Cambridge Assessment International Education

Syllabus

Cambridge International AS & A Level Psychology 9990

Use this syllabus for exams in 2024, 2025 and 2026.
Exams are available in the June and November series.
Also available for examination in March 2024, 2025 and 2026 for India only.

Version 1

For the purposes of screen readers, any mention in this document of Cambridge IGCSE refers to Cambridge International General Certification of Secondary Education.

Cambridge Pathway

Why choose Cambridge International?

Cambridge International prepares school students for life, helping them develop an informed curiosity and a lasting passion for learning. We are part of the University of Cambridge.

Our Cambridge Pathway gives students a clear path for educational success from age 5 to 19. Schools can shape the curriculum around how they want students to learn – with a wide range of subjects and flexible ways to offer them. It helps students discover new abilities and a wider world, and gives them the skills they need for life, so they can achieve at school, university and work.

Our programmes and qualifications set the global standard for international education. They are created by subject experts, rooted in academic rigour and reflect the latest educational research. They provide a strong platform for students to progress from one stage to the next, and are well supported by teaching and learning resources.

We review all our syllabuses regularly, so they reflect the latest research evidence and professional teaching practice – and take account of the different national contexts in which they are taught.

We consult with teachers to help us design each syllabus around the needs of their learners. Consulting with leading universities has helped us make sure our syllabuses encourage students to master the key concepts in the subject and develop the skills necessary for success in higher education.

Our mission is to provide educational benefit through provision of international programmes and qualifications for school education and to be the world leader in this field. Together with schools, we develop Cambridge learners who are confident, responsible, reflective, innovative and engaged – equipped for success in the modern world.

Every year, nearly a million Cambridge students from 10 000 schools in 160 countries prepare for their future with the Cambridge Pathway.

School feedback: 'We think the Cambridge curriculum is superb preparation for university.'

Feedback from: Christoph Guttentag, Dean of Undergraduate Admissions, Duke University, USA

Quality management

Cambridge International is committed to providing exceptional quality. In line with this commitment, our quality management system for the provision of international qualifications and education programmes for students aged 5 to 19 is independently certified as meeting the internationally recognised standard, ISO 9001:2015. Learn more at **www.cambridgeinternational.org/ISO9001**

Contents

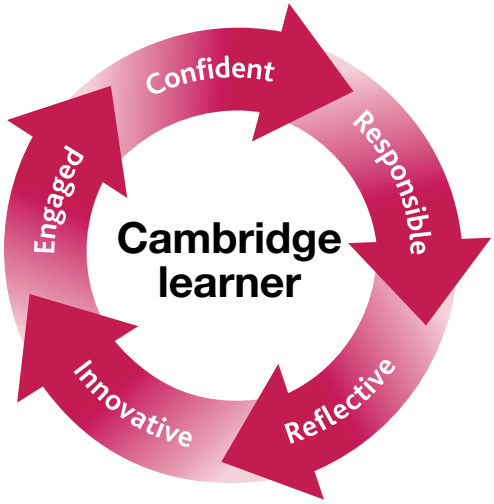
Important: Changes to this syllabus

For information about changes to this syllabus for 2024, 2025 and 2026, go to page 60.

1 Why choose this syllabus?

Key benefits

The best motivation for a student is a real passion for the subject they're learning. By offering students a variety of Cambridge International AS & A Levels, you can give them the greatest chance of finding the path of education they most want to follow. With over 50 subjects to choose from, students can select the ones they love and that they're best at, which helps motivate them throughout their studies.



Following a Cambridge International AS & A Level programme helps students develop abilities which universities value highly, including:

- a deep understanding of their subjects
- higher order thinking skills – analysis, critical thinking, problem solving
- presenting ordered and coherent arguments
- independent learning and research.

Cambridge International AS & A Level Psychology encourages learners to think like a psychologist. The syllabus provides opportunities to explore key concepts and debates that underpin the subject of psychology and to develop the skills of interpretation, application, analysis and evaluation while studying a range of stimulating topics and real-world issues.

Our approach in Cambridge International AS & A Level Psychology encourages learners to be:

confident, communicating psychological ideas and arguments to others, and exploring contemporary social issues with maturity and insight

responsible, considering the ethical and moral implications of what they learn and being able to apply it responsibly

reflective, about one's own and others' behaviour and mental processes

innovative, developing informed views about real-world issues, and an ability to think psychologically to understand problems and respond to different situations

engaged, debating issues and using research findings to understand the world around them.

School feedback: 'Cambridge students develop a deep understanding of subjects and independent thinking skills.'

Feedback from: Principal, Rockledge High School, USA

Key concepts

Key concepts are essential ideas that help students develop a deep understanding of their subject and make links between different aspects. Key concepts may open up new ways of thinking about, understanding or interpreting the important things to be learned.

Good teaching and learning will incorporate and reinforce a subject's key concepts to help students gain:

- a greater depth as well as breadth of subject knowledge
- confidence, especially in applying knowledge and skills in new situations
- the vocabulary to discuss their subject conceptually and show how different aspects link together
- a level of mastery of their subject to help them enter higher education.

The key concepts identified below, carefully introduced and developed, will help to underpin the course you will teach. You may identify additional key concepts which will also enrich teaching and learning.

The key concepts for Cambridge International AS & A Level Psychology are:

- **Nature versus nurture**
  A key focus of contemporary psychology is to consider the relative contributions of nature versus nurture. Behaviours could be seen as resulting from innate, genetic factors (nature) or behaviours could be explained in terms of the environmental influences that begin to shape us from conception (nurture). Students should be aware of this debate while planning studies and evaluating studies as part of this course.
- **Ethics**
  Ethics must be considered when planning a psychological investigation to ensure that data is gathered without compromising the wellbeing of the participant(s). The approach to ethics in psychological research has changed over time as our understanding has developed and attitudes towards ethical and moral implications change. As a result, some of the earlier studies that were the basis of the subject no longer meet the current guidelines. We should continually evaluate the ethical and moral implications of psychological research.
- **Research methods**
  Every research method has strengths and weaknesses, and a psychologist must evaluate how the method they have chosen contributes to the validity and reliability of their specific investigation as well as to wider psychological research.
- **No one view in psychology is definitive**
  Psychological research is influenced by the approach of the researcher and the time and context they are working in. Any topic is likely to be studied from the perspective of more than one psychological approach, and each approach has its own assumptions.
- **Relevance of psychology in contemporary society**
  By understanding psychology, we can improve how we live our lives and society in general. Every study is undertaken with a specific purpose in mind which can then be applied in everyday life – whether it is improving how we learn, understanding how groups of people behave or treating a disorder. Students should be able to recognise how psychological studies of a specific area can be applied to other scenarios in everyday life.

International recognition and acceptance

Our expertise in curriculum, teaching and learning, and assessment is the basis for the recognition of our programmes and qualifications around the world. Every year thousands of students with Cambridge International AS & A Levels gain places at leading universities worldwide. Our programmes and qualifications are valued by top universities around the world including those in the UK, US (including Ivy League universities), Europe, Australia, Canada and New Zealand.

UK NARIC, the national agency in the UK for the recognition and comparison of international qualifications and skills, has carried out an independent benchmarking study of Cambridge International AS & A Level and found it to be comparable to the standard of AS & A Level in the UK. This means students can be confident that their Cambridge International AS & A Level qualifications are accepted as equivalent, grade for grade, to UK AS & A Levels by leading universities worldwide.

Cambridge International AS Level Psychology makes up the first half of the Cambridge International A Level course in psychology and provides a foundation for the study of psychology at Cambridge International A Level. The AS Level can also be delivered as a standalone qualification. Depending on local university entrance requirements, students may be able to use it to progress directly to university courses in psychology or some other subjects. It is also suitable as part of a course of general education.

Cambridge International A Level Psychology provides a foundation for the study of psychology or related courses in higher education. Equally it is suitable as part of a course of general education.

For more information about the relationship between the Cambridge International AS Level and Cambridge International A Level see the 'Assessment overview' section of the Syllabus overview.

We recommend learners check the Cambridge recognition database and university websites to find the most up-to-date entry requirements for courses they wish to study.

Learn more at **www.cambridgeinternational.org/recognition**

School feedback: 'The depth of knowledge displayed by the best A Level students makes them prime targets for America's Ivy League universities.'

Feedback from: Yale University, USA

Supporting teachers

We provide a wide range of resources, detailed guidance and innovative training and professional development so that you can give your students the best possible preparation for Cambridge International AS & A Level. To find out which resources are available for each syllabus go to **www.cambridgeinternational.org/support**

The School Support Hub is our secure online site for Cambridge teachers where you can find the resources you need to deliver our programmes. You can also keep up to date with your subject and the global Cambridge community through our online discussion forums.

Find out more at **www.cambridgeinternational.org/support**

Support for Cambridge International AS & A Level			
Planning and preparation • Next steps guides. • Schemes of work. • Specimen papers. • Syllabuses. • Teacher guides.	**Teaching and assessment** • Endorsed resources. • Online forums. • Support for coursework and speaking tests.	**Learning and revision** • Example candidate responses. • Past papers and mark schemes. • Specimen paper answers.	**Results** • Candidate Results Service. • Principal examiner reports for teachers. • Results Analysis.

Sign up for email notifications about changes to syllabuses, including new and revised products and services at **www.cambridgeinternational.org/syllabusupdates**

Professional development

We support teachers through:

- Introductory Training – face-to-face or online
- Extension Training – face-to-face or online
- Enrichment Professional Development – face-to-face or online

Find out more at **www.cambridgeinternational.org/events**

- Cambridge Professional Development Qualifications

Find out more at **www.cambridgeinternational.org/profdev**

Supporting exams officers

We provide comprehensive support and guidance for all Cambridge exams officers.
Find out more at: **www.cambridgeinternational.org/eoguide**

2 Syllabus overview

Aims

The aims describe the purposes of a course based on this syllabus.

The aims are to enable students to develop:

- knowledge and understanding of psychological concepts, theories and research findings
- an understanding of psychological approaches, issues and debates and research methodology
- an awareness of the scientific method and range and limitations of psychological theory and practice
- improved skills in data analysis, evaluation and drawing conclusions
- an awareness of the relationships between psychological findings and everyday life
- an understanding of ethical issues in psychology
- an appreciation and understanding of individual, social and cultural diversity.

Cambridge Assessment International Education is an education organisation and politically neutral. The contents of this syllabus, examination papers and associated materials do not endorse any political view. We endeavour to treat all aspects of the exam process neutrally.

Content overview

Cambridge International AS & A Level Psychology provides candidates with opportunities to consider the approaches, issues and debates and research methodology that underpin all aspects of psychology.

At AS Level candidates study four psychological approaches:

- Biological
- Cognitive
- Learning
- Social

Each approach is exemplified though **12 core studies**. The core studies illustrate a wide range of research methods used in psychology, such as experiments, self-reports, case studies, observations, correlations and longitudinal studies. By exploring the relationship between the content of the study and the research methods, candidates will gain a broad understanding of how psychologists study experiences and behaviours and why the research took place.

Candidates for Cambridge International A Level Psychology study the AS Level content and **two** of the following specialist options:

1 **Clinical Psychology**
This option considers the diagnostic criteria, symptoms, explanations and treatments for a variety of mental and behavioural disorders/conditions.

2 **Consumer Psychology**
This option reflects consumer society and looks at both consumers and sellers as well as the design of consumer environments.

3 **Health Psychology**
This option focuses on the psychological factors that influence health, considers ways to measure and treat conditions such as pain and stress, and ways to influence behaviours around health and health choices.

4 **Organisational Psychology**
This option considers workplaces and organisations and how individuals and groups within an organisation function, influence each other and have an impact on the organisation.

These A Level options are diverse but each specialist option is balanced and equivalent in terms of content and demand. A number of **key studies** are specified for each specialist option, along with some additional studies which may be useful as examples of research in each area.

School feedback: 'Cambridge International AS & A Levels prepare students well for university because they've learnt to go into a subject in considerable depth. There's that ability to really understand the depth and richness and the detail of a subject. It's a wonderful preparation for what they are going to face at university.'

Feedback from: US Higher Education Advisory Council

Assessment overview

AS Level candidates take two compulsory papers, Papers 1 and 2. A Level candidates take four compulsory papers, Papers 1, 2, 3 and 4.

All AS Level candidates take:

Paper 1

Approaches, Issues and Debates 1 hour 30 minutes

60 marks

Section A: Short answer questions based on core studies (38 marks).

Section B: Extended response and essay questions, based on core studies (22 marks).

Externally assessed

50% of the AS Level

25% of the A Level

And:

Paper 2

Research Methods 1 hour 30 minutes

60 marks

Section A: Short answer questions and scenario-based questions (46 marks).

Section B: A planning question divided into several parts (14 marks).

Externally assessed

50% of the AS Level

25% of the A Level

A Level candidates also take:

Paper 3

Specialist Options: Approaches, Issues and Debates 1 hour 30 minutes

60 marks

Candidates answer questions from two specialist options. Each specialist option is out of 30 marks.

Externally assessed

25% of the A Level

And:

Paper 4

Specialist Options: Application and Research Methods 1 hour 30 minutes

60 marks

Section A: Candidates answer questions from two specialist options. Each specialist option is out of 18 marks.

Section B: A planning question divided into several parts (24 marks).

Externally assessed

25% of the A Level

Information on availability is in the **Before you start** section.

There are three routes for Cambridge International AS & A Level Psychology:

	Route	Paper 1	Paper 2	Paper 3	Paper 4
1	**AS Level only** (Candidates take all AS components in the same exam series)	yes	yes	no	no
2	**A Level** (staged over two years) Year 1 AS Level*	yes	yes	no	no
	Year 2 Complete the A Level	no	no	yes	yes
3	**A Level** (Candidates take all components in the same exam series)	yes	yes	yes	yes

* Candidates carry forward their AS Level result subject to the rules and time limits described in the *Cambridge Handbook*. See **Making entries** for more information on carry forward of results.

Candidates following an AS Level route are eligible for grades a–e. Candidates following an A Level route are eligible for grades A*–E.

Assessment objectives

The assessment objectives (AOs) are:

AO1 Knowledge and understanding

Demonstrating knowledge and understanding of:

- psychological terminology, concepts, theories, studies, evidence and methodology including research methods, issues and debates
- the theoretical, ethical and practical considerations that influence the planning and conduct of psychological research
- psychological techniques used by psychologists in everyday life.

AO2 Application

Using knowledge and understanding of psychology, as listed above, so that it can be applied to a range of scenarios.

Scenarios could be familiar or unfamiliar and may be taken from a range of everyday life or theoretical contexts.

This includes:

- explaining how psychology is applicable to a particular scenario, context or issue
- using and applying information in words or using other forms of presentation
- using relevant psychology to support points or develop arguments
- demonstrating awareness of the links between psychology used to support points or develop arguments
- using knowledge and understanding to plan an investigation.

AO3 Analysis and evaluation

Analysing and evaluating psychological concepts, theories, studies, evidence and methodology in terms of issues and debates.

This includes:

- recognising bias in psychological data, research and studies
- explaining the strengths and weaknesses of psychological concepts, theories, studies and methodology and of candidates' plans for investigations
- being able to use a range and/or variety of evidence to demonstrate the complexity of psychological issues and debates
- reaching conclusions about arguments based on a reasoned consideration of available evidence.

Weighting for assessment objectives

The approximate weightings allocated to each of the assessment objectives (AOs) are summarised below.

Assessment objectives as a percentage of each qualification

Assessment objective	Weighting in AS Level %	Weighting in A Level %
AO1 Knowledge and understanding	35	30
AO2 Application	35	35
AO3 Analysis and evaluation	30	35
Total	100	100

Assessment objectives as a percentage of each component

Assessment objective	Weighting in components %			
	Paper 1	Paper 2	Paper 3	Paper 4
AO1 Knowledge and understanding	53	22	26	26
AO2 Application	17	50	26	44
AO3 Analysis and evaluation	30	28	48	30
Total	100	100	100	100

3 Subject content

This syllabus gives you the flexibility to design a course that will interest, challenge and engage your learners. Where appropriate you are responsible for selecting topics, subject contexts, resources and examples to support your learners' study. These should be appropriate for the learners' age, cultural background and learning context as well as complying with your school policies and local legal requirements.

Candidates for Cambridge International AS Level should study the AS Level content for Papers 1 and 2. Candidates for Cambridge International A Level should study the AS Level content and **two** of the specialist options in the A Level subject content for Papers 3 and 4.

3.1 AS Level Content

The AS Level course consists of approaches, issues and debates and research methodology that underpin the study of psychology.

These fundamental aspects of psychology are taught and assessed through 12 compulsory core studies and the approaches, issues and debates and research methodology should be considered for each study as relevant.

The AS Level core studies have been chosen to give learners a broad range of topic areas as well as knowledge of research methodology. The research methodology is described on pages 20–23.

Each of the approaches is supported by three core studies presented below in alphabetical order. This is **not** a recommended teaching order, they can be taught in any order. Some core studies could be considered in the context of a number of approaches.

Biological

- Dement and Kleitman (sleep and dreams)
- Hassett et al. (monkey toy preferences)
- Hölzel et al. (mindfulness and brain scans)

Cognitive

- Andrade (doodling)
- Baron-Cohen et al. (eyes test)
- Pozzulo et al. (line-ups)

Learning

- Bandura et al. (aggression)
- Fagen et al. (elephant learning)
- Saavedra and Silverman (button phobia)

Social

- Milgram (obedience)
- Perry et al. (personal space)
- Piliavin et al. (subway Samaritans)

AS Level issues and debates

At AS Level, the issues and debates that candidates will need to consider in relation to each of the core studies, where appropriate, are:

- the application of psychology to everyday life
- individual and situational explanations
- nature versus nurture
- the use of children in psychological research
- the use of animals in psychological research.

3.1.1 The core studies

The 12 compulsory core studies are listed below under the four approaches.

The requirements are the same for each of the four approaches at AS Level.

For each of the core studies, candidates should show understanding of:

- the **psychology** that is being investigated
- the **background** to the study
- the **aim(s)** of the study
- the **procedure** of the study, including all methodology as appropriate, such as the research methods used, sample size and demographics [if known] and sampling technique [if known], experimental design, controls, question types, research technique for data collection and measured and manipulated variables
- the **ethical issues** relating to the study
- the **results** of the study, including the main/significant quantitative findings, the main qualitative findings and how they are or could be represented and interpreted
- the **conclusion(s)** the psychologist(s) drew or that could be drawn from the study
- the **strengths and weaknesses** of all elements of the study.

Candidates should be able to:

- describe and evaluate the **methodology** used
- consider how the study relates to **psychological issues and debates**.

Biological approach

Main assumptions of the biological approach:

- Behaviour, cognitions and emotions can be explained in terms of the working of the brain and the effect of hormones, genetics and evolution.
- Similarities and differences between people can be understood in terms of biological factors and their interaction with other factors.

Dement and Kleitman (sleep and dreams)

Dement, W and Kleitman, N (1957), The relation of eye movements during sleep to dream activity: An objective method for the study of dreaming. *Journal of Experimental Psychology*, 53(5): 339–46

The study by Dement and Kleitman investigated the relationship between rapid eye movements (REM) and dreaming. It included EEGs, REM and Non-REM sleep, used experimental and correlational methods and an interview technique.

The psychology being investigated includes: sleep; dreaming; ultradian rhythms.

Hassett et al. (monkey toy preferences)

Hassett, J M, Siebert, E R and Wallen, K (2008), Sex differences in rhesus monkey toy preferences parallel those of children. *Hormones and Behaviour*, 54(3): 359–64

The study by Hassett et al. was an experiment investigating sex differences for toy preferences in monkeys, whose behaviour is assumed to be more biologically controlled than that of children. Interactions with stereotypical boys' toys and girls' toys were observed and coded using a behavioural checklist. Human participants were not included in this study. To compare monkey toy preferences to those of children, data from another study was used.

The psychology being investigated includes: sex differences; socialisation; play; the role of hormones.

Hölzel et al. (mindfulness and brain scans)

Hölzel, B K, Carmody, J, Vangel, M, Congleton, C, Yerramsetti, S M, Gard, T and Lazar, S W (2011), Mindfulness practice leads to increases in regional brain gray matter density. *Psychiatry Research*, 191(1): 36–43

The study by Hölzel et al. investigated the effects of mindfulness practice on brain structure in an experiment using a longitudinal design. The techniques used included MRI scans and self-reports. The study also used correlations.

The psychology being investigated includes: mindfulness; localisation of function.

Cognitive approach

Main assumptions of the cognitive approach:

- Information is processed through the same route in all humans: input – process – output, in a similar way to how information is processed by a computer.
- People have individual differences in their cognitive processing such as with attention, language, thinking and memory. These processes can also help to explain behaviour and emotion.

Andrade (doodling)

Andrade, J (2010), What does doodling do? *Applied Cognitive Psychology*, 24(1): 100–6

The study by Andrade explored the idea that doodling can assist a person's concentration and memory. This was investigated in a laboratory experiment.

The psychology being investigated includes: attention; memory.

Baron-Cohen et al. (eyes test)

Baron-Cohen, S, Wheelwright, S, Hill, J, Raste, Y and Plumb, I (2001), The 'Reading the Mind in the Eyes' Test revised version: a study with normal adults, and adults with Asperger syndrome or high-functioning autism. *Journal of Child Psychology and Psychiatry*, 42(2): 241–51

The study by Baron-Cohen et al. investigated theory of mind in adults including those with Asperger syndrome or autism. The study aimed to improve the original 1997 'Reading the Mind in the Eyes' Test, a questionnaire that was completed online. The research methods used in this study included experiments and correlations.

The psychology being investigated includes: theory of mind; social sensitivity.

Pozzulo et al. (line-ups)

Pozzulo, J D, Dempsey, J, Bruer, K and Sheahan, C (2011), The Culprit in Target-Absent Lineups: Understanding Young Children's False Positive Responding. *Journal of Police and Criminal Psychology*, 27(1): 55–62

The study by Pozzulo et al. investigated factors affecting memory for target faces in a line-up, as used in identification of a criminal by an eyewitness. This was tested using the faces of cartoon characters and humans. The laboratory experiment also made comparisons between adults and children and used interviews and questionnaires as techniques.

The psychology being investigated includes: false positive responses; eyewitness testimony.

Learning approach

Main assumptions of the learning approach:

- We all begin life as a blank slate. Experiences and interactions with the environment shape our behaviour and these changes are directly observable.
- We learn through the processes of operant conditioning, classical conditioning and social learning. This can be understood using the stimulus-response model.

Bandura et al. (aggression)

Bandura, A, Ross, D and Ross, S A (1961), Transmission of aggression through imitation of aggressive models. *Journal of Abnormal and Social Psychology*, 63(3): 575–82

The study by Bandura et al. tested social learning theory. The study investigated whether a child would imitate aggressive behaviour if they witnessed such behaviour in an adult. The study was an experiment comparing several variables using observation as a technique to collect data.

The psychology being investigated includes: social learning theory; aggression.

Fagen et al. (elephant learning)

Fagen, A, Acharya, N and Kaufman, G E (2014), Positive Reinforcement Training for a Trunk Wash in Nepal's Working Elephants: Demonstrating Alternatives to Traditional Elephant Training Techniques. *Journal of Applied Animal Welfare Science*, 17(2): 83–97

The study by Fagen et al. investigated the use of positive reinforcement training for trunk washing in a group of working elephants to improve captive management and welfare. Secondary reinforcement training was used to train the elephants to perform specific behaviours. The research method was an observation with success measured using a behavioural checklist.

The psychology being investigated includes: operant conditioning; reinforcement (positive, negative, primary and secondary); shaping; behavioural chaining.

Saavedra and Silverman (button phobia)

Saavedra, L M and Silverman, W K (2002), Case study: disgust and a specific phobia of buttons. *Journal of the American Academy of Child and Adolescent Psychiatry*, 41(11): 1376–79

Saavedra and Silverman studied a child with button phobia. They investigated how classical conditioning can be used to treat a child's phobia by targeting disgust and fear responses. The case study research method was used with interviews, various scales and observations as techniques.

The psychology being investigated includes: evaluative learning; operant conditioning; classical conditioning; phobias.

Social approach

Main assumptions of the social approach:

- Behaviour, cognitions and emotions are influenced by social contexts, social environments and groups.
- Behaviour, cognitions and emotions are influenced by the actual, implied or imagined presence of others.

Milgram (obedience)

Milgram, S (1963), Behavioral Study of Obedience. *Journal of Abnormal and Social Psychology*, 67(4): 371–78

The study by Milgram investigated the conflict between obedience to authority and personal conscience and how far a person would go in obeying an instruction if it meant harming another person. This includes considering dispositional and situational hypotheses. A laboratory setting was used to measure obedience, described as a 'dependent variable' but there was no independent variable in the main study. The study used observations and an interview as techniques.

Please Note: Milgram conducted many variations on this study. This study did not provide the 'teacher' with voice-feedback from the 'victim'.

The psychology being investigated includes: obedience; social pressure.

Perry et al. (personal space)

Perry, A, Mankuta, D and Shamay-Tsoory, S G (2015), OT promotes closer interpersonal distance among highly empathic individuals. *Social, Cognitive and Affective Neuroscience*, 10(1): 3–9

The study by Perry et al. investigated personal space (interpersonal distance). They tested how empathy and oxytocin affected the perception of personal space using a placebo to compare to oxytocin. Two experiments used different techniques to measure interpersonal distance and questionnaires were also used. Experiment 1 used a computerised version of the Comfortable Interpersonal Distance Scale. In Experiment 2, participants chose between pictures of different rooms.

The psychology being investigated includes: interpersonal distance (personal space); social hormones; empathy.

Piliavin et al. (subway Samaritans)

Piliavin, I M, Rodin, J and Piliavin, J A (1969), Good Samaritanism: An Underground Phenomenon? *Journal of Personality and Social Psychology*, 13(4): 289–99

The study by Piliavin et al. tested bystander apathy. The study investigated how bystanders behave in real life situations and the factors that can affect their desire to help. This includes considering diffusion of responsibility. The study was a field experiment and used observations as a technique.

The psychology being investigated includes: bystander apathy; diffusion of responsibility.

3.1.2 Research methodology

Candidates need to understand research methodology used by psychologists to investigate human and animal behaviour.

See section 4 Details of Assessment for more information on what candidates should be able to do with the subject content in this section for the planning studies questions in Paper 2 on page 50.

Research methods

Experiments

Candidates should be able to:

- describe the main features of each type of experiment:
  - laboratory
  - field
- evaluate each type of experiment, in terms of:
  - reliability
  - validity
  - ethics
- describe and evaluate experimental designs as used in psychological research (independent measures, matched pairs and repeated measures)
- describe and evaluate concepts relating to experimental designs including counterbalancing, random allocation, order effects (fatigue and practice)
- evaluate the use of experiments in psychological research, including the use of experimental and control groups/control conditions
- apply knowledge of experiments to a given novel research scenario.

Self-reports

Candidates should be able to:

- describe the main features of each type of self-report:
  - questionnaire, including technique (paper and pencil/online) and question format (open and closed questions)
  - interview, including format (structured/unstructured/semi-structured), technique (telephone/face-to-face) and question format (open and closed questions)
- evaluate the use of self-reports in psychological research
- apply knowledge of self-reports to a given novel research scenario.

Case studies

Candidates should be able to:

- describe the case study method, including the main features: a single participant/unit; studied in detail
- evaluate the use of case studies in psychological research
- apply knowledge of case studies to a given novel research scenario.

Observations

Candidates should be able to:

- describe the main features of an observation (e.g. overt/covert, participant/non-participant, structured/unstructured, naturalistic/controlled)
- evaluate the use of observations in psychological research
- apply knowledge of observations to a given novel research scenario.

Correlations

Candidates should be able to:

- describe correlations, positive and negative correlations and strength of correlations
- identify and give operational definitions for co-variables (measured variables)
- evaluate the use of correlations in psychological research, including lack of causality
- apply knowledge of correlations to a given novel research scenario.

Longitudinal studies

Candidates should be able to:

- describe longitudinal studies, including experiments with longitudinal designs
- evaluate the use of longitudinal studies, including experiments with longitudinal designs
- apply knowledge of longitudinal studies, including experiments with longitudinal designs, to a given novel research scenario.

Methodological concepts

Aims and hypotheses

Candidates should be able to:

- describe and write aims
- describe and recognise null hypotheses and alternative hypotheses including directional (one-tailed) and non-directional (two-tailed) hypotheses.

Variables

Candidates should be able to:

- describe what is meant by an independent variable and a dependent variable
- describe how dependent variables can be measured
- identify independent variables and dependent variables in studies
- understand what is meant by an 'operational definition'
- operationalise:
  - an independent variable
  - a dependent variable
- apply knowledge of variables to a novel research situation.

Controlling of variables

Candidates should be able to:

- describe how psychologists can control variables (use 'controls') in a study
- understand control of variables/standardisation of a procedure
- understand uncontrolled, participant and situational variables
- apply knowledge of control of variables ('controls') to a novel research situation.

Types of data

Candidates should be able to:

- describe what is meant by quantitative and qualitative data and subjective and objective data
- evaluate the use of types of data as collected in psychological research
- apply knowledge of types of data to a novel research situation.

Sampling of participants

Candidates should be able to:

- describe what is meant by the sample and population, and the sampling techniques of opportunity sampling, random sampling and volunteer (self-selecting) sampling
- evaluate different sampling techniques as used in psychological research, including generalisations
- apply knowledge of sampling techniques to a novel research situation.

Ethics

Candidates should be able to:

- describe ethical guidelines as used in psychological research, in relation to human participants:
  - minimising harm (and maximising benefit)
  - valid consent including informed consent
  - right to withdraw
  - lack of deception
  - confidentiality
  - privacy
  - debriefing
- describe ethical guidelines as used in psychological research, in relation to animals:
  - minimising harm (and maximising benefit)
  - replacement
  - species
  - numbers
  - procedures
    - pain, suffering and distress
    - housing
    - reward, deprivation and aversive stimuli
- evaluate studies based on ethical guidelines
- apply knowledge of ethical guidelines to a novel research situation.

Validity

Candidates should be able to:

- describe validity, including ecological validity
- evaluate studies based on their validity:
  - subjectivity / objectivity
  - demand characteristics
  - generalisability
- apply knowledge of validity to a novel research situation.

Reliability and replicability

Candidates should be able to:

- describe different types of reliability, including inter-rater and inter-observer reliability, test-retest reliability
- evaluate studies based on their reliability
- apply knowledge of reliability to a given novel research situation
- understand replicability
- apply understanding of replicability to the planning of studies.

Data analysis

Candidates should be able to:

- present and interpret data in tables
- understand the meaning of 'measure of central tendency'
- name, recognise and know how to find measures of central tendency:
  - mode
  - median (no calculation necessary)
  - mean (no calculation necessary)
- understand the meaning of 'measure of spread'
  - name, recognise and know how to find range
  - recognise, interpret and understand standard deviation
- name, recognise, draw, change and interpret data from a:
  - bar chart
  - histogram
  - scatter graph.

Note: Candidates will **not** be required to carry out calculations.

Note: Candidates will **not** be required to understand or interpret statistical tests or findings other than as specified.

3.2 A Level Content

The content of the AS Level course, including research methodology, is assumed knowledge for the assessment of Paper 3 and Paper 4. The core studies will not be the direct focus of questions on Paper 3 and Paper 4 but candidates will be expected to build upon their knowledge of approaches, issues and debates and psychological research methodology during their study of the A Level specialist options. The specialist options introduced at A Level explore how psychology can be applied in a range of contexts.

Candidates study how psychology is applied in **two** of the following areas:

- Clinical Psychology
- Consumer Psychology
- Health Psychology
- Organisational Psychology

A Level issues and debates

At A Level, the issues and debates that candidates will need to consider in relation to each of the specialist options, as appropriate, are:

- the application of psychology to everyday life
- individual and situational explanations
- nature versus nurture
- the use of children in psychological research
- cultural differences
- reductionism versus holism
- determinism versus free-will
- idiographic versus nomothetic.

Research methods and methodological concepts

At A Level we assume knowledge of the research methodology studied at AS Level. Candidates are expected to apply their knowledge of AS Level research methodology to the A Level content. In addition we introduce some new research methods and methodological concepts relevant to A Level studies.

See section 4 Details of Assessment for more information on what candidates should be able to do with the AS and A Level Research Methodology subject content for the planning studies questions in Paper 4 on page 52.

Research methods which are relevant to **some** of the A Level studies.

Experiments

Candidates should be able to:

- describe and evaluate the main features of randomised control trials.

Questionnaires

Candidates should be able to:

- describe and evaluate the use of postal questionnaires
- describe and evaluate the use of rating scales; forced/fixed choice.

Methodological concepts which are relevant to **all** of the A Level specialist options.

Psychometric tests

Candidates should be able to:

- describe and evaluate psychometric tests.

Hypotheses

Candidates should be able to:

- write and apply knowledge of null hypotheses and alternative directional (one-tailed) and non-directional (two-tailed) hypotheses.

Validity

Candidates should be able to:

- describe and evaluate studies based on their validity, including temporal validity.

Use of studies

Psychology is an applied subject and teachers are encouraged to illustrate the theory and application of the concepts, theories, evidence and research through the use of studies where appropriate.

There are **key studies** associated with each topic. We have listed the specific aspects of key studies that a candidate will be expected to know and understand. These aspects are listed at the start of each specialist option. It is not necessary for candidates to read the original study but you must provide them with a detailed summary of the key study which must cover all the aspects listed.

To aid teaching and ensure candidates can see how psychological research relates to the subject content we have provided some examples of studies which might be useful to you in your teaching. Where we say, 'including a study, e.g.', candidates will not be asked questions which require a specific knowledge of these studies, however candidates should use an example in their responses. Where an example is provided, it does not necessarily cover all the relevant content and you may provide a different example if you know of one which sufficiently covers the subject content using appropriate research methodology.

A full reference to all the key studies and example studies can be found in the *Reference List for 9990 AS & A Level Psychology*, available on the website.

Specialist Option 1: Clinical Psychology

Clinical psychology is the study of a range of mental and behavioural disorders/conditions and the potential explanations and available treatments for them. There are many competing explanations and treatments for the conditions/disorders. Candidates will be expected to understand the strengths and weaknesses of these explanations and treatments and compare them with each other. Candidates should have the opportunity to explore the different issues and debates relevant to the psychological theories and concepts and the research methods used to investigate these conditions/disorders.

For all topics and studies, candidates should be able to:

- describe, evaluate and compare the psychological theories, research, approaches, explanations and treatments/therapies
- describe and evaluate **research methods** and **methodological concepts** (for AS and A Level)
- consider how the topic area relates to **psychological issues and debates** (for AS and A Level)
- **apply** the findings of the study and topic area to the real world.

After each topic there is a list of issues and debates and research methodology which are most relevant to the topic. This list is not exhaustive and teachers may use other relevant issues and methodology in their teaching.

At A Level we assume knowledge of the approaches studied at AS Level (biological, cognitive, learning and social) but we introduce the following terms for this option.

- Biological
  - explanations (genetic, biochemical)
  - measures (such as blood pressure)
  - treatments (such as electro-convulsive therapy)
- Psychological
  - explanations (behavioural, cognitive and psychodynamic)
  - therapies (such as systematic desensitisation)

Key Studies

Freeman, D, Slater, M, Bebbington, P E, Garety, P A, Kuipers, E, Fowler, D, Met, A, Read, C, Jordan, J and Vinayagamoorthy, V (2003), Can virtual reality be used to investigate persecutory ideation? *The Journal of Nervous and Mental Disease*, 191(8): 509–14

Oruč, L, Verheyen, G R, Furac, I, Jakovljević, M, Ivezić, S, Raeymaekers, P and Broeckhoven, C V (1997), Association analysis of the 5-HT2C receptor and 5-HT transporter genes in bipolar disorder. *American Journal of Medical Genetics*, 74(5): 504–6

Grant, J E, Kim, S W, Hollander, E and Potenza, M N (2008), Predicting response to opiate antagonists and placebo in the treatment of pathological gambling. *Psychopharmacology*, 200(4): 521–27

Chapman, L K and DeLapp, R C (2013), Nine Session Treatment of a Blood–Injection–Injury Phobia With Manualized Cognitive Behavioral Therapy: An Adult Case Example. *Clinical Case Studies*, 20(10): 299–312

Lovell, K, Cox, D, Haddock, G, Jones, C, Raines, D, Garvey, R, Roberts, C and Hadley, S (2006), Telephone administered cognitive behaviour therapy for treatment of obsessive compulsive disorder: randomised controlled non-inferiority trial. *BMJ: British Medical Journal*, 333(7574): 883

For each of the key studies, candidates should show knowledge and understanding of:

- the **context** of the study and relationship to other studies
- the **main theories/explanations** included in the study
- the **aim(s)** and **hypotheses** of the study [if stated]
- the **design** of the study, including all methodology as appropriate, such as the research method(s) used, sample size and demographics [if known] and sampling technique [if known], procedure, technique for data collection
- the **results**, **findings and conclusions** of the study
- the main discussion points of the study.

For each key study candidates should be able to:

- describe and evaluate research methods used in and methodological concepts included in the study (for AS and A Level)
- describe and evaluate the psychological issues and debates (for AS and A Level) included in the study.

Note: for the purposes of the subject content and assessment material we will use the terms used in ICD-11. We are aware that this set of guidelines is not used universally and will accept alternative terms if used appropriately.

1.1 Schizophrenia

1.1.1 Diagnostic criteria for schizophrenia

- diagnostic criteria (ICD-11) of schizophrenia, including symptoms (positive and negative). A case study of schizophrenia.
- types of delusions focusing on investigating delusions using virtual reality (exemplified by the following key study).

Key study using virtual reality to investigate persecutory ideation: Freeman et al. (2003).

Relevant issues and debates and methodology for this topic include: individual and situational explanations, use of children in research, idiographic versus nomothetic, case studies, generalisations from findings.

1.1.2 Explanations of schizophrenia

- biological explanations:
  - genetic
  - biochemical (the dopamine hypothesis).
- psychological (cognitive) explanation.

Relevant issues and debates and methodology for this topic include: individual and situational explanations, nature versus nurture, reductionism versus holism, determinism versus free-will, idiographic versus nomothetic.

1.1.3 Treatment and management of schizophrenia

- biological treatments:
  - biochemical including typical and atypical antipsychotics
  - electro-convulsive therapy.
- psychological therapy: cognitive-behavioural therapy, including a study, e.g. Sensky et al. (2000).

Relevant issues and debates and methodology for this topic include: idiographic versus nomothetic, experiments, longitudinal studies, generalisations from findings, ethics.

1.2 Mood (affective) disorders: depressive disorder (unipolar) and bipolar disorder

1.2.1 Diagnostic criteria for mood (affective) disorders

- diagnostic criteria (ICD-11) of mood disorders: depressive disorder (unipolar) and bipolar disorders including manic and depressive episodes.
- measure of depression: Beck depression inventory.

Relevant issues and debates and methodology for this topic include: individual and situational explanations, cultural differences, quantitative and qualitative data, psychometrics, validity.

1.2.2 Explanations of mood (affective) disorders: depressive disorder (unipolar)

- biological explanations:
  - biochemical
  - genetic (exemplified by the following key study).

Key study on association analysis of genetics of depressive disorder: Oruč et al. (1997).

- psychological explanations:
  - Beck's cognitive theory of depression
  - learned helplessness/attributional style, including a study, e.g. Seligman et al. (1988).

Relevant issues and debates and methodology for this topic include: nature versus nurture, reductionism versus holism, determinism versus free-will, experiments, reliability.

1.2.3 Treatment and management of mood (affective) disorders

- biological treatments including the use of anti-depressants (tricyclics, MAOIs and SSRIs).
- psychological therapies:
  - Beck's cognitive restructuring
  - Ellis's rational emotive behaviour therapy (REBT).

Relevant issues and debates and methodology for this topic include: application to everyday life, individual and situational explanations, reductionism versus holism, determinism versus free-will, generalisations from findings.

1.3 Impulse control disorders

1.3.1 Diagnostic criteria for impulse control disorders

- diagnostic criteria (ICD-11) of impulse control disorders:
  - kleptomania
  - pyromania
  - gambling disorder.
- measure of impulse control disorders: Kleptomania Symptom Assessment Scale (K-SAS).

Relevant issues and debates and methodology for this topic include: idiographic versus nomothetic, questionnaires, case studies, quantitative and qualitative data, objective and subjective data.

1.3.2 Explanations of impulse control disorders

- biological explanation: dopamine.
- psychological explanations:
  - behavioural: positive reinforcement
  - cognitive: Miller's feeling-state theory.

Relevant issues and debates and methodology for this topic include: application to everyday life, individual and situational explanations, nature versus nurture, reductionism versus holism, determinism versus free-will.

1.3.3 Treatment and management of impulse control disorders

- biological treatments (exemplified by the following key study).

Key study on treating gambling disorder with drugs and placebo: Grant et al. (2008).

- psychological (cognitive-behavioural) therapies including:
  - covert sensitisation, including a study, e.g. Glover (1985)
  - imaginal desensitisation, including a study, e.g. Blaszczynski and Nower (2003).

Relevant issues and debates and methodology for this topic include: application to everyday life, reductionism versus holism, idiographic versus nomothetic, interviews, generalisations from findings.

1.4 Anxiety disorders and fear-related disorders

1.4.1 Diagnostic criteria for anxiety disorders and fear-related disorders

- diagnostic criteria (ICD-11) of anxiety disorders and fear-related disorders:
  - generalised anxiety disorder
  - agoraphobia
  - specific phobia (blood-injection-injury).
- measures of anxiety and fear-related disorders:
  - Generalised Anxiety Disorder assessment (GAD-7).
  - the blood injection phobia inventory (BIPI), including a study, e.g. Mas et al. (2010).

Relevant issues and debates and methodology for this topic include: questionnaires, psychometrics, subjective and objective data, validity, reliability.

1.4.2 Explanations of fear-related disorders

- biological explanation: genetic, including a study, e.g. Öst (1992).
- psychological explanations:
  - behavioural (classical conditioning), including a study, e.g. Watson and Rayner (1920) 'Little Albert'
  - psychodynamic, including a study, e.g. Freud (1909) 'Little Hans'.

Relevant issues and debates and methodology for this topic include: nature versus nurture, determinism versus free-will, case studies, longitudinal studies, validity.

1.4.3 Treatment and management of anxiety disorders and fear-related disorders

- behavioural therapy: systematic desensitisation applied to any fear-related disorder.
- psychological therapy (exemplified by the following key study):
  - cognitive-behavioural therapy (CBT)
  - applied tension focusing on treating blood/injection/injury phobia.

Key study on treating blood/injection/injury phobia using cognitive-behavioural therapy (CBT) with applied tension: Chapman and DeLapp (2013).

Relevant issues and debates and methodology for this topic include: idiographic versus nomothetic, case studies, self-reports, longitudinal studies, generalisations from findings.

1.5 Obsessive-compulsive disorder (OCD)

1.5.1 Diagnostic criteria for obsessive-compulsive disorder

- diagnostic criteria for obsessive-compulsive disorder (ICD-11) focusing on types of obsessions and compulsions, including a study, e.g. Rapoport (1989) 'Charles'.
- measures:
  - Maudsley Obsessive-Compulsive Inventory (MOCI)
  - Yale-Brown Obsessive-Compulsive Scale (Y-BOCS).

Relevant issues and debates and methodology for this topic include: interviews, case studies, quantitative and qualitative data, psychometrics, validity.

1.5.2 Explanations of obsessive-compulsive disorder

- biological explanations:
  - biochemical
  - genetic.
- psychological explanations:
  - cognitive (thinking error)
  - behavioural (operant conditioning)
  - psychodynamic.

Relevant issues and debates and methodology for this topic include: individual and situational explanations, nature versus nurture, reductionism versus holism, determinism versus free-will, idiographic versus nomothetic.

1.5.3 Treatment and management of obsessive-compulsive disorder

- biological treatments including the use of SSRIs.
- psychological therapies including:
  - exposure and response prevention (ERP), including a study, e.g. Lehmkuhl et al. (2008)
  - cognitive-behavioural therapy (CBT) (exemplified by the following key study).

Key study on treatment of obsessive compulsive disorder using telephone administered cognitive-behavioural therapy (CBT): Lovell et al. (2006).

Relevant issues and debates and methodology for this topic include: individual and situational explanations, cultural differences, use of children in research, case studies, reliability.

Specialist Option 2: Consumer Psychology

Consumer Psychology is the study of human behaviour in relation to the retail environment. For this option candidates look at different areas of consumer environments (shops, restaurants and online) and consider how psychology can affect consumer patterns and decision-making. Candidates will also explore the reaction and preferences of consumers to the packaging of products, the marketing of products and the advertising of products. Candidates should have the opportunity to explore the different issues and debates relevant to the psychological theories and concepts and the research methods used to investigate consumer psychology.

For all topics and studies, candidates should be able to:

- describe, evaluate and compare the psychological theories, research, approaches and explanations.
- describe and evaluate **research methods** and **methodological concepts** (for AS and A Level)
- consider how the topic area relates to **psychological issues and debates** (for AS and A Level)
- **apply** the findings of the study and topic area to the real world.

After each topic there is a list of issues and debates and research methodology which are most relevant to the topic. This list is not exhaustive and teachers may use other relevant issues and methodology in their teaching.

Key Studies

North, A C, Shilcock, A and Hargreaves, D J (2003), The Effect of Musical Style on Restaurant Customers' Spending. *Environment and Behavior*, 35(5): 712–18

Robson, S K, Kimes, S E, Becker, F D and Evans, G W (2011), Consumers' Responses to Table Spacing in Restaurants. *Cornell Hospitality Quarterly*, 52(3): 253–64

Hall, L, Johansson, P, Tärning, B, Sikström, S and Deutgen, T (2010), Magic at the marketplace: Choice blindness for the taste of jam and the smell of tea. *Cognition*, 117(1): 54–61

Becker, L, van Rompay, T J, Schifferstein, H N and Galetzka, M (2011), Tough package, strong taste: The influence of packaging design on taste impressions and product evaluations. *Food Quality and Preference*, 22(1): 17–23

Snyder, M and DeBono, K G (1985), Appeals to image and claims about quality: Understanding the psychology of advertising. *Journal of Personality and Social Psychology*, 49(3): 586–97

For each of the key studies, candidates should show knowledge and understanding of:

- the **context** of the study and relationship to other studies
- the **main theories/explanations** included in the study
- the **aim(s)** and **hypotheses** of the study [if stated]
- the **design** of the study, including all methodology as appropriate, such as the research method(s) used, sample size and demographics [if known] and sampling technique [if known], procedure, technique for data collection
- the **results**, **findings and conclusions** of the study
- the main discussion points of the study.

For each key study candidates should be able to:

- describe and evaluate research methods used in and methodological concepts included in the study (for AS and A Level)
- describe and evaluate the psychological issues and debates (for AS and A Level) included in the study.

2.1 The physical environment

2.1.1 Retail store design

- types of store exterior design including storefront, window displays and landscaping, including a study, e.g. Mower et al. (2012).
- types of store interior design including grid, freeform and racetrack layouts; use of virtual store layouts, including a study, e.g. Vrechopoulos et al. (2004).

Relevant issues and debates and methodology for this topic include: cultural differences, questionnaires, quantitative and qualitative data, objective and subjective data, ecological validity.

2.1.2 Sound and consumer behaviour

- music in restaurants focusing on how background music influences the amount spent on food and drink (exemplified by the following Key Study).

Key study on musical style and restaurant customers' spending: North et al. (2003).

- background noise focusing on how sound and noise affect the perception of food taste including reasons why sound influences taste, including a study, e.g. Woods et al. (2011) study 1 or study 2.

Relevant issues and debates and methodology for this topic include: individual and situational explanations, reductionism versus holism, determinism versus free-will, generalisations from findings, validity.

2.1.3 Retail atmospherics

- model of effects of ambience: Mehrabian and Russell's pleasure-arousal-dominance (PAD) model.
- the effects of odour on shopper pleasure-arousal-dominance, including a study, e.g. Chebat and Michon (2003).
- the effects of crowding on shopper pleasure-arousal-dominance, including a study, e.g. Machleit et al. (2000) study 1 or study 2.

Relevant issues and debates and methodology for this topic include: application to everyday life, cultural differences, questionnaires, quantitative and qualitative data, objective and subjective data.

2.2 The psychological environment

2.2.1 Environmental influences on consumers

- wayfinding in shopping malls; factors affecting wayfinding such as signs and you are here maps, including a study, e.g. Dogu and Erkip (2000).
- shopper behaviour focusing on spatial movement patterns including types of trip (short, round, central and wave) and the five types of spatial behaviour patterns (specialist, native, tourist, explorer, raider); the use of CCTV tracking, including a study, e.g. Gil et al. (2009).

Relevant issues and debates and methodology for this topic include: reductionism versus holism, idiographic versus nomothetic, questionnaires, generalisations from findings, reliability.

2.2.2 Menu design psychology

- menu design focusing on the features of menu design which have positive and negative impacts and ways to study this, including the use of eye-tracking, e.g. Pavesic (2005).
- the effect of primacy and recency and menu item position on menu item choice, including a study, e.g. Dayan and Bar-Hillel (2011).
- the effect of food name on menu item choice, including a study, e.g. Lockyer (2006).

Relevant issues and debates and methodology for this topic include: application to everyday life, field experiments, objective and subjective data, generalisations from findings, validity.

2.2.3 Consumer behaviour and personal space

- personal space at restaurant tables including Hall's four zones; functions such as overload, arousal and behaviour constraint (exemplified by the following key study).

Key study on consumers responses to table spacing: Robson et al. (2011).

- defending place in a queue including nature of intrusion, number of intrusions, social structure of a queue, responses of people queuing, including a study, e.g. Milgram et al. (1986).

Relevant issues and debates and methodology for this topic include: individual and situational explanations, cultural differences, observations, quantitative and qualitative data, ethics.

2.3 Consumer decision-making

2.3.1 Consumer decision-making

- models of consumer decision-making focusing on explanations and examples of utility theory, satisficing, prospect theory.
- strategies of consumer decision-making focusing on explanations and examples of compensatory, non-compensatory and partially compensatory strategies including explanations and examples of each.
- decision-making strategies applied to internet shopping focusing on website design, including a study, e.g. Jedetski et al (2002).

Relevant issues and debates and methodology for this topic include: application to everyday life, cultural differences, reductionism versus holism, determinism versus free-will, idiographic versus nomothetic.

2.3.2 Choice heuristics

- heuristics focusing on availability, representativeness, recognition, take-the-best, and anchoring, including explanations and examples of each.
- point of purchase decisions including multiple unit pricing and suggestive selling, including a study, e.g. Wansink et al. (1998).
- applying heuristics to decision-making styles, including a study, e.g. del Campo et al. (2016).

Relevant issues and debates and methodology for this topic include: application to everyday life, individual and situational explanations, experiments, quantitative and qualitative data, objective and subjective data.

2.3.3 Mistakes in decision-making

- thinking fast and thinking slow/system 1 and system 2 including explanations and examples of each, e.g. Shleifer (2012).
- choice blindness, preferences and defending a choice (exemplified by the following key study).

Key study for choice blindness when tasting food items: Hall et al. (2010).

- consumer memory for advertising including how retroactive and proactive interference affect memory, including a study, e.g. Burke and Srull (1988).

Relevant issues and debates and methodology for this topic include: individual and situational explanations, determinism versus free-will, experiments, interviews, reliability.

2.4 The product

2.4.1 Packaging and positioning of a product

- gift-wrapping including beliefs of giver and recipient: why gifts are wrapped, types of wrapping.
- food package design (exemplified by the following key study).

Key study on food package design and taste perceptions: Becker et al. (2011).

- attention and shelf position including planograms, central gaze cascade effect, use of eye-tracking, including a study, e.g. Atalay et al. (2012).

Relevant issues and debates and methodology for this topic include: reductionism versus holism, determinism versus free-will, generalisations from findings, objective and subjective data, validity.

2.4.2 Selling the product

- sales techniques focusing on customer-focused, competitor-focused, product-focused techniques including effect of each on buyer–seller relationship.
- interpersonal influence techniques; focusing on disrupt-then-reframe including the need for cognitive closure and factors affecting the need for cognitive closure, including a study, e.g. Kardes et al. (2007).
- Cialdini's six ways to close a sale.

Relevant issues and debates and methodology for this topic include: application to everyday life, cultural differences, determinism versus free-will, idiographic versus nomothetic, field experiments.

2.4.3 Buying the product

- the Engel Kollat Blackwell model of buyer decision-making.
- deciding where to buy including reasons for store choice and demographics such as age and gender, including a study, e.g. Sinha et al. (2002).
- post-purchase cognitive dissonance including factors that can increase dissonance and ways to reduce dissonance, including a study, e.g. Nordvall (2014).

Relevant issues and debates and methodology for this topic include: cultural differences, reductionism versus holism, idiographic versus nomothetic, objective and subjective data, validity.

2.5 Advertising

2.5.1 Types of advertising and advertising techniques

- the Yale model of communication including five features.
- advertising media including types of advertising media: printed, television, internet and smartphone; use of eye-tracking and EEG, including a study, e.g. Ciceri et al. (2020).
- Lauterborn's 4 Cs marketing mix model.

Relevant issues and debates and methodology for this topic include: application to everyday life, cultural differences, objective and subjective data, generalisations from findings, validity.

2.5.2 Advertising–consumer interaction

- advertising and consumer personality including self-monitoring (exemplified by the following Key Study).

Key study on consumer personality and advertising: Snyder and DeBono (1985), focus on study 3, specifics of methodology for study 1 and study 2 will not be needed.

- how product placement in films affects choice including examples and explanations for choice, such as mere exposure and reminders, including a study, e.g. Auty and Lewis (2004).

Relevant issues and debates and methodology for this topic include: use of children in research, determinism versus free-will, self-reports, quantitative and qualitative data, validity.

2.5.3 Brand awareness and recognition

- brand recognition in children including how children acquire an understanding of advertising via logo recognition, including a study, e.g. Fischer et al. (1991).
- brand awareness, brand image and effective slogans including types and function of slogans; guidelines for creating effective slogans, e.g. Kohli et al. (2007).

Relevant issues and debates and methodology for this topic include: application to everyday life, use of children in research, determinism versus free-will, experiments, interviews.

Specialist Option 3: Health Psychology

Health psychologists look at the factors that influence behaviours in both health and community settings. For this option, candidates will look at psychological factors that influence health, and will also examine the management and assessment of health-related behaviours linked to stress, pain and non-adherence to medical advice. Candidates should have the opportunity to explore the different issues and debates relevant to the psychological theories and concepts and the research methods used to investigate health-related behaviour.

For all topics and studies, candidates should be able to:

- describe, evaluate and compare the psychological theories, research, approaches, explanations and treatments/therapies.
- describe and evaluate **research methods** and **methodological concepts** (for AS and A Level)
- consider how the topic area relates to **psychological issues and debates** (for AS and A Level)
- **apply** the findings of the study and topic area to the real world.

After each topic there is a list of issues and debates and research methodology which are most relevant to the topic. This list is not exhaustive and teachers may use other relevant issues and methodology in their teaching.

Key Studies

Savage, R and Armstrong, D (1990), Effect of a general practitioner's consulting style on patients' satisfaction: a controlled study. *BMJ: British Medical Journal*, 301(6758): 968–70

Yokley, J M and Glenwick, D S (1984), Increasing the immunization of preschool children; an evaluation of applied community interventions. *Journal of Applied Behavior Analysis*, 17(3): 313–25

Brudvik, C, Moutte, S D, Baste, V and Morken, T (2016), A comparison of pain assessment by physicians, parents and children in an outpatient setting. *Emergency Medicine Journal*, 34(3): 138–44

Bridge, L R, Benson, P, Pietroni, P C and Priest, R G (1988), Relaxation and imagery in the treatment of breast cancer. *BMJ: British Medical Journal*, 297: 1169–72

Shoshani, A and Steinmetz, S (2014), Positive Psychology at School: A School-Based Intervention to Promote Adolescents' Mental Health and Well-Being. *Journal of Happiness Studies*, 15(6): 1289–1311

For each of the key studies, candidates should show knowledge and understanding of:

- the **context** of the study and relationship to other studies
- the **main theories/explanations** included in the study
- the **aim(s)** and **hypotheses** of the study [if stated]
- the **design** of the study, including all methodology as appropriate, such as the research method(s) used, sample size and demographics [if known] and sampling technique [if known], procedure, technique for data collection
- the **results**, **findings and conclusions** of the study
- the main discussion points of the study.

For each key study candidates should be able to:

- describe and evaluate research methods used in and methodological concepts included in the study (for AS and A Level)
- describe and evaluate the psychological issues and debates (for AS and A Level) included in the study.

3.1 The patient–practitioner relationship

3.1.1 Practitioner and patient interpersonal skills

- non-verbal communications with a focus on practitioner clothing, including a study, e.g. McKinstry and Wang (1991).
- verbal communications with a focus on understanding medical terminology, including a study, e.g. McKinlay (1975).

Relevant issues and debates and methodology for this topic include: idiographic versus nomothetic, experiments, questionnaires, quantitative data, generalisations from findings.

3.1.2 Patient and practitioner diagnosis and style

- practitioner diagnosis focusing on making a diagnosis (disclosure of information, false positive and false negative diagnosis) and presenting a diagnosis.
- practitioner style: doctor-centred (directed) and patient-centred (sharing) consultation (exemplified by the following key study).

Key study for the effect of practitioner style on patient satisfaction: Savage and Armstrong (1990).

Relevant issues and debates and methodology for this topic include: application to everyday life, individual and situational explanations, cultural differences, determinism versus free-will, validity.

3.1.3 Misusing health services

- delay in seeking treatment:
  - reasons for delay, including a study, e.g. Safer et al. (1979)
  - alternative explanations for delay, e.g. the health belief model
- Munchausen syndrome versus malingering. Diagnostic features of Munchausen (essential and supporting features), including a study, e.g. Aleem and Ajarim (1995).

Relevant issues and debates and methodology for this topic include: reductionism versus holism, idiographic versus nomothetic, interviews, case study, generalisations from findings.

3.2 Adherence to medical advice

3.2.1 Types of non-adherence and reasons why patients do not adhere

- types of non-adherence (failure to follow treatments and failure to attend appointments) and problems caused by non-adherence.
- explanations of why patients do not adhere:
  - rational non-adherence, including a study, e.g. Laba et al. (2012)
  - Health Belief Model.

Relevant issues and debates and methodology for this topic include: application to everyday life, individual and situational explanations, reductionism versus holism, idiographic versus nomothetic, generalisations from findings.

3.2.2 Measuring non-adherence

- subjective measures including clinical interviews and semi-structured interviews, including a study, e.g. Riekert and Drotar (1999).
- objective measures focusing on pill counting and medication dispensers, including a study, e.g. Chung and Naya (2000).
- biological measures including blood and urine samples.

Relevant issues and debates and methodology for this topic include: application to everyday life, idiographic versus nomothetic, quantitative and qualitative data, validity, reliability.

3.2.3 Improving adherence

- improving adherence in children including a study, e.g. Chaney et al. (2004).
- individual behavioural techniques: contracts, prompts, customising treatment.
- community interventions (exemplified by the following key study).

Key study on improving medical adherence using community interventions: Yokley and Glenwick (1984).

Relevant issues and debates and methodology for this topic include: use of children in research, experiments, questionnaires, generalisations from findings, validity.

3.3 Pain

3.3.1 Types and theories of pain

- functions of pain; types of pain: acute and chronic pain. Focus on phantom limb pain and mirror treatment to include a case study, e.g. MacLachlan et al. (2004).
- theories of pain: specificity theory, gate control theory.

Relevant issues and debates and methodology for this topic include: individual and situational explanations, nature versus nurture, reductionism versus holism, determinism versus free-will, case study.

3.3.2 Measuring pain

- subjective measures including clinical interview.
- psychometric measures and visual rating scales:
  - McGill pain questionnaire
  - visual analogue scale (exemplified by the following key study).

Key Study on comparing pain assessments by doctors, parents and children: Brudvik et al. (2016).

- behavioural/observational measures: UAB pain behaviour scale.

Relevant issues and debates and methodology for this topic include: idiographic versus nomothetic, quantitative and qualitative data, interviews, observations, psychometrics, generalisations from findings.

3.3.3 Managing and controlling pain

- biological treatment: biochemical.
- psychological treatments: cognitive strategies (attention diversion, non-pain imagery and cognitive redefinition).
- alternative treatments: acupuncture; stimulation therapy/TENS.

Relevant issues and debates and methodology for this topic include: application to everyday life, cultural differences, reductionism versus holism, determinism versus free-will, idiographic versus nomothetic, objective and subjective data.

3.4 Stress

3.4.1 Sources of stress

- physiology of stress: the GAS Model and effects of stress on health.
- causes of stress: Holmes and Rahe's life events, work including a study, e.g. Chandola et al. (2008) and Friedman and Rosenman's Type A personality.

Relevant issues and debates and methodology for this topic include: individual and situational explanations, reductionism versus holism, determinism versus free-will, idiographic versus nomothetic, generalisations from findings.

3.4.2 Measures of stress

- biological measures:
  - recording devices for heart rate and brain function (fMRI), including a study, e.g. Wang et al. (2005)
  - sample tests for salivary cortisol, including a study, e.g. Evans and Wener (2007).
- psychological measures: self-report questionnaires, including tests of Friedman and Rosenman's Type A personality and Holmes and Rahe's life events questionnaire.

Relevant issues and debates and methodology for this topic include: questionnaires, psychometrics, subjective and objective data, validity, reliability.

3.4.3 Managing stress

- psychological therapy: biofeedback, including a study, e.g. Budzynski et al. (1969).
- use of imagery to reduce stress (exemplified by the following key study).

Key study on relaxation and imagery in reducing stress during medical treatment: Bridge et al. (1988).

- preventing stress: three phases of stress inoculation training.

Relevant issues and debates and methodology for this topic include: application to everyday life, individual and situational explanations, determinism versus free-will, generalisations from findings, ethics.

3.5 Health promotion

3.5.1 Strategies for promoting health

- fear arousal: use of fear to improve health, including a study, e.g. Janis and Feshbach (1953).
- providing information: giving information so people know how to improve their health, including a study, e.g. Lewin et al. (1992).

Relevant issues and debates and methodology for this topic include: individual and situational explanations, cultural differences, longitudinal studies, objective and subjective data, ethics.

3.5.2 Health promotion in schools and worksites

- schools with a focus on healthy eating, including a study, e.g. Tapper et al. (2003).
- worksites with a focus on health and safety, including a study, e.g. Fox et al. (1987).

Relevant issues and debates and methodology for this topic include: use of children in research, experiments, longitudinal studies, quantitative and qualitative data, generalisations from findings.

3.5.3 Individual factors in changing health beliefs

- unrealistic optimism: reason for disregarding positive health advice, including a study, e.g. Weinstein (1980).
- positive psychology: defining positive psychology. Three focuses: pleasant life, good life, meaningful life, including a study, e.g. Seligman (2004).
- application of positive psychology (exemplified by the following key study).

Key study on using positive psychology in schools to improve mental health: Shoshani and Steinmetz (2014).

Relevant issues and debates and methodology for this topic include: individual and situational explanations, cultural differences, idiographic versus nomothetic, psychometrics, generalisations from findings.

Specialist Option 4: Organisational Psychology

Organisational psychology is the study of behaviours within the workplace. Candidates will need to consider how social, physical and psychological environments affect individual and group behaviour in the workplace. For this option, candidates will look at aspects of job role, satisfaction, motivation, safety and leadership. Candidates should have the opportunity to explore the different issues and debates relevant to the psychological theories and concepts and the research methods used to investigate people working in organisations and workplaces.

For all topics and studies, candidates should be able to:

- describe, evaluate and compare the psychological theories, research, approaches, and explanations.
- describe and evaluate **research methods** and **methodological concepts** (for AS and A Level)
- consider how the topic area relates to **psychological issues and debates** (for AS and A Level)
- **apply** the findings of the study and topic area to the real world.

After each topic there is a list of issues and debates and research methodology which are most relevant to the topic. This list is not exhaustive and teachers may use other relevant issues and methodology in their teaching.

Key Studies

Landry, A T, Zhang, Y, Papachristopoulos, K and Forest, J (2019), Applying Self-Determination Theory to understand the motivational impact of cash rewards: New evidence from lab experiments. *International Journal of Psychology*, 55(2): 487–98

Cuadrado, I, Morales, J F and Recio, P (2008), Women's access to managerial positions: an experimental study of leadership styles and gender. *The Spanish Journal of Psychology*, 11(1): 55–65

Claypoole, V L and Szalma, J L (2019), Electronic Performance Monitoring and sustained attention: Social facilitation for modern applications. *Computers in Human Behavior*, 94: 25–34

Swat, K (1997), Monitoring of Accidents and Risk Events in Industrial Plants. *Journal of Occupational Health*, 39(2): 100–04

Giacalone, R A and Rosenfeld, P (1987), Reasons for Employee Sabotage in the Workplace. *Journal of Business and Psychology*, 1(4): 367–78

For each of the key studies, candidates should show knowledge and understanding of:

- the **context** of the study and relationship to other studies
- the **main theories/explanations** included in the study
- the **aim(s)** and **hypotheses** of the study [if stated]
- the **design** of the study, including all methodology as appropriate, such as the research method(s) used, sample size and demographics [if known] and sampling technique [if known], procedure, technique for data collection
- the **results**, **findings and conclusions** of the study
- the main discussion points of the study.

For each key study candidates should be able to:

- describe and evaluate research methods used in and methodological concepts included in the study (for AS and A Level)
- describe and evaluate the psychological issues and debates (for AS and A Level) included in the study.

4.1 Motivation to work

4.1.1 Need theories

- Maslow's hierarchy of needs including five needs, including a study, e.g. Saeednia (2011).
- McClelland's theory of achievement motivation including need for achievement, affiliation and power.

Relevant issues and debates and methodology for this topic include: application to everyday life, individual and situational explanations, cultural differences, determinism versus free-will, validity.

4.1.2 Cognitive theories

- Latham and Locke's goal-setting theory including goal-setting principles and SMART goals.
- Vroom's VIE (expectancy) theory.

Relevant issues and debates and methodology for this topic include: individual and situational explanations, cultural differences, reductionism versus holism, determinism versus free-will, idiographic versus nomothetic.

4.1.3 Motivators at work

- extrinsic motivators at work: types of reward systems including pay, bonuses, profit-sharing, performance-related pay.
- intrinsic motivators at work: non-monetary rewards including praise, respect, recognition, empowerment and a sense of belonging.
- Deci and Ryan's self-determination theory including competence, autonomy and relatedness (exemplified by the following key study).

Key study for applying self-determination theory to motivational rewards: Landry et al. (2019), focus on study 1, specifics of methodology from study 2 will not be needed.

Relevant issues and debates and methodology for this topic include: individual and situational explanations, reductionism versus holism, determinism versus free-will, idiographic versus nomothetic, generalisations from findings.

4.2 Leadership and management

4.2.1 Traditional and modern theories of leadership

- universalist theories including great person, charismatic, and transformational leaders.
- behavioural theories including Ohio University and Michigan University behavioural explanations.
- Heifetz's six principles in meeting adaptive challenges; responsibilities of an adaptive leader.

Relevant issues and debates and methodology for this topic include: application to everyday life, individual and situational explanations, nature versus nurture, reductionism versus holism, generalisations from findings.

4.2.2 Leadership style

- Muczyk and Reimann's four styles of leader behaviour.
- Scouller's levels of leadership including public, private and personal levels
- Leadership style and gender (exemplified by the following key study).

Key study on leadership style and gender: Cuadrado et al. (2008)

Relevant issues and debates and methodology for this topic include: application to everyday life, individual and situational explanations, reductionism versus holism, idiographic versus nomothetic, generalisations from findings.

4.2.3 Leaders and followers

- Kouzes and Posner's Leadership Practices Inventory including five practices.
- Kelley's (1988) followership including definition of followership, two dimensions and five followership styles.

Relevant issues and debates and methodology for this topic include: application to everyday life, cultural differences, idiographic versus nomothetic, self-reports, psychometrics.

4.3 Group behaviour in organisations

4.3.1 Group development and decision-making

- stages of group development, e.g. Tuckman and Jensen (2010).
- Belbin's nine team roles.
- faulty decision-making, explanations and strategies to avoid it:
  - groupthink including features with examples
  - Forsyth's cognitive limitations and errors including types and subtypes.

Relevant issues and debates and methodology for this topic include: application to everyday life, individual and situational explanations, reductionism versus holism, idiographic versus nomothetic, generalisations from findings.

4.3.2 Individual and group performance

- individual and group performance focusing on social facilitation and social loafing including definitions, drive theory and evaluation apprehension, social impact theory.
- group performance across cultures focusing on social loafing in individualistic and collectivist cultures, including a study, e.g. Earley (1993).
- performance monitoring of employee productivity (exemplified by the following key study).

Key study looking at concentration levels when being monitored: Claypoole and Szalma (2019), focus on experiment 1, specifics of methodology for experiment 2 will not be needed.

Relevant issues and debates and methodology for this topic include: application to everyday life, cultural differences, determinism versus free-will, idiographic versus nomothetic, quantitative and qualitative data.

4.3.3 Conflict at work

- levels of group conflict (intra-individual, inter-individual, intra-group and inter-group). Causes of organisational and interpersonal group conflict.
- Thomas–Kilmann's five conflict-handling modes.
- bullying at work; types, phases and causes, including a study, e.g. Einarsen (1999).

Relevant issues and debates and methodology for this topic include: application to everyday life, individual and situational explanations, cultural differences, reductionism versus holism, idiographic versus nomothetic.

4.4 Organisational work conditions

4.4.1 Physical work conditions

- impact of physical work conditions on productivity and the Hawthorne effect, e.g. Kompier (2006).
- impact of the design of the work environment focusing on open plan offices, including a study, e.g. Oldham and Brass (1979).

Relevant issues and debates and methodology for this topic include: determinism versus free-will, experiments, questionnaires, longitudinal studies, quantitative and qualitative data.

4.4.2 Temporal conditions of work environments

- design of work: shiftwork: rapid rotation and slow rotation, on-call and flexitime including definitions and examples of each.
- effects of shiftwork on health and accidents, including a study, e.g. Gold et al. (1992).

Relevant issues and debates and methodology for this topic include: application to everyday life, determinism versus free-will, questionnaires, quantitative and qualitative data, validity.

4.4.3 Health and safety

- accidents at work focusing on human errors (errors of omission, commission, sequencing and timing) and system errors in operator–machine systems (machine controls and displays).
- reducing accidents at work: token economy, including a study, e.g. Fox et al. (1987).
- monitoring accidents (exemplified by the following key study).

Key study on the monitoring of accidents and risk events: Swat (1997).

Relevant issues and debates and methodology for this topic include: individual and situational explanations, idiographic versus nomothetic, longitudinal studies, objective and subjective data, generalisations from findings.

4.5 Satisfaction at work

4.5.1 Theories of job satisfaction

- theories of job satisfaction: Herzberg's two factor theory including hygiene and motivational factors.
- Hackman and Oldham's job characteristics theory including job characteristics and psychological states.
- techniques of job design: enrichment, rotation and enlargement, e.g. Belias and Sklikas, (2013).

Relevant issues and debates and methodology for this topic include: application to everyday life, cultural differences, reductionism versus holism, idiographic versus nomothetic, generalisations from findings.

4.5.2 Measuring job-satisfaction

- job satisfaction rating scales and questionnaires focusing on the job descriptive index (JDI).
- Walton's quality of working life (QWL) including eight conditions and QWL evaluation scale.

Relevant issues and debates and methodology for this topic include: individual and situational explanations, quantitative and qualitative data, psychometrics, validity, reliability.

4.5.3 Attitudes to work

- workplace sabotage including methods and reasons for sabotage (exemplified by the following key study).

Key study reasons for sabotage in the workplace: Giacalone and Rosenfeld (1987).

- Blau and Boal's absenteeism and organisational commitment model including types of absence, categories of commitment.

Relevant issues and debates and methodology for this topic include: application to everyday life, individual and situational explanations, reductionism versus holism, idiographic versus nomothetic, generalisations from findings.

4 Details of the assessment

For AS Level, candidates take Papers 1 and 2. Both papers must be taken at the same exam series.

For A Level, candidates take Papers 1, 2, 3 and 4. Papers 1 and 2 must be taken at the same exam series, but Papers 3 and 4 may be taken at a later exam series. Both Papers 3 and 4 must be taken in the same exam series.

Paper 1 – Approaches, Issues and Debates

Written paper, 1 hour 30 minutes, 60 marks

Candidate answer **all** questions.

This paper contains two sections:

- Section A: short answer questions
- Section B: extended response questions which may ask for comparison between studies and will require candidates to evaluate a study(s).

The paper tests candidates' knowledge of the core studies. Candidates will also be asked questions based on the four approaches (biological, cognitive, learning and social) and the AS Level issues and debates.

Paper 2 – Research Methods

Written paper, 1 hour 30 minutes, 60 marks

Candidates answer **all** questions.

This paper contains two sections:

- Section A: short answer questions based on general research methods and research methods relating directly to a core study and three short answer scenario-based questions.
- Section B: a planning question where candidates plan a study and evaluate some aspects of this plan.

The paper will focus on knowledge and application of research methods and methodological concepts and how these relate to the core studies.

For the planning question, candidates will apply their knowledge of the research methods and practical issues and methodological concepts to plan an investigation. Some aspects of the investigation will be provided for candidates as part of the question and candidates will be required to plan the other aspects of the investigation.

Planning studies for Paper 2

Candidates should be able to:

plan studies to include **general features**:	procedure of the study how the plan makes the study valid how the plan makes the study reliable types of data
plan studies using specific research methods to include **required features**:	
experiments	independent variable dependent variable controls / standardisation choice of experimental design
additionally for field experiments:	location
self-reports	question format (open and closed questions) examples of questions question scoring / interpretation
additionally, for questionnaires:	technique (paper and pencil, online)
additionally, for interviews:	format (structured, unstructured, semi-structured) technique (face-to-face, telephone)
case studies	details about the participant / unit content of information collected two or more techniques for data collection analysis / interpretation / triangulation
observational studies	overt / covert participant / non-participant naturalistic / controlled structured (behavioural categories) / unstructured
correlational studies	two co-variables measure of variable 1 measure of variable 2 nature of the relationship / scatter graph
longitudinal studies including experiments with a longitudinal design	tests / tasks scoring frequency / interval re-contacting of participants (for repeated testing) controls / standardisation
evaluate the planned study in terms of:	practical / methodological issues validity reliability

Candidates will **not** be expected to include aims or hypotheses in their plan.

Candidates will **not** be expected to evaluate issues relating to the sample/generalisability or ethics of their plan.

Paper 3 – Specialist Options: Approaches, Issues and Debates

Written paper, 1 hour 30 minutes, 60 marks

This paper contains four specialist options. Candidates answer questions from the two options they have studied.

Candidates answer **all** the questions from these two specialist options.

There are four questions for each specialist option. Each specialist option will consist of:

- Short answer questions. There will be three questions consisting of structured short answer questions worth a total of 14 marks.
- Structured essay question, divided into two parts. There are 6 marks for the part (a) 'describe' question and 10 marks for the part (b) 'evaluate' question. The question will be based on a different topic area from those tested in the short answer questions.

Questions will require candidates to consider the subject content of the specialist options and approaches, issues and debates. The questions will be based on three topics or sub-topics within the studied specialist options. The topic areas for each specialist option will be different to the topic areas assessed in Paper 4.

Paper 4 – Specialist Options: Application and Research Methods

Written paper, 1 hour 30 minutes, 60 marks

This paper contains two sections.

Section A – candidates answer questions on the two specialist options they have studied.

There will be two structured questions on each of the specialist options, and candidates will answer all parts of the questions from the two specialist options they have studied.

Questions will require candidates to consider the subject content and Key Studies of the specialist options, research methods and methodological concepts. The questions are based on two topics or sub-topics within the studied specialist options. The topic areas for each specialist option will be different to the topic areas assessed in Paper 3.

Section B – candidates answer one planning question from a choice of four (one for each specialist option). In the planning question candidates must plan a study (10 marks) and answer structured questions to evaluate the plan (14 marks).

For the planning question, candidates will apply their knowledge of research methods and practical issues and methodological concepts to plan an investigation. Candidates will be required to specify both the **general features** which will apply to all research methods and the **specific features** which apply to the research method used.

Planning studies for Paper 4

Candidates should be able to:

plan studies to include a range of different aspects according to the research method being used	
general features (apply to all methods)	aim(s) and hypotheses procedure of the study sample and sampling technique ethics how the plan makes the study valid how the plan makes the study reliable types of data, analysis of data, use of descriptive statistics
plan studies using **specific features** in sufficient detail for **replication**, to include but not be limited to:	
experiments	type of experiment independent variable dependent variable controls/standardisation choice of experimental design counterbalancing, random allocation (where applicable)
additionally for field experiments:	location
self-reports	question format (open and closed questions) examples of questions question scoring/interpretation
additionally, for questionnaires:	technique (paper and pencil, online, postal)
aditionally, for interviews:	format (structured, unstructured, semi-structured) technique (face-to-face, telephone)
case studies	details about the participant/unit content of information collected two or more techniques for data collection analysis/interpretation/triangulation
observational studies	overt/covert participant/non-participant naturalistic/controlled structured (behavioural categories)/unstructured number of observers
correlational studies	two co-variables measure of variable 1 measure of variable 2 nature of the relationship /scatter graph

longitudinal studies including experiments with a longitudinal design	tests / tasks scoring frequency / interval re-contacting of participants (for repeated testing) controls / standardisation
evaluate **all** aspects of the planned study.	

Command words

Command words and their meanings help candidates know what is expected from them in the exam. The table below includes command words used in the assessment for this syllabus. The use of the command word will relate to the subject context.

Command word	What it means
Analyse	examine in detail to show meaning, identify elements and the relationship between them
Compare	identify/comment on similarities and/or differences
Define	give precise meaning
Describe	state the points of a topic / give characteristics and main features
Evaluate	judge or calculate the quality, importance, amount, or value of something
Explain	set out purposes or reasons / make the relationships between things clear / say why and/or how and support with relevant evidence
Give	produce an answer from a given source or recall/memory
Identify	name/select/recognise
Outline	set out the main points
State	express in clear terms
Suggest	apply knowledge and understanding to situations where there are a range of valid responses in order to make proposals / put forward considerations

Phrases such as 'Plan an experiment/investigation/study to ...' may also be seen in the assessment for this syllabus.

5 What else you need to know

This section is an overview of other information you need to know about this syllabus. It will help to share the administrative information with your exams officer so they know when you will need their support. Find more information about our administrative processes at **www.cambridgeinternational.org/eoguide**

Before you start

Previous study

We do not expect learners starting this course to have previously studied Psychology.

Guided learning hours

We design Cambridge International AS & A Level syllabuses based on learners having about 180 guided learning hours for each Cambridge International AS Level and about 360 guided learning hours for a Cambridge International A Level. The number of hours a learner needs to achieve the qualification may vary according to local practice and their previous experience of the subject.

Availability and timetables

All Cambridge schools are allocated to one of six administrative zones. Each zone has a specific timetable.

You can view the timetable for your administrative zone at **www.cambridgeinternational.org/timetables**

You can enter candidates in the June and November exam series. If your school is in India, you can also enter your candidates in the March exam series.

Check you are using the syllabus for the year the candidate is taking the exam.

Private candidates can enter for this syllabus. For more information, please refer to the *Cambridge Guide to Making Entries*.

Combining with other syllabuses

Candidates can take this syllabus alongside other Cambridge International syllabuses in a single exam series. The only exceptions are:

- syllabuses with the same title at the same level.

Group awards: Cambridge AICE

Cambridge AICE (Advanced International Certificate of Education) is a group award for Cambridge International AS & A Level. It allows schools to offer a broad and balanced curriculum by recognising the achievements of learners who pass exams in a range of different subjects.

Learn more about Cambridge AICE at **www.cambridgeinternational.org/aice**

Making entries

Exams officers are responsible for submitting entries to Cambridge International. We encourage them to work closely with you to make sure they enter the right number of candidates for the right combination of syllabus components. Entry option codes and instructions for submitting entries are in the *Cambridge Guide to Making Entries*. Your exams officer has a copy of this guide.

Exam administration

To keep our exams secure, we produce question papers for different areas of the world, known as administrative zones. We allocate all Cambridge schools to one administrative zone determined by their location. Each zone has a specific timetable. Some of our syllabuses offer candidates different assessment options. An entry option code is used to identify the components the candidate will take relevant to the administrative zone and the available assessment options.

Support for exams officers

We know how important exams officers are to the successful running of exams. We provide them with the support they need to make your entries on time. Your exams officer will find this support, and guidance for all other phases of the Cambridge Exams Cycle, at **www.cambridgeinternational.org/eoguide**

Retakes and carry forward

Candidates can retake Cambridge International AS Level and Cambridge International A Level as many times as they want to. Information on retake entries is at **www.cambridgeinternational.org/entries**. To confirm what entry options are available for this syllabus, refer to the *Cambridge Guide to Making Entries* for the relevant series.

Candidates can carry forward the result of their Cambridge International AS Level assessment from one series to complete the Cambridge International A Level in a following series, subject to the rules and time limits described in the *Cambridge Handbook*.

Regulations for carrying forward entries for staged assessment (Cambridge International AS & A Level) can be found in the *Cambridge Handbook* for the relevant year of assessment at **www.cambridgeinternational.org/eoguide**

Language

This syllabus and the related assessment materials are available in English only.

Accessibility and equality

Syllabus and assessment design

Cambridge International works to avoid direct or indirect discrimination in our syllabuses and assessment materials. We aim to maximise inclusivity for candidates of all national, cultural or social backgrounds and with other protected characteristics. In addition, the language and layout used are designed to make our materials as accessible as possible. This gives all learners the opportunity, as fairly as possible, to demonstrate their knowledge, skills and understanding and helps to minimise the requirement to make reasonable adjustments during the assessment process.

Access arrangements

Access arrangements (including modified papers) are the principal way in which Cambridge International complies with our duty, as guided by the UK Equality Act (2010), to make 'reasonable adjustments' for candidates with special educational needs (SEN), disability, illness or injury. Where a candidate would otherwise be at a substantial disadvantage in comparison to a candidate with no SEN, disability, illness or injury, we may be able to agree pre-examination access arrangements. These arrangements help a candidate by minimising accessibility barriers and maximising their opportunity to demonstrate their knowledge, skills and understanding in an assessment.

Important:

- Requested access arrangements should be based on evidence of the candidate's barrier to assessment and should also reflect their normal way of working at school; this is in line with *The Cambridge Handbook* **www.cambridgeinternational.org/eoguide**
- For Cambridge International to approve an access arrangement, we will need to agree that it constitutes a reasonable adjustment, involves reasonable cost and timeframe and does not affect the security and integrity of the assessment.
- Availability of access arrangements should be checked by centres at the start of the course. Details of our standard access arrangements and modified question papers are available in *The Cambridge Handbook* **www.cambridgeinternational.org/eoguide**
- Please contact us at the start of the course to find out if we are able to approve an arrangement that is not included in the list of standard access arrangements.
- Candidates who cannot access parts of the assessment may be able to receive an award based on the parts they have completed.

After the exam

Grading and reporting

Grades A*, A, B, C, D or E indicate the standard a candidate achieved at Cambridge International A Level. A* is the highest and E is the lowest grade.

Grades a, b, c, d or e indicate the standard a candidate achieved at Cambridge International AS Level. 'a' is the highest and 'e' is the lowest grade.

'Ungraded' means that the candidate's performance did not meet the standard required for the lowest grade (E or e). 'Ungraded' is reported on the statement of results but not on the certificate. In specific circumstances your candidates may see one of the following letters on their statement of results:

- Q (PENDING)
- X (NO RESULT).

These letters do not appear on the certificate.

If a candidate takes a Cambridge International A Level and fails to achieve grade E or higher, a Cambridge International AS Level grade will be awarded if both of the following apply:

- the components taken for the Cambridge International A Level by the candidate in that series included all the components making up a Cambridge International AS Level
- the candidate's performance on the AS Level components was sufficient to merit the award of a Cambridge International AS Level grade.

On the statement of results and certificates, Cambridge International AS & A Levels are shown as General Certificates of Education, GCE Advanced Subsidiary Level (GCE AS Level) and GCE Advanced Level (GCE A Level).

School feedback: 'Cambridge International A Levels are the 'gold standard' qualification. They are based on rigorous, academic syllabuses that are accessible to students from a wide range of abilities yet have the capacity to stretch our most able.'

Feedback from: Director of Studies, Auckland Grammar School, New Zealand

How students, teachers and higher education can use the grades

Cambridge International A Level

Assessment at Cambridge International A Level has two purposes:

- to measure learning and achievement
  The assessment:
  - confirms achievement and performance in relation to the knowledge, understanding and skills specified in the syllabus, to the levels described in the grade descriptions.

- to show likely future success
  The outcomes:
  - help predict which students are well prepared for a particular course or career and/or which students are more likely to be successful
  - help students choose the most suitable course or career.

Cambridge International AS Level

Assessment at Cambridge International AS Level has two purposes:

- to measure learning and achievement
  The assessment:
  - confirms achievement and performance in relation to the knowledge, understanding and skills specified in the syllabus.

- to show likely future success
  The outcomes:
  - help predict which students are well prepared for a particular course or career and/or which students are more likely to be successful
  - help students choose the most suitable course or career
  - help decide whether students part way through a Cambridge International A Level course are making enough progress to continue
  - guide teaching and learning in the next stages of the Cambridge International A Level course.

Grade descriptions

Grade descriptions are provided to give an indication of the standards of achievement candidates awarded particular grades are likely to show. Weakness in one aspect of the examination may be balanced by a better performance in some other aspect.

Grade descriptions for Cambridge International A Level Psychology will be published after the first assessment of the A Level in 2024. Find more information at **www.cambridgeinternational.org/alevel**

Changes to this syllabus for 2024, 2025 and 2026

The syllabus has been reviewed and revised for first examination in 2024.

You must read the whole syllabus before planning your teaching programme.

Changes to syllabus content	The syllabus content has been reviewed and revised. The assessment objectives have been updated and the weighting in each paper has been adjusted slightly. In AS Level, we have replaced five of the core studies with new studies which support the issues and debates and research methodology content more effectively. The new studies are: • Biological – Hassett et al. (monkey toy preferences) and Hölzel et al. (mindfulness and brain scans) • Cognitive – Pozzulo et al. (line-ups) • Learning – Fagen et al. (elephant learning) • Social – Perry et al. (personal space). In the research methodology section we have reviewed the content for clarity. The main changes are: • removal of natural experiments • addition of longitudinal studies • revision of the ethics in animal studies to reflect the new core studies • reorganisation of data analysis. In A Level, we have changed the titles of the specialist options and reviewed all the content. We have reviewed the issues and debates. The changes are: • longitudinal studies and psychometrics have moved into research methodology • use of animals has been removed from A Level, as this is not relevant to A Level studies • idiographic versus nomothetic has been added. We have added a small amount of new research methodology to supplement the content from AS Level which is required for the A Level content. We have taken a new approach to the use of studies. Overall we have reduced the number of studies which need to be taught, and have clarified what candidates need to know. There are now five key studies in each specialist option. These must be taught and **we will assess** knowledge of these key studies. In addition, there are a number of example studies throughout the content of the specialist options to help teachers illustrate the topic and research methodology appropriate to the topic. Example studies will **not** be assessed directly, however candidates should use an example in their responses. We have also added a section at the end of each sub-topic of relevant issues and debates and methodology to help teachers focus their teaching on the most relevant aspects for each sub-topic.

Changes to assessment (including changes to specimen papers)	Paper 1 – This paper now has two sections: • Section A – short answer questions • Section B – extended response questions. The balance of assessment objectives tested in this paper has changed slightly. There will now be more questions testing AO2 Application. The marking grid for the extended response questions has been revised. Paper 2 – This paper now has two sections: • Section A – short answer and scenario-based questions • Section B – planning question. The marking grid for the planning question has been revised. There are no other changes to this paper. Paper 3 – This paper is now called Specialist Options: Approaches, Issues and Debates. The focus of the paper has changed. The weighting of the short answer questions and extended response questions has changed slightly. The balance of assessment objectives tested in this paper has changed slightly. This paper now has questions testing AO2 Application. The marking grid for the extended response questions has been revised. Paper 4 – This paper is now called Specialist Options: Application and Research Methods. The focus of the paper has changed. The evaluation part of the planning question now has more structure. We have removed the essay questions in Section C. The balance of assessment objectives tested in this paper has changed slightly. This paper now has questions testing AO1 Knowledge and understanding. The marking grid for the planning question has been revised.
Other changes	The *Reference List for 9990 AS & A Level Psychology* will include full references to all the core studies at AS Level, the key studies and the example studies at A Level.

In addition to reading the syllabus, you should refer to the updated specimen papers. The specimen papers will help your students become familiar with exam requirements and command words in questions. The specimen mark schemes explain how students should answer questions to meet the assessment objectives.

Any textbooks endorsed to support the syllabus for examination from 2024 are suitable for use with this syllabus.

School feedback: ‘While studying Cambridge IGCSE and Cambridge International A Levels, students broaden their horizons through a global perspective and develop a lasting passion for learning.’

Feedback from: Zhai Xiaoning, Deputy Principal, The High School Affiliated to Renmin University of China

We are committed to making our documents accessible in accordance with the WCAG 2.1 Standard. We’re always looking to improve the accessibility of our documents. If you find any problems or you think we’re not meeting accessibility requirements, contact us at **info@cambridgeinternational.org** with the subject heading: Digital accessibility. If you need this document in a different format, contact us and supply your name, email address and requirements and we will respond within 15 working days.

Cambridge Assessment International Education, The Triangle Building, Shaftesbury Road, Cambridge, CB2 8EA, United Kingdom
t: +44 (0)1223 553554 email: info@cambridgeinternational.org www.cambridgeinternational.org