

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** 研究 you design, justify, run and report to academic conventions — the justification of the method is marked as heavily as the result.

- $\triangle$ 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** 零假设 it is tested against.
- Choose the **design: independent groups** 组间设计 (different people in each condition) or **repeated measures** 组内设计 (the same people in both).
- Repeated measures needs **counterbalancing** 平衡设计; independent groups needs **random allocation** 随机分配.
- **Extraneous variables** 无关变量 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** 多重存储模型 separates sensory, short-term and long-term memory.

- **Encoding** 编码, **storage** 存储 and **retrieval** 提取 are three distinct stages, and forgetting can happen at any of them.
- **Working memory** 工作记忆 is short-term memory doing something, and its capacity is famously small.
- **Cognition** 认知 covers thinking, problem-solving, decision-making and language.
- **Heuristics** 启发式 are mental shortcuts that usually work; **biases** 偏差 are the systematic errors they cause.

Learning

- **Classical conditioning** 经典条件作用 pairs a neutral stimulus with one that already produces a response, until the neutral one produces it alone.
- **Operant conditioning** 操作性条件作用 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** 观察学习 happens by watching someone else, and it is how most social behaviour is acquired.
- **Development** 发展 through adolescence and adulthood is staged, and each stage has characteristic tasks.

Social psychology

- **Conformity** 从众 is changing behaviour to match a group; **obedience** 服从 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** 归因 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.