



Pearson

International Advanced Level Psychology

**Component Guide Unit 4
WPS04**

International Advanced Level Psychology 2015

Component Guide Unit 4 WPS04

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Introduction

This Pearson Edexcel International Advanced Level in Psychology is part of a suite of International Advanced Level qualifications offered by Pearson for international students. The specification has been developed in consultation with the teaching community, higher education, learned societies and subject associations.

This guide is designed to help you get to grips with content and assessment, and to help you understand what these mean for you and your candidates.

Content and Assessment overview

Candidates should know, understand, apply, critically analyse and evaluate the specification content that is composed of nine topics. There are opportunities for candidates to develop mathematical skills throughout the content and they are required to apply these skills to relevant psychological contexts.

The Pearson Edexcel International Advanced Level Psychology qualification is a modular programme with four examination components. The International Advanced Subsidiary (XPS01) consists of Unit 1 (WPS01) and Unit 2 (WPS02). The International Advanced Level consists of Unit 1 (WPS01), Unit 2 (WPS02), Unit 3 (WPS03) and Unit 4 (WPS04).

Candidates will be assessed through four examination papers which focus on specific topics in the qualification.

- Paper 1 (WPS01) will assess content from Topics A and B
- Paper 2 (WPS02) will assess content from Topics C and D
- Paper 3 (WPS03) will assess content from Topics E, F and G
- Paper 4 (WPS04) will assess content from Topics H and I.

Candidates may be required to respond to stimulus material using psychological concepts, theories and research from across topic areas. Candidates may be asked to consider issues of validity, reliability, credibility, generalisability, objectivity and subjectivity in their evaluation of studies and theories. Candidates should be able to define any terms given in the specification.

Examinations will be available for all components in January, June and October examination series. Examination entry details and examination dates can be found on the Edexcel website and International Information Manual here: <http://qualifications.pearson.com/en/support/support-topics/centre-administration/information-manual.html#tab-International>

Assessment objectives are weighted for AS level and A level examinations in the following percentages.

		% in IAS	% in IAL
AO1	Demonstrate knowledge and understanding of scientific ideas, processes, techniques and procedures.	35-40	30-35
AO2	Apply knowledge and understanding of scientific ideas, processes, techniques and procedures: <ul style="list-style-type: none"> • in a theoretical context • in a practical context • when handling qualitative data • when handling quantitative data. 	30-35	30-35
AO3	Analyse, interpret and evaluate scientific information, ideas and evidence, including in relation to issues, to: <ul style="list-style-type: none"> • make judgements and reach conclusions • develop and refine practical design and procedures. 	30-35	35-40

The assessment objectives can be assessed in the written examinations in a combination of ways, this could be an AO in isolation or more than one AO combined within a question. Centres are referred to prior examinations that have been published and the SAMs materials for ideas to guide their planning and delivery.

Centres are also referred to the **taxonomy** (command words) found in Appendix G (pages 77-78) of the specification. The command words in this taxonomy will be used consistently by Pearson in its assessments to ensure candidates are rewarded for demonstrating the necessary skills. Careful consideration has been given to this taxonomy to ensure that Assessment Objectives are targeted consistently across questions. Centres should note that a **single command word** will be used per item; dual injunctions, for example 'describe and evaluate', will not be used.

The **levels based mark bands** encompass 4 different mark tariffs of question: 8 marks, 12 marks, 16 marks, and 20 marks. Candidates are assessed using the levels in the mark bands. The mark scheme content for these questions is indicative of what could be included, however candidates will be credited for any other reasonable marking points.

Discuss questions do not require any conclusions to be made so are applicable for **AO1** and **AO2** questions.

Evaluate, Assess, and To what extent questions require judgements/conclusions to be made so applicable for **AO1** and **AO3** questions. Where **AO2** is also required, the question will have a signpost to the scenario so that is clear to candidates that they need to make links to the scenario in their answer.

The extended-open response questions are the only questions with explicit taxonomy rules. Further exemplification of these can be found in the levels based mark bands document available on the qualification website.

Clinical Psychology

Specification requirements

Candidates must show an understanding that clinical psychology is about mental health issues and that these issues are surrounded by competing explanations of mental health issues. Candidates should be aware that diagnosing mental health issues has issues of reliability and validity, along with culturally dependent connotations. Candidates should know the features and symptoms, explanations, and treatments/therapies for two mental health issues; one is schizophrenia and the second can be selected from unipolar depression or anorexia nervosa. Candidates should be able to define any terms given in the specification and associated with the core content being delivered.

Candidates may be required to respond to stimulus material, for example scenarios drawing from mental health issues or research into mental health, and in this they can use psychological concepts, theories and/or research from within clinical psychology and across topic areas.

Candidates may be asked to consider issues of validity, reliability, credibility, generalisability, objectivity, and subjectivity in their evaluation and assessment of content, for example studies, theories, treatments or their practical investigation; these are not exhaustive. A candidate can, for example, discuss reductionism (9.3.3) within an evaluation or assessment of biological explanations of schizophrenia (8.1.4), as appropriate.

Key content /topic description

8.1 Content

Definitions and debates in the **diagnosis** of mental health issues are raised in section 8.1. In 8.1.1, candidates are expected to develop an understanding that defining abnormality is not without contention. By drawing on the historical context of clinical definitions of abnormality, candidates can begin to place the process of diagnosis within changes to wider social norms, values and knowledge. This will help them in determining the strengths and weakness of ways of defining abnormality, for example how statistical infrequency when defining IQ is embedded in western norms and values of what is determined to be intelligence. They could compare this to a social norms definition in order to highlight key differences in the defining of mental health issues. The use of Rosenhan and Seligman (1989) definition can be drawn upon to encourage candidates to evaluate and assess connections between mental health and society, perhaps drawing on issues of social control (9.3.9). Candidates may be asked to consider issues of validity, reliability, credibility, generalisability, objectivity, and subjectivity in their evaluation of diagnosis.

Classification of mental health in 8.1.2 should be addressed by looking at the DSM and ICD, comparing and contrasting the criteria of diagnosis and how these have changed over time. Candidates should know the principles of classification, in particular for their two mental health issues, and should be able to explain how the systems are used in clinical practice. They could, for example, compare diagnostic criteria between the two classification systems and determine which may have stronger validity, reliability, objectivity. Candidates may be asked to consider issues of validity, reliability, credibility, generalisability, objectivity, and subjectivity in their evaluation of classification systems.

These are drawn together in the **debates in diagnosis** section (8.1.3) to reflect and assess the issues of **cultural issues, reliability and validity** in the diagnosis of mental health issues. Candidates should be able to explore how each of these points can have implications for the treatment of people who receive a mental health diagnosis, and how society reacts to those mental health issues. Candidates may benefit from reviewing the types of validity associated with clinical diagnosis, for example aetiological, predictive and so on. Centres may discuss an example of a culturally specific disorder and how the course or diagnosis of such a disorder is specific to cultural and social norms. It may be beneficial at this point to bring in the classic study by **Rosenhan (1973)** to emphasise and provide evidence for reliability and validity. Candidates may be asked to consider issues of validity, reliability, credibility, generalisability, objectivity, and subjectivity in their evaluation of studies. Cultural issues, validity and reliability in the diagnosis of mental health disorders should be supported with evidence, both for and against, wherever appropriate in order for candidates to grasp that these debates have been investigated and challenged over time.

Section 8.3.3 requires candidates to be able to explain the **Health and Care Professions Council (HCPC)** guidelines for clinical practitioners, and when discussing classification and diagnosis it may be an appropriate time to draw on the features of the HCPC guidelines, such as the standards required of practitioners or having fitness to practice. Centres should note that these standards are regularly updated and candidates would benefit from understanding the most recent guidelines

Centres may also wish to include the practical investigation at this stage as this explores attitudes to mental health (see pages 9 to 10).

Mental health disorders, symptoms, features and explanations are covered in section 8.1.4 (Schizophrenia) and 8.1.5 (Unipolar depression or anorexia nervosa).

For **schizophrenia (8.1.4)** candidates should be able to explain the main symptoms of schizophrenia. It may be beneficial to share the DSM and ICD classification for the disorder so candidates can draw on their knowledge from 8.1.2 of diagnosis. They should be able to explain some of the key symptoms, including thought insertion, hallucinations, delusions and distorted thinking. They will benefit from understanding the difference between first and second rank symptoms of schizophrenia, along with how these may present in a patient. Features of the disorder may include demographic data (such as age, ethnicity or gender), diagnosis ratio in populations, and geographical differences in diagnosis rates, for example. Cultural difference in diagnosis is covered in 8.1.3 however it can also be embedded here, as can evidence of the reliability and validity of schizophrenia diagnosis. This may also be a useful point to draw on the compulsory contemporary study by **Suzuki et al (2014)** highlighting cultural and geographical differences in the symptoms, features and treatments of schizophrenia.

The function of **neurotransmitters** as an explanation of schizophrenia could, for example, understand the dopamine hypothesis as one of the most widely researched areas. Candidates would need to be able to explain this explanation and, as with all explanations in psychology, they should be able to evaluate this, giving strengths and weaknesses of the neurotransmitter explanation. This evaluation should include supporting evidence where appropriate and can draw on alternative explanations as part of the evaluation (such as glutamate hypothesis, genetic explanations, social explanations or psychodynamic explanations).

One **other biological explanations** must also be covered. Centres can select their other biological approach, some examples may include genetics, brain structure or glutamate. Candidates should be able to explain and evaluate this explanation as they would any theory/explanation in psychology. This biological explanation could be utilised when evaluating the neurotransmitter hypothesis to show there is more than one biological explanation of schizophrenia and compare the two. Drawing upon different explanations here can link to the issues and debates 9.3.4 to help candidates embed the ideas that there are different ways to explain behaviour in psychology.

For explanations of schizophrenia, centres can draw on supporting or refuting evidence that would aid candidates in their understanding of content and research methodology for Topic I Psychological Skills and also 8.3.1 methodology, for example Gottesman and Shields (1966) 'Schizophrenia in Twins' could be used to evidence genetic explanations whilst extending candidate understanding of the twin studies method; and Buckley (2005) 'Neuroimaging of schizophrenia' explores brain imaging in schizophrenic patients. These research studies are not a requirement of the specification, merely a suggestion of ways that methodology and content could be combined, any suitable evidence can be used by centres. Candidates may be asked to consider issues of validity, reliability, credibility, generalisability, objectivity, and subjectivity in their evaluation of explanations and theories.

For the selected '**other' mental health disorder**, a similar structure to the delivery of schizophrenia can be adopted. Centres are free to select the disorder most appropriate to their candidates. They should be able to explain the main symptoms of the chosen disorder. It may be beneficial to share the DSM and ICD classification for the disorder so candidates can draw on their knowledge from 8.1.2 of diagnosis. Features of the disorder may include demographic data (such as age, ethnicity or gender), diagnosis ratio in populations, and geographical differences in diagnosis rates. Cultural difference in diagnosis is covered in 8.1.3 however it can also be embedded here, as can evidence of the reliability and validity of diagnosis of the specific disorder selected.

Centres are required to draw on **two explanations** for their chosen disorder, one of which must be biological and the remaining explanations should be non-biological. For centres selecting unipolar depression they may, for example, opt for neurotransmitter (such as monoamine hypothesis) explanations or genetics as a biological explanation and compare to cognitive (Beck's cognitive triad) as an alternative. Centres delivering anorexia nervosa as a chosen mental health disorder may, for example, decide to draw on genetics or neurotransmitters (such as serotonin) as their biological explanation and compare to learning theories as a non-biological explanation. This may be familiar to candidates following their studies of Unit 2 and comparisons in the extended-open response question between these two explanation. Candidates would be able to compare these explanations as part of their evaluations and also this helps embed the idea that there are multiple explanations for behaviour (9.3.4). Candidates may be asked to consider issues of validity, reliability, credibility, generalisability, objectivity, and subjectivity in their evaluation of explanations and theories.

Centres are advised that careful selection of the **contemporary study** for their chosen disorder may give support to a particular explanation and thus selection should be linked to the chosen explanation where possible. For example, Hans and Hiller (2013) researched the effectiveness of cognitive-behavioural therapies with unipolar depression and thus lends itself to a cognitive explanation; Becker et al (2002) researched exposure to television and rates of eating disorders, therefore linking to learning theories (social learning theory in particular). Candidates may be asked to consider issues of validity, reliability, credibility, generalisability, objectivity, and subjectivity in their evaluation of studies.

Therapies and treatments for schizophrenia (8.1.6) and unipolar depression or anorexia nervosa (8.1.7) can be taught alongside the content for each mental health disorder, or alternatively as a distinct section.

It is required that for schizophrenia candidates will understand **drug therapy and family therapy**. For the 'other' chosen mental health disorder **drug therapy and cognitive behavioural therapy (CBT)** are specified. Candidates should be able to explain and evaluate both therapies. They could evaluate by drawing on comparisons between the treatments, supporting evidence, effectiveness of treatments, invasiveness, underlying assumptions about the cause of the mental health disorder, patient centred care and choice, or include issues and debates such as social control (9.3.9) through medicalisation and treatments. The scope for debate about treatments is broad and can be delivered as appropriate to the treatment, mental health disorder itself and centre requirements. Candidates may be asked to consider issues of validity, reliability, credibility, generalisability, objectivity, and subjectivity in their evaluation of therapies and treatments.

8.2 Studies

The classic study (8.2.1) of **Rosenhan (1973)** and the contemporary study for schizophrenia (8.2.2) **Suzuki et al. (2014)** have been summarised in the summary of studies teacher resource for WPS04. Both of these studies are compulsory and can be assessed in the written examination. Centres are also required to select one contemporary study that is relevant to their chosen disorder. For unipolar depression this study would be selected from (8.2.3) **Hans and Hiller (2013)** or (8.2.4) **Ma, Quan and Liu (2014)**. For anorexia nervosa, this study would be selected from (8.2.5) **Becker et al. (2002)** or (8.2.6) **Reichel et al. (2014)**. Contemporary studies for the chosen mental health disorder have been summarised in the summary of studies teacher resource for WPS04. Candidates can be assessed on their chosen study in the written examination. They may be asked to consider issues of validity, reliability, credibility, generalisability, objectivity, and subjectivity in their evaluation of studies.

It is recommended that wherever possible, centres combine the use of the summary of studies resource with the original study. However, where studies are not freely available or easily accessible, the summary resource is designed to help provide key starting points to enable teachers to deliver the content.

8.3 Methods

This topic can assess any **methods** (8.3.1) from Units 1 and 2 where relevant to the written examination content of clinical psychology. In addition, specific to a clinical psychology context is the use of **randomised controlled trials** and **neuroimaging**. Centres may wish to briefly summarise an example study that uses these methods in relation to clinical psychology. Whilst this is not a requirement of the specification, it may help contextualise the method and can act as evidence if the study is of schizophrenia or the 'other' mental health disorder chosen.

Candidates may be required to respond to stimulus material that draws on research methodology in the context of clinical psychology. Through this, they may be required to evaluate (8.3.5) issues of reliability, validity, generalisability, credibility, objectivity, subjectivity, ethics and practical application of findings as appropriate. In addition, they are expected to be able to rationalise the use of appropriate **conventions** of published psychological research (8.3.2). This may be an opportunity for candidates to design a hypothetical study on mental health perhaps each using a different method and sharing these to understand basic principles of a peer review. If candidates have not conducted their practical investigation at this stage (8.4.1), this may also be an opportunity to embed this section the conventions in the delivery of the practical investigation.

The **Health and Care Professions Council** (HCPC) guidelines for clinical practitioners (8.3.3) has been suggested for embedding when discussing classification and diagnosis. Centres should note that these standards are regularly updated and candidates would benefit from understanding the most recent guidelines.

Quantitative skills (8.3.4) will be assessed in this written examination and can include any mathematical skill from List A and List B as appropriate to the examination stimulus and content. Centres are referred to the mathematical skills in the specification (Appendix D; pages 67-69) for further guidance.

The **evaluation of research** (8.3.5) section could include the classic and contemporary studies, stimulus materials or research as a process in clinical psychology in the written examination. For this, candidates should be able to understand the broader implications of a clinical psychology research context in terms of reliability, validity, generalisability, credibility, objectivity, subjectivity, ethics and practical application of findings as appropriate.

8.4 Practical investigation

Within their studies of clinical psychology, candidates should conduct one **practical research** exercise to gather data relevant to topics covered in clinical psychology. This practical research exercise must adhere to ethical principles in both content and intention. The practical investigation for this topic is a **content analysis that explores attitudes to mental health**, where at least two sources should be analysed (such as radio interviews, newspapers, magazines).

Candidates may benefit from presenting their content analysis using the **conventions of published research** (8.3.2) to give them practical experience of this format of psychological research; abstract, introduction, aims and hypotheses, method, results, discussion and the process of peer review. This will also aid them in their understanding of 9.1.15 about **conventions of published psychological research**, where they will be required to revisit this process in a synoptic manner.

Candidates can be assessed on any aspect of their practical investigation using content analysis in the written examination, for example their results or their use of a content analysis methodology for this particular aim. They may be asked to consider issues of validity, reliability, credibility, generalisability, objectivity, and subjectivity in their evaluation, they may also be required to suggest improvements to selected components of their practical, for example improvements to their method of sampling or their procedure.

Planning

There is freedom within this practical investigation to select which mental illness is chosen to explore the attitudes around, though it may be helpful for candidates to focus upon one which they are familiar with based upon the topic content. An example of a practical investigation may be analysing how mental health is viewed. There should be two sources at least for the content analysis.

Carrying out the practical

Consideration should be given to ethical guidelines when designing and conducting the investigation, and should adhere to the HCPC research guidelines and the British Psychological Society (BPS) Code of Conduct and Ethics (2009) into clinical research. Candidates may be assessed on their practical investigation in written examinations, therefore they need to demonstrate an understanding of the decisions made when designing and conducting the investigation.

Analysis

Candidates will need to undertake an analysis of the data obtained within the investigation.

Drawing conclusions

There is an expectation that candidates will form inferences from their investigation which ultimately answers the research question. Communication of such findings is essential if candidates are asked about their practical investigation in the written examination.

Candidates will benefit from evaluating their practical investigation as a whole, especially when drawing conclusions.

A detailed example of a practical can be found on page 3 onwards in the additional material published by Hodder as part of the GCE UK A Level endorsed text book: http://resources.hoddereducation.co.uk/files/he/Psychology/9781471835452/835452_Addi_Matairi_al_Edexcel_Psycho_BK2_001-044.pdf

Resources and references

A range of web based resource links can be found in the 'Getting Started' publication, where a full scheme of work has been provided. There is also a resource mapping document where the textbook written by Karren Smith (2015: ISBN 9781447982463) in support of the new UK GCE Psychology AS and A Level qualification has been mapped against the Pearson International Advance Level Psychology qualification content.

http://qualifications.pearson.com/content/dam/pdf/International%20Advanced%20Level/psychology/2015/specification-and-sample-assessments/Resource_Mapping%20IAL_Psychology.pdf

A summary of studies booklet is available for each unit of the Pearson International Advance Level Psychology qualification which exemplifies all the classic and contemporary studies. This should be used in conjunction with the original source.

Classic study

8.2.1 Rosenhan (1973) On being sane in insane places.
<http://science.sciencemag.org/content/179/4070/250>

Contemporary study relating to schizophrenia

8.2.2 Suzuki et al. (2014) High prevalence of underweight and undernutrition in Japanese inpatients with schizophrenia.
<http://onlinelibrary.wiley.com/doi/10.1111/pcn.12082/pdf>

One from a choice of two contemporary studies, choosing one that suits the chosen 'other' disorder:

Depression

8.2.3 Hans and Hiller (2013) Effectiveness of and drop out from outpatient cognitive-behavioural therapy for adult unipolar depression: A meta-analysis of nonrandomised effectiveness studies.
<https://www.ncbi.nlm.nih.gov/pubmed/23379264>

8.2.4 Ma, Quan and Liu (2014) Mediating effect of social support on the relationship between self-evaluation and depression.
<https://www.sbp-journal.com/index.php/sbp/article/view/3610>

Anorexia nervosa

8.2.5 Becker et al. (2002) Eating behaviours and attitudes following prolonged exposure to television among ethnic Fijian adolescent girls.
<http://corcom130-sp10-advertising.wikispaces.umb.edu/file/view/Fiji.pdf>

8.2.6 Reichel et al. (2014) 'Glass fairies' and 'bone children': Adolescents and young adults with anorexia nervosa show positive reactions towards extremely emaciated body pictures measured by the body startle reflex paradigm.
https://www.researchgate.net/publication/259723631_Glass_fairies_and_bone_children_Adolescents_and_young_adults_with_anorexia_nervosa_show_positive_reactions_towards_extremely_emaciated_body_pictures_measured_by_the_startle_reflex_paradigm

Exemplar responses to the sample assessment materials for each examination unit can also be found on the website resources section. These demonstrate the assessment criteria and application of the mark schemes against the sample assessment materials.

Exam papers, mark schemes and examiner reports are available post results for examinations in all January, June and October here:

<http://qualifications.pearson.com/en/qualifications/edexcel-international-advanced-levels/psychology-2015.coursematerials.html#filterQuery=Pearson-UK:Category%2FExam-materials>

Other support materials are available here:

<http://qualifications.pearson.com/en/qualifications/edexcel-international-advanced-levels/psychology-2015.coursematerials.html#filterQuery=Pearson-UK:Category%2FTeaching-and-learning-materials>

Psychological Skills

Specification requirements

This is a synoptic section in which candidates will be asked to draw on other areas of the qualification in order to understand conceptual and methodological issues. Candidates will develop an understanding of how to use theories, methodology and evidence from many areas of psychology and apply them to issues. Candidates should be able to define any terms given in the specification and associated with the core content being delivered.

Relevant psychological skills have been contextualised in Topics A–H. This topic collects them together (excluding Topics F and G) in order to ensure that all content has been covered.

Candidates must consider issues and debates from across all topics (excluding Topics F and G) in order to develop a general knowledge of key issues and debates.

Candidates may be required to respond to stimulus material, for example scenarios drawing from any topic area (excluding Topics F and G) or research studies or methodology from any topic area (excluding Topics F and G), and in their responses they can use psychological concepts, theories and/or research from across topic areas.

Candidates may be asked to consider issues of validity, reliability, credibility, generalisability, objectivity, and subjectivity in their evaluation and assessment of content, for example studies, theories, treatments, methods, key questions or their practical investigations; these are not exhaustive.

Key Content/topic description

9.1 Methods

This content draws together the methodology used across the qualification. Candidates may be required to respond to stimulus materials, such as unseen studies and scenarios, from any topic (excluding Topics F and G) including practical investigations. All research methodology indicated in Topic 9 must be covered and candidates may be assessed on any of the research methods with the aim to bring together the methods sections in one topic areas in order to test overall understanding.

Candidates could draw on studies and research evidence from any area of their learning across the qualification in order to exemplify or justify points that they are making when assessing the methodology in this section.

Candidates should be able to define any terms given in the specification, and they may be asked to consider issues of validity, reliability, credibility, generalisability, objectivity, and subjectivity when making assessments and evaluations of any of the methodology content. The effects of control issues (9.1.10) are also important, and can be used in the evaluation of methodology and studies throughout the qualification. Candidates should be aware of the strengths and weaknesses of a given methodology within the context of psychological research.

Drawing from section 9.1.13, the **methodological issues** of validity (internal, predictive, ecological), reliability, generalisability, objectivity, subjectivity (researcher bias), and credibility will have been delivered throughout the qualification. It may be beneficial to revisit this as a starting point for this topic as candidates would be able to utilise these in their assessment of methodology.

The **control issues** (9.1.10) surrounding methodology are contained within this topic, and could be delivered at the start of this content to enable candidates to draw upon the specified content in their evaluations of methodology as it is being delivered. This may aid candidates in their skills of assessing and exemplifying the issues surrounding the methodological choices of researchers in psychology. They may benefit from working through examples where they determine how they could control for issues in given scenarios related to the method they are revisiting as they progress through this topic. They must understand counterbalancing, randomising, and order effects, along with experimenter or researcher effects on research studies. The concepts of social desirability and demand characteristics must be clearly understood with an ability to exemplify the impact of this on research. Candidates will need to consider how participant variables, situational variables, extraneous variables, confounding variables may affect the data that is gathered, and possible ways these could be controlled for. The operationalisation of variables, particularly the independent and dependent variable in a hypothesis is a skill candidates would benefit from developing alongside their understanding of why this is important.

Equally, the content within **ethical issues** (9.1.16) in research using humans and the ethical issues in **research using animals** (9.1.17) could also be revisited here in order to enable candidates to consider these issues as they reflect on the methodology in this section. They should be able to understand the BPS Code of Ethics and Conduct (2009), including risk assessment, the purpose of this and why it is an important consideration in psychological research. Equally, they should be aware that ethical issues reach beyond a single code of practice, and that there are wider considerations that must be accounted for when psychologists conduct research, such as the UNCRC when researching with

children as participants, the Health and Care Professions Council (HCPC) standards, and Scientific Procedures Act 1986 and Home Office Regulations for animal research.

Candidates should be able to explore the **different types of data** (9.1.1) that psychologist may gather through their research; including qualitative and quantitative data; and primary and secondary data. They should be able to explain the difference between each, and assess the type of data, for example why a researcher may wish to use primary rather than secondary data. Included within **sampling techniques** (9.1.2) are random, stratified, volunteer and opportunity sampling, and candidates should be able to explore the rationale for sampling choices and the impact on the research process that each sampling technique may have, for example that a volunteer sample may not generate a representative participant group. This could be further exemplified with reference to a study that used this method, such as Milgram (1963) if appropriate.

Experimental/research (participant) designs (9.1.3) include the use of independent groups, repeated measures and matched pairs in research. Candidates may benefit from being able to explain how these may impact on a research study and also be able to make the connections between the design decision and statistical test that would be suitable.

The use of **hypotheses** (9.1.4) requires candidates to be able to understand a null hypothesis, and alternate and experimental hypothesis. They should know the differences between these and how a null hypothesis is tested. Candidates should also be able to distinguish between a directional (one-tailed) and non-directional (two-tailed) hypothesis. They may be asked to write a hypothesis in the written examination, for which they must be able to fully operationalise the independent and dependent variables (9.1.10) in the hypothesis. Understanding the **independent and dependent variable** and operationalisation of these is developed further in 9.1.6 and centres may wish to combine this section with the design and use of **experiments** (9.1.6). Understanding of laboratory and field experiments are expected for this section, however candidates do not need to know naturalistic experiments as the specification does not require knowledge of this methodology. As with all sections in this topic, there is an expectation that experimental methodology can be evaluated by candidates.

Qualitative research methods are included in 9.1.5 with the use of **questionnaires and interviews**. For questionnaires the use of open and closed (including ranked scale) questions are required. Candidates will have used questionnaires in the practical for social psychology, and centres could use this as a starting point and add additional examples, such as Cohrs et al. (2012) which is summarised in the UK GCE A Level textbook as a social psychology contemporary study. The use of self-report data should also be explored, and the relative merits and demerits of this method of gathering data. Finally, the use of structured, semi-structured and unstructured interviews is a requirement, and candidates may benefit from being able to compare and contrast these to reinforce the difference and aid with evaluations.

Gathering both qualitative and quantitative data can be achieved through **observations** (9.1.7) and candidates may wish to compare how structured observations and naturalistic observations generate such data, along with evaluations of each choice. The methods of recording observational data should be covered, including tallying, event and time sampling, along with the choices available to the observer in terms of decisions about covert versus overt observation; and participant versus non-participant observation. Candidates can, as with all methodology, be asked in the written examination to draw on observational methods in relation to a scenario, and centres may wish to develop with in their delivery of this topic, such as identifying or describing a type of observation from a stimulus example to show their knowledge and understanding.

It may be beneficial for centres to deliver the **analysis of qualitative data using thematic analysis** (9.1.14) at this point where candidates may benefit from embedding this process in their understanding and evaluations of the types of data gathered from questionnaires, interviews, and observations where appropriate.

For the **correlation research** methodology (9.1.8) candidates should be able to understand and demonstrate an ability to identify types of correlation, including positive and negative, and may benefit from having an understanding about how data may look if it showed no (zero) correlation. Candidates must be able to evaluate the use of correlations, including issues with cause and effect and variables that may result in issues with results and conclusions.

Additional research methods and techniques (9.1.9) are drawn upon here from the topics studied over the AS level and A level content. Candidates should be able to discuss and evaluate the use of these additional methods in psychological research across different areas for Topic I. The use of twin studies in testing aggression is initially studied in biological psychology and is exemplified by the contemporary study by Brendgen et al. (2005). The use of animal experiments is introduced in learning theories and development and examples such as Pavlov or Skinner may have been used to develop understanding of this method in that topic. It is important to understand the use of case studies in different areas of psychology including case studies of brain-damaged patients in relation to memory such as the case of HM (2.2.13) and Freud's use of case studies (4.2.4). The use of brain scanning/neuroimaging (CAT, PET, fMRI) is introduced in biological psychology (3.2.5) and revisited in clinical psychology (8.3.1). The use of randomised controlled trials (RCTs) has been addressed in clinical psychology (8.3.1) and candidates could suggest other areas of psychology that this would be an appropriate method, such as biological psychology and areas where it may not. The use of content analysis (where thematic analysis can be included) was addressed in 4.2.3 learning theories and development and again in clinical psychology for the practical (8.4.1). The use of clinical interviewing, ethnographic fieldwork, longitudinal, cross-sectional research, cross-cultural and meta-analysis have been introduced in developmental psychology methods (5.3) and candidates could again review their learning over the qualification and suggest other areas of psychology that these would be appropriate methods and areas where they may not.

Conventions of published psychological research (9.1.15) is covered initially in Topic H and are revisited here. It may be beneficial for centres to concentrate delivery of this content in Topic H, and then encourage candidates to apply their knowledge to examples of studies, perhaps drawn from the classic and contemporary studies across the qualification. Candidates may wish to structure their notes on the classic and contemporary studies in this format throughout their qualification in anticipation of this section of Topic H and I.

The decisions about, rationale for the use of, and interpretation of descriptive statistics (List A) (9.1.11) and inferential statistics (List B) (9.1.12) can be assessed throughout this topic area, these are exemplified in the specification (**Appendix D**).

9.2 Key questions in society

This section is where candidates can discuss key questions for society using concepts, theories or research from one or more of Topics A to H (except Topics F and G). It corresponds to 9.3.10 **the use of psychological knowledge in society**. The candidates should address relevant ways in which psychological understanding and research can make a contribution to addressing key questions in society. It is an opportunity to apply their knowledge in a synoptic way.

Candidates may benefit from reviewing a range of key questions during this topic through peer group presentations on given key questions. Alternatively, a key question could be embedded in the delivery of each topic, perhaps to draw together understanding across topics prior to examinations.

Key questions for society could include;

- Can the increase of violent video games account for an increase in aggression?
- How can explanations of prejudice help reduce stereotypes of mental health?
- Can psychological knowledge help a child with Dyslexia improve their learning?
- Is the use of day care for children under three years old good or bad for them?
- Are celebrities the main influence on the fashion choices of adolescents?
- Can knowledge from psychology be used to prevent bullying?
- How has research into adolescent reconstructive memory and attachment been used in clinical practice?
- What are the implications for society if aggression is found to be caused by nature not nurture
- Would it be a good idea for airline companies to offer treatment programmes for fear of flying?

This is not a definitive list. There are also examples of key questions included in the GCE AS level (8PS0) and A level (9PS0) Psychology specification.

Centres are recommended to draw on any relevant issues they feel are appropriate for their candidates. Often issues can be found in the media to allow candidates to debate contemporary social concerns and questions. Candidates are required to develop the skills of addressing unseen content and drawing on their synoptic learning over the qualification.

What to consider when choosing key questions:

Is the key question of relevance in today's society?

Are you able to explain the key question using research and/or theories from the approaches covered in this specification?

Can you put forward a for/against argument for the key question?

Are there any other plausible explanations for the key question?

Can the key question be clearly explained to show the way it is important for society or a society?

Be sure to focus on the key question itself, to describe it, as well as being able to apply concepts, theories and ideas from approaches to explain it.

The written examination will present stimulus material that has been adapted to provide background information to give candidates a starting point for their discussion. The SAMs includes the following example;

A key question for society is how to explain aggression and deal with issues such as people becoming desensitised to violence.

A laboratory study in 2010 found that when 22 boys aged 14 to 17 watched 60 four-second violent video clips, they tended to become emotionally desensitised to aggression. One explanation of their desensitisation is that there is a change in the way the brain processes emotional responses. The lateral orbitofrontal cortex in the brain showed less activity the more clips the boys watched. Another explanation might be that as the boys watched more violent video clips they considered violence as more acceptable. The boys judged the aggression as less severe the more they watched the clips.

Discuss the key question of how to explain aggression, using concepts, theories and/or research studied in your psychology course.

You must make reference to the context in your answer.

(8)

This requires candidates to **discuss** (AO1 and AO2) the context along with their own knowledge and understanding of concepts, theories and/or research studied throughout topics A to H. While the unseen stimulus material and key question will change in each examination, this question is designed to be assessed as an 8-mark discussion question.

9.3 Issues and debates themes

9.3.1 Ethical issues in research (animal and human).

Psychological research must comply to ethical guidelines, both when using humans and when using animals in research, however, research has been conducted prior to the formalisation of ethical codes of conduct which did not always meet ethical criteria. In this debate, candidates should review their understanding of ethical issues, drawing examples from across units to exemplify the issues surrounding ethical research.

The types of issues concerning the role of ethics which could be debated may include: how studies can be carried out ethically, how research may be limited by ethics, or how research with vulnerable groups can meet ethical guidelines.

It is suggested that candidates revisit their understanding of the British Psychological Society (BPS) code of ethics and conduct (2009), including risk management when carrying out research in psychology (first introduced in 1.2.9); ethical issues regarding the use of animals in laboratory experiments, including the Scientific Procedures Act (1986) and Home Office Regulations (first introduced in 4.2.8); ethics and the UNCRC (1989) (first introduced in 5.3.3) and an awareness of Health and Care Professions Council (HCPC) guidelines for clinical practitioners (first introduced in 8.3.3). They should be able to draw on their synoptic learning to provide cross-topic links; for example, reviewing Watson and Rayner (1920) using the UNCRC, or review the use of the therapies and treatments in Topic D in light of the HCPC guidelines.

Centres may wish to combine the delivery of this content with the delivery of 9.1.16 and 9.1.17 in the methodology content of this topic area.

9.3.2 Practical issues in the design and implementation of research.

The selection and implementation of research methodology requiring consideration of differing methods and design decisions. Such practical issues can include the rationale for gathering qualitative or quantitative data, validity concerns surrounding experiments and the impact of this on data gathered, or perhaps the control of variables when conducting research. Centres may wish to deliver this throughout the methodology section of this topic (9.2) or as a summary at the end of that topic to draw together the issues around methodological decision processes in psychological research.

9.3.3 Reductionism versus holism when researching human behaviour.

Reductionism is about looking at the parts of something or someone to build up knowledge to understand the whole person, whereas holism considers the whole person. A holistic view considers issues such as nature and nurture, gender, culture, social status or age and how these interact. Reductionism aims to be more scientific, often through the selection of methodology such as experiments or neuroimaging techniques. Candidates should be able to debate the relative merits and demerits of each perspective in psychological research, and support these debates with appropriate evidence and examples where relevant.

9.3.4 Ways of explaining behaviour using different approaches, models or theories.

Features of human behaviour can be explained using different themes; for example, aggression can be explained through learning or biology, with some aggressive behaviours also being explained by social psychologists. Even within a topic area there can be different theories based on a different set of assumptions to explain the nature of a particular behaviour, for example memory is explained using three different theories.

Candidates would benefit from being able to draw from their learning of psychology several different ways of explaining features of human behaviour. This could be achieved by picking out different content (such as aggression, phobias, schizophrenia, prejudice) and asking candidates to explain these using several psychological theories and concepts. Alternatively, centres could select behaviours that are new to candidates (such as attraction, intelligence, personality, perception) to encourage them to consider psychology in a wider context.

Centres may wish to deliver this section alongside the key questions for society (9.2) as a way to broaden the candidate's ability to make connections across topics.

9.3.5 The issue of psychology as a science.

Whether psychology is a science or not is a recurring debate. This is often underpinned by the researchers' perspective and the purpose of research within psychology. It can be argued that a focus should be valid data which is qualitative and in depth and expresses the voice of the participant, thus producing data that represents 'real life'. However, a focus on quantitative data and hypothesis testing in order to produce more reliable data has been argued as beneficial for attempting to demonstrate cause and effect. This issue and debate returns candidates to choices in methodology, and could be delivered in conjunction with 9.3.2 because it concerns the way in which studies are carried out and the choices that are made.

9.3.6 Cultural and gender issues in psychological research.

Culture can affect how an individual views the world, such as how mental health is diagnosed (8.1.3), or whether attachment types are universal (5.1.2). Cross-cultural studies can help to see what can be considered in humans to be a 'universal law', and what is culturally based, candidates will have considered cultural issues in depth for Topic E and this may provide a starting point to make the synoptic links across other topic areas. They should address this debate by questioning not only the cultural applicability of theories, but also the cultural dominance of psychological researchers and their data gathering itself (for example the ethnocentricity of researchers and often participants).

Gender is also considered to be constructed through our environment, while we can say that sex is allocated at conception according to genes, gender behaviour can be driven by environmental factors and social norms. Candidates could also draw on the conflicting ideas of nature and nurture surrounding gendered behaviour as a key question (9.2). They should also address this debate by questioning not only the gender applicability of theories, but also the gender dominance in psychological researcher (for example whether psychological knowledge and research is androcentric).

9.3.7 The role of both nature and nurture in psychology.

The nature-nurture debate will be familiar to candidates as it is evident throughout the qualification, such as aggression in topics C and D, and the nature of mental health in Topic H. Candidates should be able to debate the issues surrounding how far human behaviour is 'nature' and how far it is 'nurture'. Candidates could address specific issues such as personality, gender, or development and may benefit from the inclusion of this debate in their skills for the key questions in society (9.2).

9.3.8 An understanding of how psychology has developed over time.

Psychological explanations have developed over time, often through the development of research techniques, for example neuroimaging, and movement from introspection in the late 1800's, to measurable behaviour from around 1930. It has also changed in conjunction with practical and ethical issues surrounding research, for example Milgram's work on obedience in 1963 and Burger's work to replicate Milgram in 2009. Candidates may wish to combine this issue and debate with their debates around practical issues (9.3.2) ethical debates (9.3.1) and how psychology has changed over time (9.3.4). This debate is also introduced in Topic H, where the history of abnormality (8.1.1) can be used as a springboard to demonstrate the development of psychological explanations and understanding, from lobotomies through to drug treatments.

9.3.9 The use of psychology in social control.

Psychology has been used across many societies as a form of social control, for example the ways in which patients with mental health illnesses have been treated which candidates may have addressed as a practical investigation in Topic H (8.4.1). This debate may also enable candidates to consider situations where social control can be used to effect positive outcomes, such as controlling crowd behaviour or controlling the viewing of violence in video games or televisions by age restriction.

9.3.10 The use of psychological knowledge in society.

The key questions considered in 9.2 highlight how psychological knowledge is used in society, it is advised that centres highlight this issue within their delivery of 92.

9.3.11 Issues relating to socially sensitive research.

Much of the research conducted in psychology is socially sensitive, for example Milgram carried out studies to see if the Germans were different, and he found that they were not, however candidates may wish to consider what would have happened if Milgram had found that Germans (for example) were different? Of course he did not, it is important to remember that. The same could be questioned of Raine et al. (1997), in that what if there was conclusive evidence that murderer's brains were in fact different? Or if schizophrenia research finds a specific gene. Whilst these are highly unlikely scenarios, by asking these sorts of questions it can show how psychology can involve socially sensitive issues and candidates should develop an understanding of the implications of psychological research.

Resources and references

Ethical issues in research (human and animals)

http://www.bps.org.uk/system/files/documents/code_of_ethics_and_conduct.pdf – the BPS code of conduct (2009) is a good resource, not only for information about ethics but as a starting point for discussions.

http://www.bps.org.uk/sites/default/files/documents/code_of_human_research_ethics.pdf – A link to a BPS document relating to risk management

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/291350/Guidance_on_the_Operation_of_ASPA.pdf – the ethics of using animals is covered well in the Animals (Scientific Procedures Act) 1986.

http://www.bps.org.uk/system/files/images/guideline_for_psychologists_working_with_animals_2012_rep55_2012_web.pdf – a booklet on the subject of using animals in research from the BPS (British Psychological Society).

<http://www.apa.org/monitor/jan03/animals.aspx> – the ethics of using animals are discussed on the American Psychological Association (APA) site.

Reductionism versus holism

www.apa.org/monitor/sep06/sd.aspx – a discussion from the American Psychological Association about reductionism and psychology.

<http://www.psyking.net/id29.htm> – a site that discusses themes and has some interesting ideas to help discussion.

Psychology as a science

<http://www.psychologytoday.com/blog/under-the-influence/201308/the-psychology-the-psychology-isnt-science-argument> – a post from Psychology Today on the scientific nature of psychology

<http://blogs.scientificamerican.com/the-curious-wavefunction/2013/08/13/is-psychology-a-real-science-does-it-really-matter/> – a Scientific American blog on whether psychology is a science.

Culture and gender issues in psychological research

Magnusson, E., & Marecek, J. Gender and Culture in Society: Theories and Practices, 2012, Cambridge University Press, New York – a book which may have too much depth but is worth a look.

How psychology has changed over time

Wertheimer, M., A Brief History of Psychology, 2012, 5th edn., Taylor Francis, Hove – a book that is quite short and accessible.

<http://psychclassics.yorku.ca/> – a site that offers discussion around CHP (Classics in the History of Psychology).

The use of psychological knowledge as a form of social control

<http://thepsychologist.bps.org.uk/volume-20/edition-7/agents-social-control> – an article in The Psychologist (a BPS publication) on psychology used as social control.

The use of psychological knowledge in society

<http://www.psychologytoday.com/blog/rejoining-joy/201110/positive-society-psychology-i> – a post from Psychology Today about positive psychology. It is useful to consider how positive psychology can be used in a way that is different from more problem solving uses.

Socially sensitive research

Banyard, P. & Flanagan, C. Ethical Issues and Guidelines in Psychology, 2005, Routledge, Hove – this book contains a chapter on socially sensitive research and is also useful on ethics in general.

Dickson-Swift, V., James, E.L., & Liamputtong, P. Undertaking Sensitive Research in the Health and Social Sciences: Managing Boundaries, Emotions and Risks, 2008, Cambridge University Press, UK, pp. 168 – this book contains a chapter on socially sensitive research. An excerpt is accessible at:
http://assets.cambridge.org/9780521718233/excerpt/9780521718233_excerpt.pdf

Quantitative skills guidance

Throughout the course of study, candidates will develop competence in **Mathematical Skills** (also listed in Appendix D; pages 67-69 of the specification). This provides exemplification of mathematical skills in the context of Psychology to guide centres in the delivery of these skills, however assessment is not limited to the examples in the exemplification. There are opportunities for candidates to develop these skills throughout the content of the topics in this qualification, and candidates are required to apply the skills to relevant psychological contexts and stimulus material that may be presented in the written examination. As with any terminology in the specification, candidates should be able to define the key quantitative terms and explain the rationale for quantitative data choices, for example why a particular test may be used. The formulae and critical values tables will be provided in the written examination booklet and candidates may use a calculator on all papers.

The specification content for the clinical **Topic H** and psychological skills **Topic I** requires candidates to be able to draw from all quantitative skills covered throughout the qualification.

List A can be initially found in Topic A and includes:

- calculating measures of central tendency (mean, median, mode),
- data tables (frequency tables and summary tables),
- graphical presentation (bar chart, histogram),
- measures of dispersion (range and standard deviation),
- percentages, ratios, and fractions.

List B can be initially found in Topic B and includes:

- Levels of measurement.
- Wilcoxon non-parametric test of difference
- Spearman's test
- Chi-squared
- Probability and levels of significance ($p \leq .10$ $p \leq .05$ $p \leq .01$).
- Observed and critical values,
- sense checking of data
- One- or two-tailed regarding inferential testing.
- Type I and type II errors.

Suggestions for practical use of the quantitative skills can be found in many of the practical investigations, along with the exemplification provided in the IAL Psychology specification (**Appendix D**).

Mapping the IAL Psychology to the GCE 2015 specification

This section is designed to provide you with an overview of where there is cross-over content between the International Advanced Subsidiary and International Advanced Level in Psychology (2015) and the GCE Advanced Subsidiary Level and Advanced Level (2015) qualifications. This may enable centres to effectively cross-reference resources and teaching support materials between the two qualifications. Many are provided on the Pearson Edexcel psychology website, and there are a number of resources provided through external publishers that centres may find useful to cross-reference.

Topic	IAS/IAL Content	GCE 2015 Content
Clinical Psychology	8.1.2 Classification systems ICD and DSM	5.1.2 Classification systems 5.1.1 Diagnosis of mental disorders
	8.1.3 Debates in diagnosis Cultural, Reliability, Validity	5.1.2 Classification systems 5.1.5 Individual differences 5.1.1 Diagnosis of mental disorders
	8.1.4 Schizophrenia Symptoms and features Neurotransmitters One other biological explanation	5.1.3 Schizophrenia Symptoms and features Neurotransmitters One other biological explanation
	8.1.6 Treatments/therapies for schizophrenia Drug therapy Family therapy	5.1.4 Treatments Two treatments (unspecified)
	8.1.5 Unipolar depression or anorexia nervosa Symptoms and features One biological explanation One non-biological explanation	5.1.3 One other disorder from anorexia nervosa, obsessive compulsive disorder or unipolar depression Symptoms and features One biological explanation One non-biological explanation
	8.1.7 Treatments/therapies for one other disorder Drug Therapy CBT	5.1.4 Treatments Two treatments (unspecified)

	8.2.1 Classic study Rosenhan (1973)	5.3.1 Classic study Rosenhan (1973)
	8.3.1 Methods in clinical psychology	5.2 Methods
	8.3.3 Awareness of HCPC	5.2.1 Awareness of HCPC
	8.3.4 Quantitative skills	5.2.5 Quantitative skills
	8.4.1 Practical investigation Content analysis that explores attitudes to mental health.	5.5.1 Practical investigation Content analysis that explores attitudes to mental health.

Topic	IAS/IAL Content	GCE 2015 Content
Psychological Skills (9.1 methods)	9.1.1 Types of data: qualitative and quantitative data; primary and secondary data.	9.1.1 Types of data: qualitative and quantitative data; primary and secondary data.
	9.1.2 Sampling techniques: random, stratified, volunteer and opportunity.	9.1.2 Sampling techniques: random, stratified, volunteer and opportunity.
	9.1.3 Experimental/research designs: independent groups, repeated measures and matched pairs.	9.1.3 Experimental/research designs: independent groups, repeated measures and matched pairs.
	9.1.4 Hypotheses: null, alternate, experimental; directional and non-directional.	9.1.4 Hypotheses: null, alternate, experimental; directional and non-directional.
	9.1.5 Questionnaires and interviews: open, closed (including ranked scale questions); structured, semi-structured and unstructured interviews; self-report data.	9.1.5 Questionnaires and interviews: open, closed (including ranked scale questions); structured, semi-structured and unstructured interviews; self-report data.
	9.1.6 Experiments: laboratory and field; independent and dependent variables.	9.1.6 Experiments: laboratory and field; independent and dependent variables.
	9.1.7 Observations: tallying; event and time sampling; covert, overt, participant, non-participant; structured observations; naturalistic observations. Gathering both qualitative and quantitative data.	9.1.7 Observations: tallying; event and time sampling; covert, overt, participant, non-participant; structured observations; naturalistic observations. Gathering both qualitative and quantitative data.
	9.1.9 Additional research methods and techniques: twin studies and aggression, animal experiments, case studies as used in different areas of psychology including case studies of brain-damaged patients in relation to memory, brain scanning/neuroimaging (CAT, PET, fMRI), randomised controlled trials (RCTs), content analysis, clinical interviewing, ethnographic fieldwork when getting data with children, longitudinal and cross-sectional research, cross-cultural and meta-analysis.	9.1.9 Additional research methods and techniques: twin <i>and adoption</i> studies, animal experiments, case studies as used in different areas of psychology, scanning (CAT, PET, fMRI), content analysis, <i>correlational research</i> , longitudinal and cross-sectional research, cross-cultural and meta-analysis.

	9.1.8 Correlation research: type of correlation: positive, negative and use of correlations including issues with cause and effect and other variables.	9.1.9 <i>Additional research methods and techniques: twin and adoption studies, animal experiments, case studies as used in different areas of psychology, scanning (CAT, PET, fMRI), content analysis, correlational research, longitudinal and cross-sectional research, cross-cultural and meta-analysis.</i>
	9.1.10 Control issues: counterbalancing, randomising, order effects, experimenter/researcher effects, social desirability, demand characteristics, participant variables, situational variables, extraneous variables, confounding variables, operationalisation of variables.	9.1.9 Control issues: counterbalancing, randomising, order effects, experimenter effects, social desirability, demand characteristics, participant variables, situational variables, extraneous variables, confounding variables, operationalisation of variables.
	9.1.11 Descriptive statistics 9.1.12 Inferential statistics	9.1.10 Descriptive statistics 9.1.11 Inferential statistics
	9.1.13 Methodological issues: validity (internal, predictive, ecological), reliability, generalisability, objectivity, subjectivity (researcher bias), credibility.	9.1.12 Methodological issues: validity (internal, predictive, ecological), reliability, generalisability, objectivity, subjectivity (researcher bias), credibility.
	9.1.14 Analysis of qualitative data — thematic analysis.	9.1.13 Analysis of qualitative data (thematic analysis <i>and grounded theory</i>).
	9.1.15 Conventions of published psychological research: abstract, introduction, aims and hypotheses, method, results, discussion; the process of peer review.	9.1.14 Conventions of published psychological research: abstract, introduction, aims and hypotheses, method, results, discussion; the process of peer review.
	9.1.16 Ethical issues in research using humans (BPS Code of Ethics and Conduct, 2009), including risk assessment when carrying out research in psychology. The UNCRC and participation versus protection rights when researching with children and ethical issues when children are the participants. Health and Care Professions Council (HCPC).	9.1.15 Ethical issues in research using humans (BPS Code of Ethics and Conduct, 2009), including risk assessment when carrying out research in psychology.
	9.1.17 Ethical issues in research using animals (Scientific Procedures Act 1986 and Home Office Regulations).	9.1.16 Ethical issues in research using animals (Scientific Procedures Act 1986 and Home Office Regulations).

Psychological skills (9.2 Key questions in society)	9.2.1 Key questions for society using concepts, theories or research from one or more of Topics A to H (except Topics F and G).	*One key question of relevance to today’s society, discussed as a contemporary issue for society rather than an academic argument 1.4.1 Social Psychology 2.4.1 Cognitive Psychology 3.4.1 Biological Psychology 4.4.1 Learning theories 5.4.1 Clinical Psychology 7.4.1 Child Psychology
Psychological skills (9.3 Issues and debates)	9.3.1 Ethical issues in research (animal and human).	9.3.1 Ethical issues in research (animal and human). *see also each topic area in A Level GCE Psychology (9PS0) sections 1.6; 2.6; 3.6; 4.6; 5.6; 6.6; 7.6; 8.6
	9.3.2 Practical issues in the design and implementation of research.	9.3.2 Practical issues in the design and implementation of research. *see also each topic area in A Level GCE Psychology (9PS0) sections 1.6; 2.6; 3.6; 4.6; 5.6; 6.6; 7.6; 8.6
	9.3.3 Reductionism versus holism when researching human behaviour.	9.3.3 Reductionism versus holism when researching human behaviour. *see also each topic area in A Level GCE Psychology (9PS0) sections 1.6; 2.6; 3.6; 4.6; 5.6; 6.6; 7.6; 8.6
	9.3.4 Ways of explaining behaviour using different approaches, models or theories.	9.3.4 Ways of explaining behaviour using different approaches, models or theories. *see also each topic area in A Level GCE Psychology (9PS0) sections 1.6; 2.6; 3.6; 4.6; 5.6; 6.6; 7.6; 8.6
	9.3.5 The issue of psychology as a science.	9.3.5 The issue of psychology as a science. *see also each topic area in A Level GCE Psychology (9PS0) sections 1.6; 2.6; 3.6; 4.6; 5.6; 6.6; 7.6; 8.6

9.3.6 Cultural and gender issues in psychological research.	9.3.6 Cultural and gender issues in psychological research. *see also each topic area in A Level GCE Psychology (9PS0) sections 1.6; 2.6; 3.6; 4.6; 5.6; 6.6; 7.6; 8.6
9.3.7 The role of both nature and nurture in psychology.	9.3.7 The role of both nature and nurture in psychology. *see also each topic area in A Level GCE Psychology (9PS0) sections 1.6; 2.6; 3.6; 4.6; 5.6; 6.6; 7.6; 8.6
9.3.8 An understanding of how psychology has developed over time.	9.3.8 An understanding of how psychology has developed over time. *see also each topic area in A Level GCE Psychology (9PS0) sections 1.6; 2.6; 3.6; 4.6; 5.6; 6.6; 7.6; 8.6
9.3.9 The use of psychology in social control.	9.3.9 The use of psychology in social control. *see also each topic area in A Level GCE Psychology (9PS0) sections 1.6; 2.6; 3.6; 4.6; 5.6; 6.6; 7.6; 8.6
9.3.10 The use of psychological knowledge in society.	9.3.10 The use of psychological knowledge in society. *see also each topic area in A Level GCE Psychology (9PS0) sections 1.6; 2.6; 3.6; 4.6; 5.6; 6.6; 7.6; 8.6
9.3.11 Issues relating to socially sensitive research.	9.3.11 Issues relating to socially sensitive research. *see also each topic area in A Level GCE Psychology (9PS0) sections 1.6; 2.6; 3.6; 4.6; 5.6; 6.6; 7.6; 8.6