Application of psychology to everyday life

Lesson 7.1.1 | A Level issues, debates and methods

Core ideas

Application means using psychological evidence to understand, predict, prevent or improve behaviour in real situations.

Psychological applications can support work in schools, healthcare, policing, workplaces, families, media and public policy.

A strong application names a specific finding and shows exactly how it could guide a decision or intervention.

Controlled studies can suggest useful applications, but real-life settings may include stress, culture, cost, ethics and individual differences.

Specialist options often make application explicit, such as improving workplace safety, designing better job roles or supporting healthier behaviour.

Good evaluation explains both the practical value of an application and the limits of transferring evidence to a new context.

Application of psychology to everyday life

Lesson 7.1.1 | A Level issues, debates and methods

Key terms

Everyday life: Real situations outside the research setting.

Intervention: An action designed to change, prevent or improve behaviour.

Practical value: The usefulness of research beyond describing a finding.

Transfer: Using evidence from one setting, sample or task in another context.

Ecological validity: How well research reflects real-world behaviour.

Generalisability: How far findings apply beyond the original participants or setting.

Policy: A rule, plan or decision made by an organisation or authority.

Further detail and evidence

Application is a justified use of a finding, theory or method in a real setting. State the psychological mechanism, the change proposed, the intended beneficiary and the outcome to be measured. A sensible suggestion is not proof that the intervention already works.

Clinical: telephone-assisted ERP can reduce travel demands. Consumer: a product comparison tool may support compensatory decisions. Health: a specific immunisation prompt addresses a different barrier from access support. Organisational: clear safety reporting can reveal near misses that accident totals omit.

Transfer depends on matching the original evidence to the new population, task and context. Compare cost, acceptability, feasibility, equity and unintended effects alongside effectiveness. The four specialist options share methods but make different claims about behaviour.

Application of psychology to everyday life

Lesson 7.1.1 | A Level issues, debates and methods

Applying the ideas

Lovell's format included initial/final meetings and safeguards. Applying it means preserving the tested package's important features while evaluating access and outcomes in the new setting. It does not support replacing all professional contact with unsupported calls.

Worked example: A school wants to reduce exam anxiety and asks for one psychology-based idea. Which kind of evidence could be applied, and what caution should the school keep in mind? The school could apply evidence from health or clinical psychology on stress management, such as relaxation, imagery or coping strategies, to design support sessions before exams. The application is practical because it turns research on managing anxiety into an intervention for students. The school should be cautious because evidence from one sample or treatment setting may not work equally well for all ages, cultures or levels of anxiety.

Worked example: In a hospital, managers use research on rotating shifts to change night-work schedules. Why is this a good example of application to everyday life? This is a good application because research on shiftwork, sleep disruption and accidents is being used to change a real workplace schedule. The aim is to reduce tiredness and improve safety for staff and patients. It still needs evaluation because hospital staffing needs, worker preferences and local accident data may affect whether the change works in that setting.

Evaluation and connections

A laboratory effect can suggest an application without demonstrating its effectiveness in the field. Follow-up and suitable comparison groups help assess maintenance. Avoid treating larger spending, higher productivity or reduced service use as automatically better for every person. Identify whose outcome matters.

Individual and situational explanations

Lesson 7.1.2 | A Level issues, debates and methods

Core ideas

Individual explanations focus on characteristics inside the person, such as beliefs, personality, biology, motivation, cognition or prior experience.

Situational explanations focus on features outside the person, such as social pressure, physical setting, work design, culture, instructions or rewards.

Many behaviours are best explained by an interaction between individual factors and situational pressures.

A Level specialist topics often invite this debate, such as stress, pain, consumer behaviour, mental disorder, motivation and workplace safety.

Individual explanations can be useful for tailored support, but they may risk blaming the person if the situation is ignored.

Situational explanations can support environmental or policy changes, but they may underplay personal differences in how people respond.

Key terms

Individual explanation: An explanation based on personal characteristics or processes.

Situational explanation: An explanation based on the surrounding context or environment.

Disposition: A person's characteristic tendency or way of responding.

Individual and situational explanations

Continued

Context: The setting, people, demands and conditions around behaviour.

Interaction: Two or more factors influencing each other.

Attribution: A judgement about the cause of behaviour.

Personal factor: A characteristic of the individual that may affect behaviour.

Environmental factor: A feature of the situation that may affect behaviour.

Further detail and evidence

Individual explanations emphasise relatively enduring traits, beliefs, biology or skills; situational explanations emphasise the immediate environment, roles, incentives and social context. A measured individual difference is not necessarily inherited, and a situational effect is not necessarily universal.

Clinical: vulnerability and cognitive appraisals can interact with stressful conditions. Consumer: self-monitoring can alter the response to an advertising message. Health: personal beliefs interact with cost/access. Organisational: skill and motivation interact with leadership and task design.

An interaction occurs when the effect of one factor depends on another. In an experiment, manipulate the situational factor while measuring a relevant individual characteristic; avoid calling the measured characteristic a randomly allocated condition.

Individual and situational explanations

Lesson 7.1.2 | A Level issues, debates and methods

Applying the ideas

In Landry, a fixed-value reward was presented supportively or controllingly. Presentation is situational, while employees may differ in how they value autonomy. In Robson, the effect of spacing can depend on the dining relationship. Use this conditional pattern to move beyond simply listing two causes.

Worked example: A hospital manager says nurses make errors because some staff are careless. Another manager points to rotating night shifts, fatigue and confusing displays. How do these explanations differ? The first explanation is individual because it locates the cause inside the nurses, such as carelessness or personal responsibility. The second explanation is situational because it focuses on working time, tiredness and the design of the operator-machine system. A balanced answer would consider both: individual attention matters, but workplace conditions can make errors more likely.

Worked example: In consumer psychology, one shopper buys an expensive dessert because they love sweet food, while another buys it because music, lighting and table spacing make the restaurant feel relaxed. What does this show about the debate? The first shopper is explained more individually because preference for sweet food is a personal factor. The second shopper is explained more situationally because the restaurant environment influences behaviour. The example shows why the debate is useful: consumer decisions can reflect both personal preferences and situational cues in the setting.

Evaluation and connections

Individual accounts can support personalisation but risk blaming the person and ignoring constraints. Situational accounts identify changeable environments but may overlook consistent differences. Controlled manipulation helps isolate a factor; correlations between traits and behaviour retain alternative explanations. A balanced conclusion follows the actual evidence.

Nature versus nurture

Lesson 7.1.3 | A Level issues, debates and methods

Core ideas

Nurture explanations focus on experience and environment, such as learning, family life, culture, social norms, education, media or workplace conditions.

Most psychological explanations are not purely nature or purely nurture; many behaviours develop through interaction between biology and experience.

Core studies and specialist options can be evaluated by asking whether their evidence supports biological causes, environmental causes or both.

Nature explanations can support medical or biological interventions, but they may become deterministic if they ignore learning and context.

Nurture explanations can support prevention, education and environmental change, but they may underplay biological vulnerability or individual differences.

Nature versus nurture

Lesson 7.1.3 | A Level issues, debates and methods

Key terms

Nature: Inherited or innate contributions to behaviour; biological measurements alone do not establish inheritance.

Nurture: Influences on behaviour linked to environment, learning and experience.

Inheritance: Passing characteristics from parents to offspring through genes.

Innate: Present from birth rather than learned through experience.

Learning: A change in behaviour or knowledge through experience.

Socialisation: The process of learning norms, values and behaviours from other people.

Interactionist explanation: An explanation where biological and environmental factors work together.

Biological vulnerability: A biological risk factor that may make a person more likely to develop a behaviour or disorder.

Nature versus nurture

Lesson 7.1.3 | A Level issues, debates and methods

Further detail and evidence

Nature concerns inherited/innate contributions; nurture concerns experience and environmental influence. Biological measurement is not automatically evidence of inheritance: experience can change the brain and physiology. Genetic association is not a demonstration that genes determine behaviour.

Family resemblance combines shared genes and environment. Twin/adoption evidence can help separate influences, but depends on assumptions and comparable environments. Genetic effects may depend on exposure; people also select and shape environments partly through their characteristics.

Learning accounts explain how rewards, modelling and associations contribute. Clinical conditioning, Food Dudes and workplace rewards illustrate nurture mechanisms. They do not prove that biology is irrelevant or that every individual responds identically.

Applying the ideas

Oruc compares genetic variants in bipolar I patients and controls. The main null result and weak exploratory subgroup findings do not justify a single-gene conclusion. In contrast, behavioural treatment changing a learned fear is evidence that experience can modify responses, not evidence that susceptibility has no inherited component.

Evaluation and connections

Use precise conclusions: heritability is about variation in a population/context, not the percentage of one person caused by genes. A nature/nurture label should follow the proposed mechanism and evidence. Interaction accounts are often more informative than declaring one side the complete winner.

Use of children in psychological research

Lesson 7.1.4 | A Level issues, debates and methods

Core ideas

Children may be studied because some psychological questions are specifically about development, learning, family life, education or early experience.

Child participants need extra ethical protection because they may understand less, feel more pressure to obey adults and be more vulnerable to distress.

Researchers usually need parental or guardian consent as well as the child's own assent where possible.

Tasks, instructions, questions and debriefing must be age-appropriate so children can understand what is happening.

Protection from harm is especially important, so procedures should avoid unnecessary fear, embarrassment, fatigue or lasting upset.

Data from children can be valuable, but validity may be affected by language ability, attention, memory, suggestibility and the testing situation.

Key terms

Child participant: A participant who is not yet legally or developmentally treated as an adult.

Parental consent: Permission from a parent or guardian for a child to take part.

Assent: A child's own agreement to take part, given in a way they can understand.

Use of children in psychological research

Continued

Age-appropriate: Suitable for a child's developmental level, language and understanding.

Protection from harm: The responsibility to avoid physical or psychological harm to participants.

Debriefing: Explaining the study afterwards in a clear and suitable way.

Suggestibility: A tendency to be influenced by leading questions or other people's expectations.

Vulnerability: Increased need for protection because a person may be less able to understand, refuse or cope.

Further detail and evidence

Children may differ in comprehension, memory, language, motivation and power relative to adults. Use developmentally appropriate tasks and response formats. A child scale is not automatically comparable with an adult scale simply because both generate numbers.

Ethical safeguards include suitable guardian permission, the child's willing assent, understandable information, continuing withdrawal, privacy and careful distress monitoring. School permission does not replace individual willingness. Incentives should not create undue pressure.

Useful examples include Lehmkuhl's adapted ERP case, Chaney's child inhaler device, logo recognition in Fischer, and school interventions such as Food Dudes/Shoshani. Each uses children for a specific question; their procedures and ethical demands differ.

Use of children in psychological research

Lesson 7.1.4 | A Level issues, debates and methods

Applying the ideas

Brudvik used age-appropriate self-report to avoid assuming that a quiet child has little pain. Fischer's logo matching reduces reading demands but tests recognition rather than later smoking. The measure should fit developmental ability and the construct, not only convenience.

Worked example: A researcher wants to test memory in seven-year-olds using a long interview with complex wording and several leading questions. What problems would this create? The interview may not be age-appropriate because complex wording could confuse the children, making the data less valid. Leading questions could increase suggestibility, so children may give answers shaped by the researcher rather than their own memory. Ethically, the researcher should shorten the task, use simple language, avoid leading wording, gain parental consent and child assent, and remind children they can stop.

Worked example: During a school study, parents have signed consent forms but one child says they do not want to continue. How should the researcher respond? The researcher should let the child stop because parental consent does not remove the child's right to withdraw. The child's assent matters, especially because children may feel pressure to obey adults in school. The researcher should respond calmly, avoid making the child feel punished, and debrief in a simple way so the child understands what happened.

Evaluation and connections

Research can improve child services and reveal development, but dependency increases risks of compliance and coercion. Adult findings may not generalise to children, while one age group may not represent another. Distinguish longitudinal change from cross-sectional age differences and report documented protections separately from inferred concerns.

Cultural differences

Lesson 7.1.5 | A Level issues, debates and methods

Core ideas

Culture includes shared values, norms, practices, language and meanings that can shape behaviour and experience.

Cultural differences matter because a finding from one group may not generalise automatically to another group.

Researchers should avoid ethnocentrism, where one culture is treated as the normal or superior standard for judging others.

An etic approach looks for patterns that may compare across cultures, while an emic approach tries to understand behaviour within one culture's own meanings.

Methods can be culturally biased if tasks, questionnaires, translations or researcher expectations do not fit the participants' context.

Applications of psychology should be adapted carefully because interventions, workplace practices, health advice or consumer strategies may not work the same way in every culture.

Key terms

Culture: Shared values, norms, practices, language and meanings within a group.

Cultural difference: A variation in behaviour, belief or experience linked to cultural context.

Generalisability: How far findings apply beyond the original sample or setting.

Cultural differences

Lesson 7.1.5 | A Level issues, debates and methods

Continued

Ethnocentrism: Judging other cultures using one culture as the main standard.

Cultural bias: Distortion caused when methods or interpretations unfairly favour one culture.

Emic approach: Studying behaviour from within the meanings of one culture.

Etic approach: Comparing behaviour across cultures to look for broader patterns.

Translation validity: How well translated materials keep the same meaning across languages.

Further detail and evidence

Culture involves shared meanings, practices and norms, with substantial variation within any country. Cultural differences may concern personal space, communication, authority, health beliefs, advertising or the value of group membership. Nationality is an imperfect indicator of cultural orientation.

Cross-cultural comparison needs equivalent recruitment, tasks, language and measurement meaning. Translation/back-translation helps wording but does not guarantee conceptual equivalence. The same rating can have different reference points or social desirability pressures.

Earley illustrates the importance of individualist/collectivist orientation together with in-group membership. Del Campo reports cross-country differences in heuristic use. Neither warrants the claim that all members of one nation think or work in the same way.

Cultural differences

Lesson 7.1.5 | A Level issues, debates and methods

Applying the ideas

A leadership scale developed in one context may treat speaking up as effective participation, while another context expresses constructive contribution differently. Pilot locally, examine meanings and compare relevant workplace conditions before interpreting a score difference as a cultural trait.

Worked example: A questionnaire about workplace motivation is written in English, translated quickly and used with employees in three countries. Results are then compared as if the measure worked identically everywhere. What should be questioned? Translation validity should be questioned because the same words may not carry the same meaning in each language or workplace culture. The measure may also have cultural bias if examples, rating styles or ideas about motivation fit one context better than another. Before comparing scores, researchers should check whether items are understood similarly and whether local work norms affect responses.

Worked example: When a health campaign from one country is copied into another, fewer people follow the advice even though the message is scientifically accurate. How can cultural differences explain this? The advice may not match local beliefs, language, family roles, trust in health authorities or practical barriers, so the application does not transfer directly. This shows that psychological evidence can have practical value but still needs cultural adaptation. A stronger campaign would test the message with the target group and adjust examples, delivery and support to fit the local context.

Evaluation and connections

Cultural research challenges universal assumptions and improves appropriate applications. However, culture may be confounded with education, economics, workplace structure and test familiarity. Avoid ethnocentrism and within-country stereotypes. Generalise from the sampled setting with a clear account of its limits.

Reductionism versus holism

Lesson 7.1.6 | A Level issues, debates and methods

Core ideas

Reductionism explains complex behaviour by breaking it down into smaller parts, such as genes, neurotransmitters, learning links or single cognitive processes.

Holism explains behaviour by considering the whole person, situation and interaction between biological, cognitive and social influences.

Reductionist explanations can be useful because they are often clearer to measure, test and link to practical treatments or interventions.

Reductionism can become a weakness if it ignores context, meaning, culture, individual differences or how several influences work together.

Holistic explanations can give a richer and more realistic account of complex behaviour, especially in clinical, health, consumer and organisational topics.

Holism can be harder to test precisely because broad explanations may include many interacting factors at once.

Key terms

Reductionism: Explaining complex behaviour by reducing it to simpler parts or lower-level processes.

Holism: Explaining behaviour by considering the whole person or wider system.

Level of explanation: The scale used to explain behaviour, such as biological, cognitive or social.

Reductionism versus holism

Lesson 7.1.6 | A Level issues, debates and methods

Continued

Biological reductionism: Explaining behaviour mainly through genes, brain activity, hormones or neurotransmitters.

Environmental reductionism: Explaining behaviour mainly through learning, rewards, punishments or stimulus-response links.

Interaction: Different influences affecting each other rather than acting separately.

Context: The wider situation in which behaviour happens.

Oversimplification: Making an explanation too narrow so important influences are left out.

Further detail and evidence

Reductionism explains a complex phenomenon using a smaller set of components or one explanatory level. Biological reductionism uses mechanisms such as neurotransmitters; psychological reductionism can explain behaviour solely through reinforcement or a narrow cognitive process. Reductionism is not limited to biology.

Holism examines the organised whole and interactions among levels, including personal meaning, relationships and environment. An approach becomes more holistic by explaining their relationships, not merely listing many unrelated influences.

Examples: a dopamine-only account of urges is narrower than an account combining reward, beliefs and context. A pain rating explained only by tissue damage omits attention/emotion. Safety explained only as worker error overlooks controls, displays and work organisation.

Reductionism versus holism

Lesson 7.1.6 | A Level issues, debates and methods

Applying the ideas

Gate control integrates peripheral input, spinal modulation and descending brain influences. This explains why both bodily stimulation and psychological context can affect pain. It is more integrative than a direct signal account, while still simplifying the whole experience.

Worked example: One student says panic disorder is only a problem of adrenaline and brain chemistry. Another says symptoms also depend on thoughts, avoidance, life stress and support. How do these explanations differ? The first explanation is reductionist because it reduces panic disorder to biological processes such as adrenaline and brain chemistry. The second is more holistic because it includes biological, cognitive, behavioural and social influences working together. The reductionist account may help with clear biological treatment ideas, but the holistic account may better explain why different people experience and manage panic in different ways.

Worked example: For a workplace safety problem, a manager blames accidents only on careless workers. A psychologist examines training, shift length, equipment design, supervision and fatigue. Which approach is stronger here? The manager's account is reductionist because it reduces accidents to one personal cause: carelessness. The psychologist's account is more holistic because it considers several interacting workplace factors. The holistic approach is stronger here because accidents in organisations often depend on systems as well as individuals, although each factor would still need evidence to show how much it contributes.

Evaluation and connections

Reduction makes mechanisms operational and experiments feasible, supporting targeted interventions. It can miss meaning and interactions. Holism reflects complexity but may become hard to test, replicate or falsify. Evaluate what a particular simplification gains and loses, rather than assuming more variables always produce a better theory.

Determinism versus free-will

Lesson 7.1.7 | A Level issues, debates and methods

Core ideas

Determinism is the view that behaviour is caused by factors such as biology, learning, unconscious processes, culture or the situation.

Free-will is the view that people can make meaningful choices and are not completely controlled by internal or external causes.

Hard determinism argues that behaviour is fully caused and that free-will is an illusion.

Soft determinism accepts that behaviour has causes but allows that people may still choose within limits.

Scientific psychology often looks for causes so that behaviour can be explained, predicted and changed.

A fully deterministic account can be criticised for ignoring responsibility, personal agency and cases where people resist pressure or change behaviour.

Key terms

Determinism: The view that behaviour is caused by factors beyond free choice.

Free-will: The idea that people can make meaningful choices about their behaviour.

Hard determinism: The view that behaviour is fully caused and free-will is an illusion.

Determinism versus free-will

Lesson 7.1.7 | A Level issues, debates and methods

Continued

Soft determinism: The view that behaviour has causes but people still have some choice within limits.

Biological determinism: Explaining behaviour through genes, brain activity, hormones or other biological causes.

Environmental determinism: Explaining behaviour through learning, reinforcement, social pressure or surroundings.

Agency: A person's capacity to act intentionally and make choices.

Responsibility: Being accountable for behaviour or decisions.

Further detail and evidence

Determinism proposes that behaviour follows causes. Biological determinism emphasises physical/inherited processes; environmental determinism emphasises learning and circumstances; psychic determinism emphasises unconscious processes. Strong/hard determinism allows little meaningful choice.

Free will concerns the capacity to choose and act intentionally. Soft determinism/compatibilism accepts causal influences while allowing agency within constraints. Feeling free is not itself proof that no prior cause influenced the decision.

A probabilistic finding is not inevitability. Genetic vulnerability, rewards and social influence can change likelihood without forcing every person to act the same way. Therapy and planning can support agency while recognising barriers and unconscious influences.

Determinism versus free-will

Lesson 7.1.7 | A Level issues, debates and methods

Applying the ideas

A consumer responding to an anchor may feel fully deliberate. A person resisting a compulsion can learn alternative responses even when intrusive thoughts are unwanted. Explain which behaviour is being discussed: onset of an urge and choice of a later response need not receive the same account.

Worked example: After repeated praise for taking risks, a worker keeps ignoring safety rules. Later, after a serious near miss, they choose to follow the procedure even when peers joke about it. How does this scenario show both sides of the debate? The early risk-taking can be explained deterministically because reinforcement and peer approval shaped the worker's behaviour. The later decision supports free-will or soft determinism because the worker reflects on the near miss and chooses a safer action despite social pressure. A balanced answer would say behaviour is influenced by causes, but people may still make choices within those pressures.

Evaluation and connections

Deterministic theories support prediction and scientific testing, but can understate lived choice and responsibility. Strong free-will claims can neglect coercion, illness and access barriers. Compare specific mechanisms and limits of prediction; exceptions to a group trend do not automatically refute every causal influence.

Idiographic versus nomothetic

Lesson 7.1.8 | A Level issues, debates and methods

Core ideas

Idiographic research focuses on the individual person, case or small group in depth, often using rich qualitative detail.

Nomothetic research looks for general laws, patterns or averages that can apply across larger groups of people.

Idiographic approaches can reveal personal meaning, unusual cases and complex life histories that may be lost in group averages.

Nomothetic approaches can support prediction, comparison, diagnosis, policy and evidence-based interventions.

A limitation of idiographic evidence is that findings from one person or small group may not generalise widely.

A limitation of nomothetic evidence is that group trends may hide individual differences, context and personal experience.

Key terms

Idiographic approach: Studying individuals or small cases in depth.

Nomothetic approach: Studying groups to find general laws or patterns.

Case study: A detailed investigation of one person, group or situation.

Idiographic versus nomothetic

Lesson 7.1.8 | A Level issues, debates and methods

Continued

General law: A broad pattern or principle that is expected to apply across people.

Qualitative data: Non-numerical data such as interviews, observations or written descriptions.

Quantitative data: Numerical data such as scores, ratings or frequencies.

Group average: A summary score that represents a group but may not describe every person in it.

Individual difference: A way in which one person differs from another.

Further detail and evidence

Idiographic approaches seek detailed understanding of a particular person/unit, including unique meaning and history. Nomothetic approaches seek general principles and patterns across people. A case study often supports idiographic understanding; a standardised comparison often supports nomothetic claims, but method and purpose should be distinguished.

Qualitative is not identical to idiographic, and quantitative is not identical to nomothetic. A case can use repeated numerical ratings; a large study can compare qualitative themes. A small study may generate a general hypothesis without establishing it.

Chapman/DeLapp's BII case and Lehmkuhl's adapted child ERP illustrate individual formulation. Lovell's randomised comparison and Landry's experimental groups investigate broader patterns. Their conclusions differ in level and appropriate generalisation.

Idiographic versus nomothetic

Lesson 7.1.8 | A Level issues, debates and methods

Applying the ideas

T's reduction in anxiety and return to medical procedures provides detailed evidence of usefulness for one client. A controlled trial could test average improvement across varied clients. Combining both approaches helps explain who benefits, how and under which conditions.

Worked example: A clinical psychologist writes a detailed case report about one client whose symptoms do not fit a common pattern. A hospital manager wants large-scale evidence before changing treatment guidelines. How do these positions differ? The clinical psychologist is using an idiographic approach because the focus is on one client's unique symptoms, life context and personal meaning. The hospital manager is asking for nomothetic evidence because treatment guidelines usually need broader patterns from larger groups. The case report may reveal an important exception, but larger evidence is needed before assuming the same approach should apply widely.

Worked example: In a workplace study, the average stress score falls after a new rota, but interviews show two employees became more stressed because of childcare and travel problems. What does this show about the debate? The average stress score is nomothetic because it summarises a general group pattern. The interviews add idiographic detail by showing how the change affected particular employees differently. Together they give a stronger evaluation: the rota may help the group overall, but individual circumstances still matter when judging its real impact.

Evaluation and connections

Idiographic work preserves context and unusual cases, but cannot estimate a population effect from one person. Nomothetic work supports comparison and prediction, but averages may conceal subgroups. Standardisation improves consistency while potentially excluding important personal meaning. Match the conclusion to the design.

Randomised control trials

Lesson 7.2.1 | A Level issues, debates and methods

Core ideas

A randomised control trial compares an intervention group with a control or comparison group to judge whether the intervention changes an outcome.

Random allocation means participants are assigned to groups by chance, helping reduce selection bias and participant differences between conditions.

A control group may receive no treatment, usual treatment, a waiting-list condition, a placebo or an alternative intervention.

Outcome measures should be chosen before the trial and should match the aim, such as symptom scores, relapse rates, behaviour records or quality-of-life ratings.

Blinding can reduce expectation bias when participants or researchers might change behaviour or judgements if they know the condition.

Key terms

Randomised control trial: A study comparing groups assigned by chance to test an intervention.

Random allocation: Assigning participants to groups by chance.

Intervention group: The group that receives the treatment, programme or change being tested.

Randomised control trials

Lesson 7.2.1 | A Level issues, debates and methods

Continued

Control group: A comparison group used to judge the effect of the intervention.

Placebo: An inactive treatment used to compare against an active treatment.

Blinding: Keeping participants or researchers unaware of group allocation to reduce bias.

Outcome measure: The score, behaviour or result used to judge whether the intervention worked.

Attrition: Loss of participants before the trial is completed.

Further detail and evidence

An RCT randomly allocates participants to intervention/comparison groups. It aims to distribute known and unknown participant differences on average. Random allocation is different from randomly sampling a population and does not guarantee a representative sample.

Comparisons can use placebo, usual care, a waiting list or another active treatment, depending on the question and ethical needs. Blinding participants, providers and assessors are separate possibilities. Psychological therapies often cannot blind therapists/clients, but outcome assessors may be blinded.

Specify baseline, standardised treatment delivery, outcome measures, follow-up, adherence and dropout handling. Intention-to-treat analysis retains people in assigned groups where appropriate, protecting the comparison from some selective adherence effects. It cannot magically recover every missing outcome.

Randomised control trials

Lesson 7.2.1 | A Level issues, debates and methods

Applying the ideas

Lovell compares delivery formats of active CBT/ERP using random allocation and blind assessors. Grant's original medication trials included placebo/blinding. The later pooled predictor analysis is different from a new randomised test of family-history causation.

Worked example: A clinic tests a new anxiety programme by randomly assigning 80 clients to the programme or to usual support, then comparing symptom scores after eight weeks. What features make this an RCT? This is an RCT because clients are allocated by chance to two groups, one receiving the new programme and one acting as a comparison group with usual support. The symptom score after eight weeks is the outcome measure. The design helps judge whether the programme adds benefit beyond usual support, although the clinic should also monitor consent, withdrawal, attrition and whether the groups were treated fairly.

Worked example: In a trial for a sleep intervention, 12 of 60 participants leave before the follow-up. The remaining participants improve more than the control group. How should the result be interpreted? The improvement suggests the intervention may be effective because it is compared with a control group. However, attrition is 20 percent because 12 out of 60 participants left, so the result should be interpreted carefully. If the people who left differed from those who stayed, the final comparison may overestimate or underestimate the intervention's effect.

Evaluation and connections

RCTs can give strong evidence for effectiveness, but they may raise ethical issues and may not reflect every real treatment setting.

RCTs strengthen causal inference when allocation, implementation and follow-up are sound. Attrition, crossover, expectancy and selected eligibility can still bias interpretation. Non-inferiority needs a justified margin and precision; no significant difference alone does not demonstrate equality. Evaluate real-world feasibility and appropriate ethical care.

Postal questionnaires

Lesson 7.2.2 | A Level issues, debates and methods

Core ideas

Postal questionnaires can reach participants who are geographically spread out, busy or easier to contact at home than in a lab.

Standardised questions make responses easier to compare, especially when closed questions or rating scales are used.

Low response rates can create sampling bias because the people who reply may differ from those who ignore the questionnaire.

Anonymity can encourage honest answers, but researchers still need clear consent, confidentiality and sensitive wording.

Postal questionnaires are practical for large samples, but researchers cannot easily clarify confusing questions or check who completed the form.

Key terms

Postal questionnaire: A physical questionnaire sent to participants for completion and return by post.

Self-report: Data participants provide about their own thoughts, feelings or behaviour.

Response rate: The percentage of contacted people who return usable responses.

Postal questionnaires

Lesson 7.2.2 | A Level issues, debates and methods

Continued

Sampling bias: A distortion caused when the responding sample differs from the target population.

Closed question: A question with fixed answer options.

Open question: A question that lets participants answer in their own words.

Anonymity: When participants' identities are not attached to their responses.

Missing data: Information not provided because items are skipped or forms are incomplete.

Further detail and evidence

A postal questionnaire is sent as a physical document for completion and return by post. It differs from an online questionnaire even though both can be completed remotely. Provide a return route, clear instructions, accessible print and an appropriate response deadline.

Sampling needs a suitable address frame and a plan for nonresponse. A stamped return envelope and proportionate reminder can improve return, while confidentiality procedures protect identifiable information. Only contact people in ways covered by consent and privacy arrangements.

Use clear, neutral items with time periods and response anchors. Include open/closed questions as needed and state scoring. A pilot checks comprehension, burden and instructions; it is not merely a smaller final sample added to the main results.

Postal questionnaires

Lesson 7.2.2 | A Level issues, debates and methods

Applying the ideas

An employer could send an anonymous satisfaction questionnaire with an independent return address, reducing direct manager pressure. A code can permit follow-up but means responses are not fully anonymous if linked to identity; explain that distinction accurately.

Worked example: A health psychologist posts 600 questionnaires about sleep habits to shift workers and receives 150 usable replies. What should be said about the method and response rate? The method is a postal questionnaire because workers complete the questions remotely and return them. The response rate is 25 percent because 150 out of 600 replied. This may be practical for reaching shift workers, but the low response rate could create sampling bias if the workers who replied differ from those who did not, such as being more concerned about sleep.

Worked example: In a postal questionnaire about workplace stress, several participants skip sensitive items about conflict with managers. How should the researcher treat this problem? The skipped answers are missing data, and the researcher should not invent responses or pressure participants to answer sensitive items. They should report how much data is missing and consider whether the missing answers affect conclusions. Better anonymity, clearer consent and careful wording might reduce skipped items in a future questionnaire.

Evaluation and connections

Postal completion can reach people without internet access and reduce interviewer influence. Literacy, cost, delay, lost post, low returns and uncertainty about who answered threaten usefulness. Nonresponders may differ systematically. Confidentiality may encourage honesty without removing recall or social desirability bias.

Rating scales and forced-choice responses

Lesson 7.2.3 | A Level issues, debates and methods

Core ideas

A rating scale asks participants to place an answer on an ordered scale, such as from strongly disagree to strongly agree.

Forced-choice responses require participants to choose from fixed options, which can make answers quick to score and compare.

Likert-type items are common rating-scale questions because they measure strength of agreement or frequency rather than just yes or no.

Balanced response options should avoid pushing participants toward one answer and should match the construct being measured.

Rating scales can produce quantitative data for patterns, averages and comparisons, but the numbers may simplify complex feelings.

Forced-choice questions can reduce vague answers, but they may frustrate participants if none of the options fits their real view.

Key terms

Rating scale: An ordered set of response points used to measure degree, frequency or agreement.

Forced-choice response: A fixed-answer format where participants must choose from the options given.

Rating scales and forced-choice responses

Lesson 7.2.3 | A Level issues, debates and methods

Continued

Likert scale: A rating scale that measures agreement or disagreement with a statement.

Response option: One answer choice available to a participant.

Neutral option: A middle response such as neither agree nor disagree.

Acquiescence bias: A tendency to agree with statements regardless of their content.

Social desirability bias: Answering in a way that seems acceptable rather than fully honest.

Ordinal data: Data where responses have an order but the gaps between points may not be equal.

Further detail and evidence

A rating scale places a response along ordered categories or a continuum, such as 1-7 agreement or an intensity line. Define both endpoints and the meaning of direction. A forced-choice format requires selection among specified options; it may include yes/no, paired alternatives or fixed categories.

Item wording should express one idea and avoid leading or double-barrelled content. Balanced anchors and sensible options improve interpretation. Reverse wording can address acquiescence but can also confuse respondents; score it consistently if used.

Do not assume that the psychological distance between every pair of numbers is identical. A scale score remains a subjective report when it represents pain, satisfaction or belief. A fixed option can simplify coding while hiding explanations.

Rating scales and forced-choice responses

Lesson 7.2.3 | A Level issues, debates and methods

Applying the ideas

A seven-point justifiability scale in Giacalone quantifies an attitude, not observed sabotage. A willingness rating in Snyder measures intention, not actual shampoo use. An open follow-up can ask why, adding qualitative material alongside the numerical response.

Worked example: A questionnaire asks students to rate exam stress from 1, not stressed, to 5, extremely stressed. What are the strengths and limits of using this scale? The scale gives quantitative data, so the researcher can compare students, calculate patterns such as a mean and track changes over time. It is quick for participants to answer and easy to score. However, stress is complex, and a single number may hide different causes or experiences. The labels and wording also need to be clear so students interpret the scale in a similar way.

Worked example: In a wellbeing survey, participants must choose either 'happy at work' or 'unhappy at work'. What concern should be raised about this forced-choice item? The forced-choice format is easy to code, but the two options are too limited. A participant who feels mixed, neutral or satisfied with some parts of work but not others has no accurate answer. This could reduce validity because the data may reflect the options provided more than the participant's real experience.

Evaluation and connections

Standardised response formats support comparison and efficient analysis. Central tendency, extreme responding, acquiescence and social desirability can distort scores. Forced choice may exclude a truthful mixed/uncertain position. Examine reliability, construct validity, culture and sensitivity to meaningful change.

Psychometric tests

Lesson 7.2.4 | A Level issues, debates and methods

Core ideas

A psychometric test measures a psychological characteristic using standardised tasks, questions or scoring rules.

Standardisation means the test is given and scored in the same way so that scores can be compared fairly.

Norms are comparison data from a relevant group, helping researchers interpret whether a score is typical, high or low.

Reliability matters because a test should give consistent scores when the construct has not changed.

Validity matters because the test should measure what it claims to measure, not something unrelated such as reading speed or test anxiety.

Psychometric tests can support decisions in education, work and clinical settings, but misuse can label people unfairly or ignore culture and context.

Key terms

Psychometric test: A standardised test designed to measure a psychological characteristic.

Standardisation: Using the same instructions, materials, timing and scoring for each test taker.

Norms: Comparison scores from a relevant group used to interpret an individual's result.

Psychometric tests

Lesson 7.2.4 | A Level issues, debates and methods

Continued

Reliability: The consistency of a test or measure.

Validity: How far a test measures what it claims to measure.

Raw score: The score before it is compared with norms or converted into another scale.

Percentile: A score showing the percentage of the norm group scoring at or below that point.

Test bias: A feature of a test that unfairly disadvantages some groups.

Further detail and evidence

Psychometric tests systematically measure psychological attributes using defined items, administration and scoring. Standardisation supports comparable use. Norms, where relevant, provide a reference distribution; a criterion threshold instead compares with a defined standard.

Reliability includes internal consistency, test-retest and rater agreement where relevant. Validity includes whether items represent the intended construct and relate to suitable external evidence. High consistency can arise from repetitious items without covering the whole construct.

Examples include BDI depressive symptom scores, GAD-7 anxiety severity and JDI satisfaction facets. Some clinical ratings combine interview and judgement; not every named scale is a purely self-administered test. A score must be interpreted using the correct version and intended population.

Psychometric tests

Lesson 7.2.4 | A Level issues, debates and methods

Applying the ideas

A total can monitor change before/after an intervention, but consider whether the instrument is sensitive to the relevant symptoms. A high screening score supports further assessment; it does not automatically establish diagnosis, cause or the best treatment.

Worked example: A school uses a standardised aptitude test to decide who receives extra enrichment lessons. What should be checked before relying on the scores? The school should check that the test is reliable, valid for the ability it claims to measure and standardised for the age group being tested. Norms should come from a relevant comparison group, not a very different population. The score can help decision-making, but it should not be the only evidence because motivation, language background, anxiety and classroom performance may also matter.

Worked example: When a personality test is translated for students in another country, several items about workplace habits no longer make sense. What problem does this create? This creates a validity and test-bias problem because the translated items may not measure the intended personality trait in that cultural context. Students may answer based on unfamiliar wording or irrelevant examples rather than their actual characteristics. The test would need careful adaptation, piloting and comparison with suitable norms before the scores were interpreted seriously.

Evaluation and connections

Tests are efficient and can reduce unsystematic judgement, while response bias, language, culture and inappropriate norms threaten interpretation. Repeated measurement can introduce memory or practice. Examine practical access and confidentiality. A reliable instrument used for the wrong purpose can still lead to an invalid conclusion.

Null and alternative hypotheses

Lesson 7.2.5 | A Level issues, debates and methods

Core ideas

A hypothesis is a testable prediction about a relationship, difference or effect in a study.

The alternative hypothesis predicts that there will be a relationship, difference or effect between variables.

The null hypothesis predicts that there will be no relationship, no difference or no effect beyond chance variation.

A directional hypothesis states the expected direction of the result, such as higher, lower, positive or negative.

A non-directional hypothesis predicts a difference or relationship without saying which direction it will take.

Hypotheses should name the variables clearly so that the prediction can be tested and interpreted.

Key terms

Hypothesis: A testable prediction about what a study expects to find.

Null hypothesis: A prediction that there will be no relationship, difference or effect.

Alternative hypothesis: A prediction that there will be a relationship, difference or effect.

Directional hypothesis: A prediction that states the expected direction of the result.

Non-directional hypothesis: A prediction that expects a result but does not state its direction.

Null and alternative hypotheses

Continued

Independent variable: The variable changed or compared by the researcher.

Dependent variable: The outcome measured in the study.

Chance variation: Differences in results that could occur randomly rather than because of a real effect.

Further detail and evidence

For A Level, write and apply null hypotheses and both directional (one-tailed) and non-directional (two-tailed) alternative hypotheses to the actual operationalised variables. Hypothesis writing is part of Paper 4 planning; Paper 2 planning does not require aims or hypotheses.

An alternative hypothesis predicts a difference or association; a directional prediction gives its expected direction, while a non-directional prediction does not. A null states no population difference/association, with observed variation attributable to chance. Operationalise conditions, measures and the population relevant to the plan.

Experimental hypotheses refer to defined IV conditions and a measurable DV. Correlational hypotheses refer to two measured co-variables and the proposed relationship. Observations and self-reports require wording that matches their actual design rather than an invented manipulated variable.

Use previous theory/evidence to justify direction where appropriate. A hypothesis should be testable before results are known. Null and alternative should concern the same variables and comparison; they should not describe different research questions.

Null and alternative hypotheses

Lesson 7.2.5 | A Level issues, debates and methods

Applying the ideas

Example: mean seven-point comfort ratings will be lower after viewing a six-inch than a 24-inch restaurant-table gap. Null: mean comfort will not differ beyond chance between those defined conditions. A correlational alternative could instead predict that greater perceived crowding relates to lower satisfaction.

Worked example: A researcher predicts that students who revise with practice questions will score higher than students who only reread notes. How should the alternative and null hypotheses be written? The alternative hypothesis could state that students who revise with practice questions will score higher on the test than students who only reread notes. This is directional because it predicts the direction of the difference. The null hypothesis would state that there will be no difference in test scores between the two revision groups, or that any difference will be due to chance.

Worked example: In a study of phone use and sleep quality, a student writes, 'Phones are bad for sleep.' What is weak about this as a hypothesis? The statement is too vague because it does not clearly name measurable variables or say what result will be tested. A better non-directional hypothesis would be that there will be a relationship between amount of phone use before bed and sleep-quality score. A directional version would predict that greater phone use before bed will be associated with poorer sleep-quality scores.

Evaluation and connections

Statistical decisions do not prove a theory true or eliminate all alternative explanations. A non-significant result is not proof of no possible effect. The syllabus does not require calculations or unspecified inferential tests. Paper 4 plans require aims/hypotheses; the 2027 Paper 2 planning expectations differ.

Temporal validity

Lesson 7.2.6 | A Level issues, debates and methods

Core ideas

Temporal validity asks whether findings from one time period still apply at a later time.

A study may lose temporal validity when social norms, technology, education, law or everyday behaviour change.

Older findings can still be valuable if the psychological process being studied remains stable and later evidence supports it.

Replication helps test temporal validity by repeating a study or testing the same idea with newer samples.

Historical context matters because participants' responses may reflect the time and setting in which the data were collected.

Strong evaluation avoids dismissing evidence just because it is old; it asks what has changed and whether the finding has been updated or supported.

Key terms

Temporal validity: How far findings remain valid across time.

Replication: Repeating a study or testing the same idea again to check whether findings hold.

Historical context: The social and cultural conditions at the time a study was carried out.

Temporal validity

Lesson 7.2.6 | A Level issues, debates and methods

Continued

Cohort effect: A difference linked to the generation or time period participants come from.

Social norm: A shared expectation about behaviour in a society or group.

Technological change: New tools or media that may change behaviour or research conditions.

Generalisation over time: Applying findings from one period to another period.

Contemporary relevance: How useful evidence is for explaining behaviour in the present.

Further detail and evidence

Temporal validity concerns whether findings apply beyond the period in which evidence was collected. Technology, norms, policies, job design, medical care and advertising exposure can change. It is different from the duration of a study or reliability across repeated measurements.

Older evidence can remain useful if the relevant mechanism persists, while its particular procedure or application needs updating. A theory about interference may remain relevant even when advertisements move from print to phones; an old interface comparison may transfer less directly.

Replication with current samples/procedures can test persistence. Repeated cross-sectional studies compare periods but may change sampling; longitudinal studies follow people but mix ageing with historical change. Record what was kept constant and what changed.

Temporal validity

Lesson 7.2.6 | A Level issues, debates and methods

Applying the ideas

Doctor-clothing preferences in 1991 may differ with newer infection-control norms. Jedetski's early website tools may differ from present shopping platforms. Identify the particular changed feature and explain how it could affect the result, rather than rejecting a study solely because it is old.

Worked example: A 1970s study of bystander behaviour is used to explain how people respond to emergencies recorded on smartphones today. What temporal-validity issue should be considered? The study may still be useful if it identifies a stable process such as diffusion of responsibility, but temporal validity needs checking because modern emergencies can involve phones, filming, online sharing and different expectations about helping. Comparing the original context with today's context, plus looking for newer replications or related evidence, prevents assuming the finding applies unchanged.

Worked example: One classic study is criticised as old, but newer studies using different samples find a similar pattern. How should its temporal validity be judged? The criticism should not stop at saying the study is old. If newer studies find a similar pattern, that supports temporal validity because the finding appears to hold across time. Methods, samples and contexts still need comparison, but replication makes the classic evidence more useful for present-day explanation.

Evaluation and connections

A recent publication is not automatically temporally valid for every future context. Updating a method can improve relevance but reduce comparability with the original. Evaluate stable mechanisms and context-sensitive findings separately. Several replications over time give stronger evidence than assuming either permanent truth or complete obsolescence.

Planning studies for Paper 4

Lesson 7.2.7 | A Level issues, debates and methods

Core ideas

Paper 4 Section B offers one planning question for each specialist option; answer one question from the four choices, normally from an option you studied. The plan is worth 10 marks and structured evaluation questions total 14 marks.

Unlike Paper 2, Paper 4 general planning features include aim(s) and hypotheses, procedure, sample and sampling technique, ethics, validity, reliability, types of data, data analysis and use of descriptive statistics. Give sufficient detail for replication.

For experiments, specify the type, IV, DV, design, controls/standardisation and counterbalancing or random allocation where applicable; add location for a field experiment. Distinguish recruiting a sample from allocating participants to conditions.

For self-reports, include open/closed format, example questions, scoring/interpretation and questionnaire technique (paper, online or postal), or interview format (structured, semi-structured or unstructured) and technique (face-to-face or telephone).

For case studies, specify the participant/unit, content, two or more collection techniques and analysis/interpretation/triangulation. For observation, specify overt/covert, participant/non-participant, naturalistic/controlled, structured/unstructured and number of observers.

For longitudinal plans (including longitudinal experiments), specify tests/tasks, scoring, frequency/interval, re-contacting participants and controls/standardisation. Paper 4 may require evaluation of all aspects of the plan.

Key terms

Replicable procedure: A procedure described precisely enough for another researcher to repeat it.

Descriptive analysis: Summarising and interpreting observed data using tables, graphs or measures such as means and standard deviations.

Planning studies for Paper 4

Lesson 7.2.7 | A Level issues, debates and methods

Further detail and evidence

For correlational plans, specify both co-variables, measurement of each, and the relationship/scatter graph. Match the analysis to the data: for example, compare group means and standard deviations or interpret a scatter graph; inferential-test calculations are not added requirements.

Ethics should be practical: informed consent, withdrawal without penalty, minimising harm, secure coded data and suitable debriefing. Explain how each safeguard applies to the actual specialist scenario rather than listing ethical words.

Paper 4 plan: include aims/hypotheses, sample/sampling, ethics, replicable procedure, validity/reliability, data type, analysis and appropriate descriptive statistics. The plan is worth 10 marks and structured evaluation 14 marks. Choose one of four option-based planning questions and follow the specified method/features.

Experiment: identify laboratory/field type, IV conditions, operationalised DV, design, controls and allocation/counterbalancing where appropriate; field work also needs location. Self-report: give example open/closed items and scoring, questionnaire technique (paper/online/postal), or interview format and face-to-face/telephone technique.

Observation: specify overt/covert, participant/non-participant, setting, structured categories/unstructured notes, number of observers and recording. Correlation: define two co-variables, both measures and anticipated relationship/scatter graph. Do not claim a manipulated cause.

Case study: define the person/unit, information, at least two techniques and analysis/triangulation. Longitudinal: state tasks, scoring, interval, re-contact and controls. Give enough detail for replication without unnecessary invented equipment or risky procedures.

Applying the ideas

Example outline: compare two accurate menu versions with identical items/prices, varying only positions. Recruit consenting adults from a defined setting and randomly allocate versions. Record the chosen item, preserve withdrawal/privacy and summarise choice frequencies. Standard instructions and fixed materials support reliability and control; limited hypothetical choice reduces real-spending validity.

Planning studies for Paper 4

Lesson 7.2.7 | A Level issues, debates and methods

Continued

Worked example: Plan a field experiment in consumer psychology on background music and restaurant spending. Include a hypothesis, design, data analysis and one ethical safeguard. Aim to investigate whether music condition affects spending per diner. A non-directional alternative predicts a difference in spending between the music and no-music conditions; the null predicts no difference. Recruit 60 consenting adult diners by opportunity sampling across six comparable lunch sessions, with 10 per session. Use independent groups and pair the sessions by weekday and lunchtime, randomly allocating one session in each pair to music and the other to no music. Use the same instrumental playlist at one fixed safe volume in music sessions; keep ambient noise, menu, prices, staff instructions and session duration as similar as possible and record spend per diner, excluding identifying payment details. Compare the conditions using means and standard deviations. Obtain appropriate consent for research participation and protect withdrawal and privacy; explain the study without pressure to spend. Consider time-slot differences as a possible confound.

Worked example: Evaluate one validity issue and one reliability issue in an organisational questionnaire about job satisfaction. Validity could be reduced if workers think managers can identify them, because fear of consequences may lead to socially desirable answers. Use questionnaires without names or identifying details, deny managers access to individual answers, and report only group summaries to reduce that pressure. Reliability could be reduced if different staff receive different wording or scoring instructions. Use the same items, response scale and scoring rules for everyone and check that repeated measurement is consistent when job conditions have not changed.

Evaluation and connections

Evaluate all aspects of the actual plan, including sample/generalisability, ethics, practicality, validity and reliability. Link each strength/weakness to a consequence and feasible improvement. Preserve the supplied requirements. Unlike Paper 2, Paper 4 expects the wider planning features, including hypotheses, sampling and ethics.

Hint: check the question's method and context, then use a plan checklist: aim/hypotheses; sample; operationalised measures; replicable procedure; ethics; validity/reliability; data and descriptive analysis. Support each evaluation point with a consequence for this plan.