

Psychology Research, Learning and Social Behaviour

GAC030 outcome practice; check the current centre brief.

Sleep and grades: three possible stories

- More sleep and higher grades may occur together.
- Sleep could affect grades; grades-related stress could affect sleep.
- Another factor, such as study habits, could affect both.
- A correlation alone cannot choose the causal explanation.

An honest study and an honest report

- Design, justify, conduct and report a study.
- The method must suit the question and protect participants.
- Report the actual outcome, including a small or uncertain difference.
- Check the centre brief for required assessment conventions.

From a broad idea to a testable hypothesis

- Define the conditions and the measured outcome.
- Example: music versus silence; words recalled after a fixed interval.
- A null hypothesis states no specified population effect or difference.
- Set the prediction and analysis plan before inspecting results.

Choose a design and explain its trade-off

- Independent groups: different people complete each condition.
- Repeated measures: the same people complete both conditions.
- Random allocation reduces systematic group differences.
- Counterbalancing reduces order effects in suitable repeated-measures tasks.

Controls, ethics and the report structure

- Keep relevant instructions, timing and conditions consistent.
- Record extraneous variables and limits rather than hiding them.
- Use consent, withdrawal, privacy and an agreed safe protocol.
- Report question, method, results, interpretation and limitations.

Correlation leaves competing causal accounts

- Sleep might influence grades.
- Grade-related stress might influence sleep.
- Study habits might affect both sleep and grades.
- Report an association and the alternatives the design cannot remove.

The multi-store account separates memory stores

- Sensory memory briefly holds incoming information.
- Short-term memory holds a limited amount for a short time.
- Long-term memory retains information over longer periods.
- The model simplifies memory; evidence must test its claims.

Encoding, storage and retrieval are different

- Encoding: change incoming information into a usable form.
- Storage: retain information over time.
- Retrieval: access retained information when needed.
- A failure to answer does not identify which process failed.

Working memory supports an active task

- Working memory maintains and uses information during an activity.
- Example: hold intermediate values while solving a calculation.
- Its limited capacity makes competing demands important.
- Reduce irrelevant demands; do not assume unlimited attention.

Cognition, shortcuts and bias

- Cognition includes thinking, problem-solving, decisions and language.
- A heuristic is a shortcut used to make a judgement.
- A bias is a systematic pattern of error.
- Check evidence instead of judging likelihood from vividness alone.

Classical conditioning links stimuli

- A neutral stimulus is paired with a stimulus that already produces a response.
- After learning, the former neutral stimulus can elicit a response.
- Example: a sound repeatedly precedes food.
- Identify the stimuli and response; do not describe a reward for an action.

Operant conditioning uses consequences

- Reinforcement increases a behaviour; punishment reduces it.
- Positive means adding something; negative means removing something.
- Negative reinforcement removes an unpleasant condition.
- Classify by the effect on behaviour, not whether it sounds pleasant.

Watching a model can lead to learning

- Observational learning involves watching another person's behaviour.
- A learner may copy a demonstrated checking routine.
- Attention, remembering and ability affect what can be learned.
- Watching does not guarantee immediate imitation.

Development concerns more than a birthday

- Adolescence and adulthood include physical, cognitive and social changes.
- Stage theories propose characteristic tasks or ways of thinking.
- People differ in timing, opportunity and circumstances.
- Use theories to interpret evidence cautiously.

Conformity and obedience have different triggers

- Conformity: behaviour changes to match a group.
- Obedience: behaviour follows an authority's instruction.
- Example: match the group's answer versus follow a supervisor's order.
- Describe the source of influence and possible consequences.

Attribution can overlook the situation

- Disposition: explain behaviour through a person's tendencies.
- Situation: explain behaviour through circumstances.
- A late teammate may face transport problems or other constraints.
- One event cannot establish a permanent character judgement.

Group decisions and ethical evaluation

- Group polarisation can strengthen an initial leaning.
- Groupthink can suppress dissent in a cohesive group.
- Invite independent views and questions before settling on a decision.
- Evaluate consent, distress, deception, withdrawal and debriefing.

New notes address two missing outcomes

- The original handout remains part of the lesson.
- Extra notes compare intelligence theories and developmental accounts.
- Use theory, application and limitation together.
- Required named models depend on the current centre brief.

General ability and different task demands

- Spearman's g: a common contribution across mental tasks.
- Fluid intelligence: reasoning with new problems.
- Crystallised intelligence: learned knowledge and skills.
- Real tasks can require both reasoning and knowledge.

Multiple and triarchic accounts

- Gardner proposes several areas of intelligence.
- Sternberg distinguishes analytical, creative and practical aspects.
- Compare evaluating costs, inventing an activity and organising a timetable.
- A useful illustration is not proof of independent abilities.

A strength is not a learning-style prescription

- Musical skill does not establish a fixed musical learning style.
- A score depends on the task and testing conditions.
- Use suitable varied practice and examine actual learning.
- Do not assign a person's future from one label or result.

Erikson: adolescent and early adult tasks

- Adolescence: identity versus role confusion.
- Early adulthood: intimacy versus isolation.
- Exploring subjects and roles can relate to identity.
- Uncertainty alone does not establish failure or a diagnosis.

Erikson: middle and later adulthood

- Middle adulthood: generativity versus stagnation.
- Later adulthood: integrity versus despair.
- Mentoring can contribute to others without parenthood.
- Life reflection depends on individual experience and context.

Formal operational reasoning considers possibilities

- Piaget's account includes abstract and hypothetical reasoning.
- Example: consider what would follow if a rule changed.
- Support, knowledge and task demands affect performance.
- One failed task does not establish a whole developmental stage.

Observation, theory, evidence and limits

- Describe the action before explaining it.
- Name the theory and its relevant concept.
- Explain how the concept might fit the case.
- Consider alternatives and the limits of the evidence.

Justify the question, measure and design

- Example: an instruction-checking prompt and task accuracy.
- Define accuracy and choose matched materials before data collection.
- Explain participant differences or repeated-task effects.
- Choose a design for the question and acknowledge its trade-off.

Record the procedure and analysis honestly

- Agree ethical safeguards before recruiting volunteers.
- Keep dated records of allocation, instructions and deviations.
- Use anonymous codes and the agreed data-handling procedure.
- Pre-agree summaries and comparisons; retain inconvenient results.

A small mean difference is not a verdict

- Fictional group means: 8.0 and 8.2 out of ten.
- Six people per group; individual scores overlap widely.
- Means alone establish neither significance nor a population cause.
- Discuss variation, the design and specific limitations.

Check yourself

- Distinguish correlation from a causal conclusion.
- Explain negative reinforcement with the change in behaviour.
- Compare g, multiple intelligences and triarchic theory.
- Apply one developmental concept with an alternative explanation.