2 The specification overview

2a. Overview of A Level in Psychology (H569)

Learners must complete all components (01, 02 and 03) to be awarded the OCR A Level in Psychology.

Content Overview	Assessment Overview	
Planning, conducting, analysing and reporting psychological research across a range of experimental and non-experimental methodologies and techniques.	Research methods (01) 80 marks written paper 2 hours	**33.3%** of total A level
Introduces some of the central areas, perspectives, issues and debates through research in psychology.	Core studies in psychology (02)* 80 marks written paper 2 hours	**33.3%** of total A level
Compulsory sections on: • Mental health • Criminal psychology. Learners will also study **one** out of the following applied options: • Child psychology • Environmental psychology • Sport and exercise psychology.	Applied psychology (03)* 80 marks written paper 2 hours	**33.3%** of total A level

* Indicates synoptic assessment

2b. Content of A Level in Psychology (H569)

Research methods (Component 01)

Learners will need to be familiar with the **four** main techniques for collecting/analysing data.

These are:

- self-report
- experiment
- observation
- correlation.

Learners will be expected to carry out their own practical investigations and reflect on their experiences using these four methods.

In addition, learners need to be familiar with the case study method but are not required to conduct one as part of their own practical investigations.

Learners will also need to be familiar with the following:

- planning and conducting research
- data recording, analysis and presentation
- report writing
- science in psychology.

Core studies in psychology (Component 02)

Learners will need to be familiar with the fifteen core studies.

Learners will also need to be familiar with the following:

- areas and perspectives in psychology
- methodological issues relating to the core studies
- issues and debates in psychology.

Applied psychology (Component 03)

Learners will need to be familiar with **two** compulsory sections:

- Mental health
- Criminal psychology.

Learners will also study **one** out of the following applied psychology options:

- Child psychology
- Environmental psychology
- Sport and exercise psychology.

Learners will need to be familiar with the issues and debates that relate to this component.

2c. Content of Research methods (Component 01)

This component introduces and develops knowledge and understanding of the process of planning, conducting, analysing and reporting psychological research using a range of experimental and non- experimental methodologies and techniques.

It promotes an understanding of the methods of scientific enquiry used in empirical research and the relevant knowledge and skills required to conduct such research. It also encourages the acquisition of a range of evaluative concepts for reviewing and discussing the design and outcomes of research.

There is a strong focus on the requirement for learners to plan, conduct and analyse their own practical investigations using the four core research methods and techniques (experiment, observation, self-report and correlation).

Where possible and appropriate, links should be made with the content of the other components (e.g. in the application of evaluative issues).

The multiple-choice section of the examination may require candidates to utilise their knowledge of the core studies from Component 02.

It should also be noted that the content of Component 01, apart from the mathematical content, can also be assessed in Components 02 and 03.

Research methods and techniques

1.1 Research methods and techniques	Learners should have knowledge and understanding of the following research methods and techniques and their associated strengths and weaknesses:
Experiment	• laboratory experiment • field experiment • quasi experiment.
Observation	• structured • unstructured • naturalistic • controlled • participant • non-participant • overt • covert.
Self-report	• questionnaire • Interviews: ○ structured, semi-structured, unstructured.

Correlation	• obtaining data for correlational analysis • positive correlation • negative correlation • no correlation.
Case study*	• when and why a case study method would be used

* Students are required to know about the features of a case study but are not required to conduct one as part of their own practical investigations.

Planning and conducting research

1.2 Planning and conducting research	Learners should be familiar with the following features of planning and conducting research and their associated strengths and weaknesses:
Aims and hypotheses and how to formulate	• research aim • research question • alternative hypotheses • null hypotheses • one-tailed (directional) hypotheses • two-tailed (non-directional) hypotheses.
Populations, samples and sampling techniques	• target population and sample • random sampling • snowball sampling • opportunity sampling • self-selected sampling.
Experimental designs	• repeated measures design • independent measures design • matched participants design.
Variables and how they are operationalised	• independent variable (IV) • dependent variable (DV) • control of extraneous variables (researcher, situational and participant)
Designing observations	• behavioural categories • time sampling • event sampling.
Designing self-reports	• open questions • closed questions • rating scales: ○ Numerical scale, Likert rating scale, Semantic differential rating scale.

Data recording, analysis and presentation

1.3 Data recording, analysis and presentation	Learners should be able to demonstrate knowledge and understanding of the process and procedures involved in the collection, analysis and presentation of data. This will necessitate the ability to perform some calculations (please see Appendix 5 for examples of mathematical requirements).
Raw data	• design of raw data recording tables • use of raw data recording tables • standard and decimal form • significant figures • make estimations from data collected.
Levels of data	• nominal level data • ordinal level data • interval level data.
Types of data	• quantitative data • qualitative data • primary data • secondary data.
Descriptive statistics	• measures of central tendency ○ mode, median, mean. • measures of dispersion ○ range, variance, standard deviation. • ratio • percentages • fractions • frequency tables (tally chart).

Graphs*	• line graphs • pie charts • bar charts • histograms • scatter diagram.
Inferential statistics	• normal distribution curves • skewed distribution curves • probability • significance levels • criteria for using a parametric test • criteria for using a specific non-parametric inferential test (Mann-Whitney U test, Wilcoxon Signed Ranks test, Chi-square, Binomial Sign test and Spearman's Rho) • using statistical tables of critical values for all five named non-parametric inferential tests • write a significance statement including the calculated value, the critical value and significance level • calculate Chi-square • type 1 errors • type 2 errors • symbols: =, <, <<, >>, >, ∝, ~, ≥, ≤.
Methodological issues	• representativeness • generalisability • reliability: ○ internal, external, inter-rater, test-retest, split-half. • validity: ○ internal, face, construct, concurrent, predictive, external, population, ecological. • demand characteristics • social desirability • researcher/observer bias • researcher/observer effect(s) • ethical issues, including the British Psychological Society's Code of Ethics and Conduct: ○ Respect – informed consent, right to withdraw, confidentiality ○ Competence ○ Responsibility – protection of participant, debrief ○ Integrity – deception.

*Students will not be asked to draw graphs/charts with a high degree of precision. For example, when sketching a pie chart, segments would only need to be roughly proportionate to calculated percentages.

Report Writing

1.4 Report writing	Learners should have knowledge of the conventions of reporting research in a practical report and demonstrate understanding of the role, content and purpose of each of the main sections and sub-sections.
Sections and sub-sections of a practical report	• abstract • introduction • method (design, sample, materials/apparatus, procedure) • results • discussion • references • appendices.
Citing academic references	• a familiarity with citing academic research using the Harvard system of referencing, e.g. Milgram, S. (1963) Behavioral study of obedience. *Journal of Abnormal and Social Psychology*, 67, (4), 371–378.
Peer review	• appreciate the role of the psychological community in validating new knowledge and ensuring integrity through the process of peer review.

Practical Investigations

1.5 Practical investigations	Learners are expected to conduct and analyse their own research practical investigations, including appropriate risk assessment and management (please see appendix 5).
	Learners should have undertaken the following practical investigations and be prepared to be assessed on them individually: • experiment • observation • self-report • correlation.

1.6 Science in psychology	Learners should understand how society makes decisions about scientific issues and should be aware of the nature and principles of scientific enquiry through knowledge and understanding of the following concepts: • the study of cause-and-effect • falsification • replicability • objectivity • hypothesis testing • manipulation of variables • control and standardisation • quantifiable measurements.

2c. Core studies in psychology (Component 02)

Core studies in psychology (Component 02) aims to develop the critical thinking and independent learning skills essential to the scientific study of psychology. The selected core studies reflect the contribution of psychology to an understanding of individual, social and cultural diversity.

This component develops learners' ability to make evaluative points about the studies and their ability to see the studies in the context of psychological areas, perspectives, issues and debates.

Section A: Core studies

Section A: Core studies		
This section will assess the learners' knowledge and understanding of the core studies, as well as their ability to evaluate the studies. The core studies are placed within a broad area of investigation. Within each area, the learners are required to examine three core studies. Holistically, the studies have been selected to represent a variety of research methodologies, designs, samples, sampling methods, issues and debates. Learners will need to refer to topics from Component 01 when analysing and evaluating core studies. Students should also be able to comment on the contribution of core studies to an understanding of individual, social and cultural diversity. For full references please see appendix 5.		
Area	**Study**	**Topic**
Social	Milgram (1963)	Obedience to authority
	Piliavin et al. (1969)	Helping behaviour
	Levine (2001)	Cross-cultural altruism
Cognitive	Loftus and Palmer (1974)	Eyewitness testimony
	Grant et al. (1998)	Context-dependent memory
	Simons and Chabris (1999)	Visual inattention
Developmental	Bandura et al. (1961)	Transmission of aggression
	Chaney et al. (2004)	Adherence to medical regimes
	Lee et al. (1997)	Lying and truth telling

cont. Section A: Core studies		
Area	**Study**	**Topic**
Biological	Sperry (1968)	Lateralisation of function in the brain
	Casey et al. (2011)	Delayed gratification
	Maguire et al. (2000)	Brain plasticity
Individual differences	Freud (1909)	Phobias
	Baron-Cohen et al. (1997)	Autism and theory of mind
	Van Leeuwen et al. (2008)	Intelligence

Section A: Core Studies	Content

Individual studies	'Tell the story' of each core study in terms of:
	• aim
	• method
	  ○ design
	  ○ sample
	  ○ materials/apparatus
	  ○ procedure
	• findings/results
	• conclusions
	• how the study relates to the topic.
	• how the study could be improved.

Core studies in their area	• Similarities between studies
	• Differences between studies
	• To what extent do studies contribute to our understanding of:
	  ○ individual diversity
	  ○ social diversity
	  ○ cultural diversity
	• Usefulness of studies

Methodological issues	• The strengths and weaknesses of the different research methods and techniques • The strengths and weaknesses of different types of data • Ethical issues • Validity • Reliability • Sampling bias • Ethnocentrism.

Section B: Areas, perspectives, issues and debates

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In this section, learners will be asked questions that invite them to generate an extended discussion, recognising the inter-relationship between different areas, perspectives, issues and debates in psychology. The specification places core studies within particular areas, but learners may refer to other appropriate studies from Component 03 where a question indicates this is permissible. They may also argue that a core study placed within one area can be seen as falling within another area. Core studies that come from a behaviourist perspective include Bandura and Chaney. Psychodynamic ideas are referred to in the research by Freud. However, similar to the above, learners may refer to other appropriate studies from Component 03 where a question indicates this is permissible.	
Areas, perspectives, issues and debates	**Content**
Areas • Social • Cognitive • Developmental • Biological • Individual Differences	• The defining principles and concepts of each area. • Research to illustrate each area. • Strengths and weaknesses of each area. • Applications of each area. • How each area is different from and similar to other areas/perspectives.
Perspectives • Behaviourist • Psychodynamic	• The defining principles and concepts of each perspective. • Research to illustrate each perspective. • Strengths and weaknesses of each perspective. • Applications of each perspective. • How each perspective is different from and similar to the other perspective/areas.
Debates • Nature/nurture • Freewill/determinism • Reductionism/holism • Individual/situational explanations • Psychology as a science	• The defining principles and concepts of each debate. • Different positions within each debate. • Research to illustrate different positions within each debate. • Strengths and weaknesses of the different positions within each debate.
Issues • Ethical issues • Conducting socially sensitive research • Usefulness of research	• The defining principles and concepts of each issue. • Research to illustrate the different issues. • Strengths and weaknesses related to the different issues.

Section C: Practical applications

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To encourage awareness of practical applications of psychology, this section will require learners to apply their knowledge and understanding of psychology to a novel source. The source could be a newspaper or magazine article, a blog, a diary entry, email exchange or equivalent written source. It is advised that teachers prepare learners for this section by giving them a variety of sources to consider.	
Practical applications	**Content**
The practical applications of psychology	• Identify and apply the psychological content in the source. • Make evidence-based suggestions in relation to the source. • Consider the strengths and weaknesses of the suggestion(s) made.

2c. Content of applied psychology (Component 03)

This component consists of **two** compulsory sections:

- Mental health
- Criminal psychology.

Learners will also choose to study **one** out of the following applied psychology options:

- Child psychology
- Environmental psychology
- Sport and exercise psychology.

Each topic contains the following:

Background

With reference to psychology, learners should be able to explain and exemplify the background and consider relevant issues and debates in relation to the topic area.

Key studies

Learners should understand each key study and how it relates to the topic.

Application

Learners will be presented with a novel situation. They should be able to apply their psychological knowledge to explain strategies to change behaviour or explain how they would conduct an appropriate investigation into the topic area.

Learners must be able to:

- Describe concepts, theories and studies as specified below.
- Discuss and apply methodological issues and debates in psychology to the background and key studies.
- Explain and exemplify the background in each topic.
- Apply the background and key studies to novel situations.
- Evaluate the contribution the key studies have made to the topic.
- Suggest possible improvements to key studies.
- Explain how psychology contributes to an understanding of individual, social and cultural diversity.
- Explain how research into mental health and criminal psychology contribute to the success of the economy and society.

The issues and debates that learners are required to apply in Component 03 are detailed below.

Issues and debates

Learners must be able to apply each of the following issues and debates to each topic and relevant research.

Debates	**Issues**
• Nature/nurture • Freewill/determinism • Reductionism/holism • Individual/situational explanations • Psychology as a science	• Ethical issues • Conducting socially sensitive research • Usefulness of research • Validity • Reliability • Sampling bias

Section A: Mental health			
Topic	**Background**	**Key research**	**Application**
What is mental health?	• Three historical views of mental illness: humoural, supernatural and hospital movement. • Four definitions of abnormality: deviation from social norms, failure to function adequately, statistical infrequency, and deviation from ideal mental health. • Categorising mental disorders using the ICD and DSM, including cultural biases in diagnosis.	Neighbors et al. (2003) Racial differences in DSM diagnosis using a semi-structured instrument: the importance of clinical judgment in the diagnosis of African Americans.	Using definitions of abnormality to assess mental illness. Using the ICD and DSM to diagnose depression, phobias and schizophrenia.
The medical model	Medical explanations of general mental illness: • Biochemical explanation. • Genetic explanation. • Brain abnormality.	Gottesman et al. (2010) Mental disorders in offspring with two psychiatrically ill parents.	The use of drug treatment for one specific disorder (depression, phobias or schizophrenia).
Alternatives to the medical model	Non-medical explanations of general mental illness: • Behaviourist explanation. • Cognitive explanation. • Psychodynamic explanation.	Watson and Raynor (1920) Conditioned emotional reactions.	The use of CBT as a treatment for depression or schizophrenia. The use of systematic desensitisation as a treatment for phobias.
Modern approaches to mental health	• The roles of psychologists and psychiatrists in diagnosing and treating mental illness. • The role of technology in supporting mental health. • The promotion of mental wellbeing.	Fulmer et al. (2018) Using psychological artificial intelligence (Tess) to relieve symptoms of depression and anxiety: randomized controlled trial.	The use of artificial intelligence (AI) technology to support mental wellbeing.

Section B: Criminal Psychology			
Topic	**Background**	**Key research**	**Application**
Turning to crime	• One biological explanation of criminal behaviour. • One social explanation of criminal behaviour. • One cognitive explanation of criminal behaviour.	Raine et al. (1997) Brain abnormalities in murderers indicated by positron emission tomography.	The use of zero-tolerance policing to prevent crime. The use of anger management to prevent violent crime.
Building a case	• Emotional context in the processing of forensic evidence. • Cognitive biases in the processing of forensic evidence. • Biases involved when working for the prosecution or defence in the processing of forensic evidence.	Hall and Player (2008) Will the introduction of an emotional context affect fingerprint analysis and decision-making?	How ACE-V can be used to reduce bias in the processing of forensic evidence.
In the courtroom	How juries can be persuaded by: • Characteristics of witnesses and defendants (attractiveness, confidence and ethnicity) • Inadmissible evidence • Pre-trial publicity.	Dixon et al. (2002) Effects of regional accent, race, and crime type on attributions of guilt.	The use of expert witnesses to reduce external influences on jury decision-making. How the order of testimony in the courtroom can influence jury decision-making.
Managing offenders	• Imprisonment as a response to criminal behaviour. • Non-custodial punishment as a response to criminal behaviour. • Rehabilitation as a response to criminal behaviour.	Haney, Banks and Zimbardo (1973) A study of prisoners and guards in a simulated prison.	The use of restorative justice to reduce reoffending.

Section C: Option 1 Child Psychology			
Topic	**Background**	**Key research**	**Application**
Pre-adult brain development	How brain development impacts risk-taking behaviour.	Barkley-Levenson and Galván (2014) Neural representation of expected value in the adolescent brain.	Two strategies to reduce risk-taking behaviours. Understanding how research in this topic can be undertaken.
Perceptual development	Perceptual development in children and animals.	Gibson and Walk (1960) The 'Visual Cliff'.	Two strategies to develop perception in young children. Understanding how research in this topic can be undertaken.
The development of attachment	The development of attachment in babies.	Ainsworth and Bell (1970) Attachment, exploration and separation: Illustrated by the behaviour of one-year-olds in a strange situation.	Two strategies to develop an attachment friendly environment. Understanding of how research in this topic can be undertaken.

Section C: Option 2 Environmental Psychology			
Topic	**Background**	**Key research**	**Application**
Biological rhythms	How disruption to biological rhythms affects behaviour.	Czeisler et al. (1982) Rotating shift work schedules that disrupt sleep are improved by applying circadian principles.	Two strategies for reducing the effects of shift work. Understanding of how research in this topic can be undertaken.
Recycling and other conservation behaviours	The factors which influence the tendency to conserve or recycle.	Lord (1994) Motivating recycling behaviour: A quasi-experimental investigation of message and source strategies.	Two strategies to increase recycling. Understanding of how research in this topic can be undertaken.
Psychological effects of the built environment	The impact of the built environment and urban renewal on our wellbeing.	Ulrich (1984) View through a window may influence recovery from surgery.	Two examples of environmental design used to improve health and wellbeing. Understanding of how research in this topic can be undertaken.

Section B: Option 3 Sport and exercise psychology			
Topic	**Background**	**Key research**	**Application**
Exercise and mental health	Benefits of exercise to mental health.	Lewis et al. (2014) Mood changes following social dance sessions in people with Parkinson's Disease.	Two exercise strategies to improve mental health. Understanding of how research in this topic can be undertaken.
Motivation	How self-efficacy and sports confidence (including imagery and sports orientation) affects motivation.	Munroe-Chandler et al. (2008) Playing with confidence: The relationship between imagery use and self-confidence and self-efficacy in youth soccer players.	Two strategies for motivating athletes. Understanding of how research in this topic can be undertaken.
Audience effects	How an audience can facilitate or inhibit sports performance.	Wunderlich et al. (2021) How does spectator presence affect football?	Two strategies for increasing performance in spectator sports. Understanding of how research in this topic can be undertaken.

For full references please see Appendix 5.