaking in front of large groups or audiences.

Strongly Disagree 1 2 3 4 5 Strongly Agree

5. I prefer spending time alone or with a small group of close friends.

Strongly Disagree 1 2 3 4 5 Strongly Agree

6. I often seek out new and exciting experiences, even with people I don't know well

Strongly Disagree 1 2 3 4 5 Strongly Agree

7. I tend to keep my thoughts and feelings to myself rather than share them openly

Strongly Disagree 1 2 3 4 5 Strongly Agree

8. I find it easy to approach and engage with strangers in social situations.

Strongly Disagree 1 2 3 4 5 Strongly Agree

9. I enjoy quiet, solitary activities more than large social events.

Strongly Disagree 1 2 3 4 5 Strongly Agree

10. I feel most comfortable in familiar, low-stimulation environments.

Strongly Disagree 1 2 3 4 5 Strongly Agree

- Add up all the scores for questions 1, 2, 4, 6 and 8
- Reverse the scores for questions 3, 5, 7, 9 and 10 and add them up.
- Add these numbers together for your final score.
- Higher scores indicate higher levels of extroversion. Scores should be between 10-50

The Scientific Method

Research in action.....

What is the theory / observation being tested?

What is the hypothesis? (predicted outcome)

How are we testing our hypothesis?

What data was collected? (findings)

What conclusions can we draw? (is our hypothesis correct?)

Key debates in Psychology

Nature or nurture?

This debate is about whether behaviour is mainly caused by biological factors or by environmental influences.

- **Nature explanations** focus on things like genes, hormones, brain structure, neurotransmitters and evolution.
- **Nurture explanations** focus on learning, upbringing, family, culture, education, social experiences and relationships.

Most modern psychologists now take an **interactionist view**, meaning behaviour is often caused by a mixture of nature and nurture working together.



Activity: Which side is it?

Read each example and decide whether it supports nature, nurture, or interactionist.

1. A psychologist argues that aggression is linked to high testosterone levels.
2. A child becomes anxious after repeatedly seeing a parent panic in social situations.
3. A person may inherit a genetic vulnerability to depression, but stressful life events can trigger symptoms.
4. A researcher claims that intelligence is mostly explained by inherited genes.
5. A teenager becomes more confident after joining a supportive friendship group.

Free will or determinism?

This debate is about whether people freely choose their behaviour or whether behaviour is controlled by forces outside their control.

- **Free will** suggests people can make choices and are responsible for their actions.
- **Determinism** suggests behaviour is caused by factors such as biology, childhood experiences, unconscious drives, learning or social pressure.

Determinism is often seen as more **scientific** because it looks for cause and effect, but it can raise ethical issues because it may suggest people are not fully responsible for what they do.

Activity: Which side is it?

Read each example and decide whether it supports free will or determinism.

1. A criminal claims his violent behaviour was caused by childhood trauma and poor role models.
2. A student chooses to stop procrastinating and creates a revision timetable.
3. A psychologist argues that phobias develop through conditioning and are not freely chosen.
4. A person decides to forgive someone even though they feel angry.
5. A researcher claims that brain chemistry strongly influences mood and behaviour.



Reductionism or holism?

This debate is about how psychologists should explain behaviour.

- **Reductionism** explains behaviour by breaking it down into smaller parts, such as genes, brain chemicals, thoughts or learned responses.
- **Holism** argues that behaviour should be understood as a whole, because human behaviour is too complex to be explained by one small factor.

Reductionist explanations are often **easier to test scientifically**, but they can oversimplify behaviour. Holistic explanations **give a fuller picture**, but they can be harder to test.

Activity: Which side is it?

Read each example and decide whether it supports reductionism or holism.

1. Depression is caused by low levels of serotonin in the brain.
2. To understand depression, we must look at biology, thinking patterns, relationships, social class and life events together.
3. Obedience can be explained by the presence of an authority figure.
4. Addiction should be understood by considering brain chemistry, personality, peer influence, stress and culture.
5. A psychologist explains memory as a set of separate processes: encoding, storage and retrieval.



Idiographic or nomothetic?

This debate is about whether psychologists should focus on individuals or general laws of behaviour.

- **Idiographic** approaches study individuals in depth and focus on what makes each person unique.
- **Nomothetic** approaches study large groups of people to find general patterns, laws or theories that apply to many people.

Nomothetic research is useful for making predictions and comparing groups, but it may ignore individual differences. Idiographic research gives richer detail, but its findings may not apply to everyone.

Activity: Which side is it?

Read each example and decide whether it supports idiographic or nomothetic psychology.

1. A psychologist carries out a detailed case study of one person with a rare memory disorder.
2. A researcher gives 500 participants a questionnaire to identify general patterns in anxiety.
3. Freud used detailed case studies to explore individual unconscious conflicts.
4. A study compares the average obedience levels of men and women in a controlled experiment.
5. A therapist focuses on understanding one client's unique childhood, personality and experiences.



Task

Choose one famous psychology study from the list below. Your task is to research it briefly and report back to the class.

You must explain:

1. What theory or idea was being tested?
 2. How did the researchers test it?
 3. What did they find?
- How does it link to at least two psychological debates?
 - Nature/nurture
 - Free will/determinism
 - Reductionism/holism
 - Idiographic/nomothetic



Choose one study

1. Bandura, Ross and Ross — Bobo Doll Study

Bandura investigated whether children learn aggression by watching adults. Children saw an adult behave aggressively or non-aggressively towards a Bobo doll. The study found that children who saw aggression were more likely to copy aggressive behaviour.

2. Harlow — Contact Comfort Study

Harlow studied attachment in infant monkeys. The monkeys were given a wire “mother” that provided food and a soft cloth “mother” that provided comfort. The monkeys spent more time with the cloth mother, suggesting attachment is about comfort as well as food.

3. Asch — Conformity Study

Asch investigated whether people would conform to a group even when the group was clearly wrong. Participants judged line lengths while others deliberately gave incorrect answers. Many participants conformed at least some of the time.

4. Zimbardo — Stanford Prison Experiment

Zimbardo studied how social roles can affect behaviour. Participants were randomly assigned to act as prisoners or guards in a mock prison. The study was stopped early because some guards became cruel and some prisoners became distressed.

5. Rosenhan — Being Sane in Insane Places

Rosenhan investigated whether psychiatrists could tell the difference between sane and insane patients. Pseudo-patients entered hospitals claiming to hear voices, then behaved normally. Many were still treated as mentally ill, raising questions about diagnosis and labelling

