

Course Companion

GAC Psychology

Every topic handout in one volume

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GAC029 Psychology II: Introduction to Psychology

GAC Psychology

What this module is, and how it is marked

GAC029 introduces psychology as an academic subject: its history and principles, then emotion and personality, sensation and perception, and the biology of behaviour.

Assessment includes a **psychological experiment** you conduct and report, a test, and coursework. The experiment is assessed on method, not on whether the result matched the textbook.

- $\triangle$ **Definitions are precise here, and the precision is examinable.** Sensation is not perception. Correlation is not causation. Most lost marks come from a term used loosely, not from material never studied.

What is psychology

- **Psychology** is the scientific study of behaviour and mental processes. The word *scientific* is doing work: claims rest on evidence gathered systematically.
- The field's **perspectives** – biological, behavioural, cognitive, humanistic, psychodynamic – explain the same behaviour differently, and a question naming one expects that one.
- **Research methods** here mean the experiment: an **independent variable** the researcher changes, a **dependent variable** measured, and everything else controlled.
- **Ethics** in psychology are strict: informed consent, no harm, the right to withdraw, debriefing afterwards.

| **Worked example.** Does music affect memory?

Independent: music or silence. Dependent: words recalled from a list of twenty. Controls: same list, same time limit, same room. Design: each participant does both conditions, with the order swapped for half of them so practice does not favour one condition.

That last sentence is **counterbalancing**, and including it is what turns a demonstration into an experiment.

Emotions and personality

- An **emotion** has three parts: a physiological change, an expression, and a subjective feeling.

- Theories differ on the order. Does the body respond first and the feeling follow, or the reverse? Naming the theory is the marked step.
- **Personality** is a person's stable pattern of thinking, feeling and behaving.
- **Trait theories** describe personality along dimensions; **learning approaches** explain it as the result of experience. GAC029 emphasises the second.

Sensation and perception

- **Sensation** is the detection of a stimulus by a sense organ. **Perception** is the brain's interpretation of it.
- The distinction is the most examined thing in the unit: the eye senses light, the brain perceives a face.
- **Absolute threshold** is the smallest detectable stimulus; the **difference threshold** is the smallest change you can notice.
- **Perceptual constancy** keeps an object looking the same size and colour as conditions change – which is why an illusion works: it exploits a rule the brain applies correctly almost always.

The biology of behaviour

- A **neuron** receives at its dendrites, fires along its axon, and passes a signal across a **synapse** using **neurotransmitters**.
- The **central nervous system** is the brain and spinal cord; the **peripheral nervous system** is everything else.
- The **cerebral cortex** has four lobes, and each is associated with characteristic functions.
- **Sleep** runs in cycles of about ninety minutes, and **REM sleep** is where most vivid dreaming happens.
- $\triangle$ Say “is associated with”, not “controls”. Brain regions work together, and a question that offers “the amygdala controls fear” is usually testing exactly that overstatement.

GAC030 Psychology III: Research in Psychology

GAC Psychology

What this module is, and how it is marked

GAC030 is the Level III psychology module: research methods first, then memory and cognition, learning, and social psychology.

Assessment centres on a **research study** – you design, justify, run and report to academic conventions – the justification of the method is marked as heavily as the result.

- Δ A study that finds nothing is a valid result, reported as one. Adjusting the analysis until something appears is the failure the methods unit exists to prevent.

Research skills

- Start from a **testable hypothesis** and state the **null hypothesis** – it is tested against.
- Choose the **design: independent groups** (different people in each condition) or **repeated measures** (the same people in both).
- Repeated measures needs **counterbalancing** ; independent groups needs **random allocation** .
- **Extraneous variables** are anything else that could explain the result, and naming the ones you could not control is part of an honest report.
- **Correlation does not establish cause** – the sentence every psychology report needs, and the one most often missing.

| **Worked example.** Students who sleep more get better grades.

Sleep could improve grades. Or conscientious students both sleep regularly and study well. Or anxiety about grades could reduce sleep, reversing the arrow.

Three explanations, one correlation. Naming the alternatives is the answer; asserting the first is the error.

Thinking and memory

- The **multi-store model** separates sensory, short-term and long-term memory.
- **Encoding** , **storage** and **retrieval** are three distinct stages, and forgetting can happen at any of them.
- **Working memory** is short-term memory doing something, and its capacity is famously small.

- **Cognition** covers thinking, problem-solving, decision-making and language.
- **Heuristics** are mental shortcuts that usually work; **biases** are the systematic errors they cause.

Learning

- **Classical conditioning** pairs a neutral stimulus with one that already produces a response, until the neutral one produces it alone.
- **Operant conditioning** changes behaviour by its consequences.
- **△ Negative reinforcement is not punishment.** Reinforcement always increases a behaviour; negative means something unpleasant was removed. This single distinction is the most reliable exam question in the module.
- **Observational learning** happens by watching someone else, and it is how most social behaviour is acquired.
- **Development** through adolescence and adulthood is staged, and each stage has characteristic tasks.

Social psychology

- **Conformity** is changing behaviour to match a group; **obedience** is following an instruction from authority.
- Classic studies showed both are far stronger than people predict of themselves, which is the finding, not the anecdote.
- **Attribution** explains behaviour by disposition or by situation, and people systematically over-use disposition for others and situation for themselves.
- **Group behaviour** changes decisions: groups polarise, and a cohesive group can suppress dissent.
- Social psychology is the unit where **ethics** matter most, because the classic studies would not be approved today – and saying why is a marked answer.