

# INTERNATIONAL AS AND A-LEVEL PSYCHOLOGY

(9685) Teaching guidance

For teaching from September 2018 onwards

For International AS and A-level exams May/June 2019/2020 onwards Our specification is published on our website **oxfordaqaexams.org.uk**. We will let centres know in writing about any changes to the specification. We will also publish changes on our website. The definitive version of our specification will always be the one on our website; this may differ from printed versions.

# Contents

Introduction
Section 3.1
Section 3.2
Section 3.3
Section 3.4
Assessment Objectives (AOs)
Different tasks and question frames
How the units fit together
Supporting the learning required for the units10
Section 3.110
Section 3.210
Section 3.31
Section 3.412
Conclusion18
Appendix 1 – Command words

# Introduction

This teacher guide complements the specification for the Oxford AQA International AS and A-level Psychology and should be read alongside it and the sample materials. This guide will provide the following for teachers and prospective teachers of this course:

- An overview of this specification's philosophy and approach to the study and assessment of International AS and A-level Psychology.
- A unit-by-unit look at what is required in learning and assessment.
- Suggested possible routes through the course.

# Section 3.1

In Paper 1 students cover three interesting and universally relevant areas of psychology to give them an initial understanding of the range and diversity of psychological enquiry.

In **Memory, 3.1.1**, the focus is on key theories of memory, the multi-store model and working memory; students cover these theories in some detail, along with evidence to support each theory. In doing so they will acquire an early appreciation of how theory and research are interlinked and gain on overall understanding of the process of psychological theory building. This topic lends itself well to in-class demonstration, so that from the outset, students become familiar with the way psychology works. Teaching of the experimental method can be covered alongside the memory content. Eyewitness testimony is also covered in this topic, as an example of the useful contribution of psychology to issues in the real world.

In **Social Psychology**, **3.1.2**, the focus is on the key social psychological processes of conformity and obedience. Here the focus is primarily on the research and associated concepts and explanations. This area of the specification is well suited to application and students will benefit from consideration of real life examples of the behaviours under discussion. Here there is a further opportunity to explore the experimental method in a replication of the classic Jenness study, and an opportunity to introduce students to the questionnaire method through consideration of locus of control. Ethical issues are also introduced here in relation to the controversial Milgram obedience research. This section of social psychology lays the ground for other work on social psychology that students will cover in Year 2 in Applied psychology: Work and the individual.

In **Psychopathology, 3.1.3**, students have an initial introduction to the area of atypical behaviour, covering definitions of abnormality and the explanation and treatment of two quite common disorders, depression and phobias. This introductory study to psychopathology serves as a useful introduction to consideration of the major psychological disorder, schizophrenia, in Year 2. Discussion of definitions of abnormality provides the ideal opportunity to cover normal and skewed distributions (in relation to the statistical infrequency definition). It is well worth taking extra time to cover the behavioural and cognitive explanations carefully here. This will save a lot of time in Year 2 when students are expected to appreciate the overall approaches to psychology on Paper 4.

# Section 3.2

In Paper 2, three very different topic areas enable quite different approaches to classroom delivery. With greater focus on factual information, the Biopsychology topic lends itself to the use of diagrams, models and video clips, whilst for Cognitive development, the focus is more on theory and classroom demonstration. Research methods 1 offers the opportunity for students to undertake a range of practical classroom activities.

In **Biopsychology**, **3.2.1**, students have their first real appreciation of the role of biological structures and processes in behaviour. A sound understanding of basic biopsychology is essential for students hoping to go on to study psychology at higher education, and its inclusion on the specification reflects the current emphasis on neuroscience at university level. Some of the content here may already be

familiar to students of biology, but all students should find this basic material highly accessible. Unlike with some other areas of the specification, the biopsychology content lends itself less well to traditional discussion or evaluation, the emphasis here being more on description and application. Diagrams and models should be used in the classroom wherever possible. Although the scheme of work does not specify named websites, many suitable sites can be accessed in the classroom to illustrate, for example, brain structure and the process of synaptic transmission. Personal experiences of fight or flight provide an opportunity for coverage of the interview method.

In **Cognitive development, 3.2.2**, students are introduced for the first time to work in the area of developmental psychology. They cover the major theories of Piaget and Vygotsky, with Piaget's research offering the opportunity for several mini demonstrations in class. The work of Baillargeon is considered as an alternative to Piaget's work on object permanence; here students are introduced to the innovative and entertaining studies of violation of expectation. The study of Vygotsky and scaffolding provides the opportunity for introduction to the observational method. Finally students take a brief look at social cognition, to gain an appreciation of how cognitive development affects not just the way we understand the physical world, but also, how we understand other people.

In **Research methods 1, 3.2.3**, students explore the various methods used to investigate psychological processes and behaviour, and some simple descriptive techniques to analyse data. Some of this material will be covered alongside content of other topics throughout the course of the year, and the remaining material should be introduced in the context of practical classroom activities, some suggestions for which appear in the scheme of work and in the later section on supporting the learning. Teachers should be mindful of their responsibility to make sure than any practical activities that their students undertake conform to the ethical guidelines set out in the British Psychological Society's guiding principles for research. It needs to be made very clear to students that all research methods 2 on Paper 3 in Year 2. Teachers should plan for some recap of Year 1 Research methods in their Year 2 delivery.

# Section 3.3

In Paper 3, students cover two topics in depth, Sleep and Schizophrenia, and build on their earlier learning in Research methods 1 by considering more sophisticated data analysis techniques in Research methods 2.

In **Psychology of sleep**, **3.3.1**, students cover a range of intriguing and personally relevant sleeprelated material, including the nature and function of sleep and sleep disorders. They are able to use their prior study of biopsychology to support their learning here as they investigate the brain mechanisms involved in sleep. Wherever possible, biological models, diagrams and internet clips can be used to aid learning. This topic provides students with an opportunity to use the content analysis method in analysing information from their own personal sleep diaries which students should fill in every day for the duration of the topic. Data from these diaries will also be used later for a correlational analysis.

In **Schizophrenia**, **3.3.2**, students cover a major disorder. They are building here on their knowledge of ways of defining abnormality acquired when studying Psychopathology in Year 1. Again, video clips from the internet can be used to illustrate the biological basis of schizophrenia and to learn about individual case studies. This topic provides an opportunity for coverage of the case study method and case study transcripts for discussion in class can be obtained from specialist abnormal psychology texts. The cognitive explanation of schizophrenia can be illustrated in class with a demonstration of a technique used to monitor own output, an ability often lacking in people with certain schizophrenia symptoms. A full experimental study is conducted here with an investigation into age (or cultural) differences in attitude to people showing symptoms of schizophrenia. This involves full statistical analysis.

In **Research methods 2, 3.3.3**, students build on their knowledge of research methods acquired in Year 1, making this a synoptic topic. The section starts with a session on reporting of psychological investigations and here it is helpful to have examples of written reports for students to consider. Student examples are fine for this, but in the absence of any student examples, copies of very simple journal articles will suffice. After teacher input and discussion, students produce a mini written report of their investigation into attitudes towards people with symptoms of schizophrenia, following the conventions of

scientific report writing. The report should be organised into the appropriate sections. Key concepts of reliability and validity are covered here, alongside all matters related to inferential statistics. Although students will not have to calculate inferential statistics in an examination, they should have some experience in calculation and interpretation to enable a full understanding. It is recommended that students have an opportunity to calculate the following tests as examples: Spearman's rho, Chi-squared, Mann-Whitney.

# Section 3.4

In this paper, students cover Applied psychology: Work and the individual as their final topic, alongside the overarching Approaches in psychology and Issues and debates in psychology. All previous topics covered throughout the course can be used to illustrate answers on Approaches and Issues and debates, making this a synoptic paper.

In **Approaches in psychology**, **3.4.1**, students cover the major scientific approaches, covering the underlying principles and key theoretical ideas. Students should be able to illustrate their discussions here with references to topics covered in their studies elsewhere on the course. For example, when discussing the behavioural explanation, students could give examples of the two-process model of phobias from their study of psychopathology in Year 1. Coverage of the cognitive approach provides an opportunity to enable an understanding of the role of inference in cognitive research by carrying out a replication of the Stroop experiment in class. At the start of their study of approaches, students should construct a spreadsheet enabling them to record key ideas, evidence, strengths, limitations and applications, to be completed for each approach as it is covered. This will enable easy comparison of the approaches.

In **Issues and debates in psychology, 3.4.2**, broad philosophical and theoretical notions about the origins and causes of behaviour are introduced for consideration, alongside debates about the nature of science and the scientific status of psychology. Students should to be able to illustrate their discussions here with references to topics covered in their studies elsewhere on the course. For example, when discussing reductionism, students could give examples of biological reductionism from their study of schizophrenia. The implications of the debates are important and form the basis of any thorough discussion. For example, if we take a determinist approach to cognitive development, how does that affect special interventions for children who are achieving less well? As with approaches, students should construct a spreadsheet at the start of their study of issues, enabling them to record key ideas, evidence, links to approaches, discussion points and applications, to be completed for each issue as it is covered.

In **Applied psychology: Work and the individual, 3.4.3**, students are reintroduced to the area of social psychology, but this time with special focus on the work environment. The content of the topic is of direct and practical relevance for all students expecting to enter the world of work at some point. New social psychological phenomena are introduced and students consider their relevance to the workplace. Discussion of work based examples should be encouraged throughout delivery of the topic. The study of social facilitation offers an opportunity for students to design and conduct a class experiment, thus refreshing their knowledge of the experimental method. As well as key social phenomena and relevant studies in social psychology, students will consider the psychology of communication at work and psychological theories of job motivation and satisfaction. Finally, students look at the negative effects of workload and control when they consider stress in the workplace.

# Assessment Objectives (AOs)

There are three Assessment Objectives for the International AS and A-level in Psychology:

AO1	Knowledge and understanding of scientific ideas, processes, techniques and procedures (40% at AS and 34% at A-level)
AO2	Application of knowledge and understanding of scientific ideas, processes, techniques and procedures:
	in a theoretical context
	in a practical context
	when handling qualitative data
	when handling quantitative data
	• (30% at AS and 30% at A-level).
AO3	Analysis, interpretation and evaluation of scientific information, ideas and evidence, including in relation to issues, to:
	make judgements and conclusions
	develop and refine practical design and procedures
	• (30% at AS and 36% at A-level).

The Assessment Objectives are weighted differently on different papers to allow for appropriate assessment of the content. For example, on Papers 3 and 4 there is a greater weighting for AO3 than on Papers 1 and 2, reflecting the increased emphasis on analysis and evaluation at A-level.

Each individual item or question may address a single Assessment Objectives or a combination of Assessment Objectives.

Assessment Objectives will be triggered by appropriate command words so students should attend carefully to the command words in the item or question. For example, a question asking a students to 'Describe....' requires a purely knowledge based answer, whereas, a question asking a student to 'Describe and evaluate....' requires a combination of both knowledge and evaluation.

If students focus on responding to the command words in questions, this will ensure that they address the appropriate objectives in their answers. In essay-style 20 mark questions, where the usual skills split is 8:12, it is perhaps helpful for students to know that there should be slightly more emphasis on evaluation/application than on knowledge.

# Different tasks and question frames

The specimen assessment materials (SAMs) illustrate a variety of different question types and the accompanying mark schemes. It should be noted that the SAMs have been developed to give an indication of appropriate questions and mark scheme content, as such they are illustrative only and have not been through the rigorous development process used for live examinations.

Each paper is worth 90 marks and there are three topics on each paper. For each topic, the assessment will total 30 marks to be made up from a combination of multiple choice or objective test questions, short answer questions, scenario or stem-led questions and questions requiring some extended writing.

# Multiple choice and objective test questions

Several different examples are available on the SAMs. Some require choosing the correct answer from four options, whilst others require a choosing two correct answers from five options. Other types of objective test include matching tests and labelling diagrams using a selection of terms from given options. In this type of question marks are usually awarded for each correct answer.

# Short answer questions

These will vary but often require students to give an outline or a brief explanation, for example, giving an outline or definition of a psychological concept, describing the findings of a study, or explaining the difference between two terms. Depending on the material, the mark schemes for these short questions will be either points-based, with marks awarded for certain points made in the answer, or levels-based, where the response is compared with level descriptors before a final mark is determined.

# Scenario or stem-led questions

Here students are presented with a scenario or a stem. This will usually consist of a verbal description of an everyday situation or a description of a study that has been carried out, possibly including a set of results from the study. Students are required to demonstrate their understanding of specification content by applying what they know about psychology to the information given in the scenario or stem. Engagement with the material in the stem is important if students are to access the marks for this type of question. Mark schemes for these questions are either points-based or levels-based dependent on the exact nature of the material.

# **Extended writing**

Some higher tariff questions will require extended writing where students write in paragraphs and prose. Typical commands here will be 'Describe and evaluate...' or 'Discuss...' Here students will be expected to present material in an organised and logical way, use evidence to support arguments if appropriate, and formulate conclusions consistent with the content of the response. Mark schemes for these questions are levels-based where the response is compared with level descriptors before a final mark is determined. Instructions in how to apply the levels-based mark schemes are given at the start of each mark scheme. The maximum tariff for any one piece of extended writing will be 20 marks, with more opportunities for extended writing at A-level than at AS Level.

# **Research methods questions**

Research methods are assessed on Paper 2 in Research methods 1 and on Paper 3 in Research methods 2. On each of these papers, students will read a scenario or stem about a study and then answer a series of short answer questions on the material they have read. These questions usually require students to apply their knowledge to the scenario; many questions include the words '...in this study', meaning the answer must be linked back to the stem in some way for credit. In this type of question generic answers would not be creditworthy.

Students may be required to perform mathematical calculations in research methods questions, however, they will not be required to calculate the standard deviation in an examination or calculate any inferential statistical tests from first principles using raw data in an examination.

# How the units fit together

These qualifications are modular. The full International A-level is intended to be taken over two years. The specification content for the International AS is half that of an International A-level. The International AS can be taken as a standalone qualification or can be used to count towards the International A-level. Students can take the International AS papers in the first year and then take the International A-level papers in the second year to complete the full International A-level, or they can take all the papers together in the same examination series at the end of the course.

The International AS content will be 50% of the International A-level content but International AS assessments will contribute 40% of the total marks for the full International A-level qualification, with the remaining 60% coming from the International A-level assessments.

# Possible examination routes

- Papers 1 and 2 only, for the Oxford AQA International AS qualification.
- Papers 1 and 2, for the Oxford AQA International AS qualification, in one series, then Papers 3 and 4, for the full Oxford AQA International A-level, in a later series.
- Papers 1, 2, 3 and 4 in the same series, leading to the full Oxford AQA International A-level.

Students may resit a paper any number of times within the shelf life of the specification. The best result for each paper will count towards the final qualification. Examinations will be available in January and May/June.

# Order of teaching

Students on a two year course should cover the content for Paper 1 and Paper 2 in the first year. The order in which first year topics are covered is up to individual teachers and will vary according to whether or not classes are shared and whether or not students are to be entered for January examinations. On the specimen scheme of work, Paper 1 content is covered first but much of the research methods content is integrated into topic content on the scheme where it is possible. For example, when covering the Memory topic, students cover the experimental method and carry out a practical experiment as part of their learning.

In the second year of a two year course it is important that students cover the content of Paper 3 before they study the content of Paper 4. This is because material on Approaches and Issues and debates will be better appreciated after students have gained knowledge and understanding of the various topic areas, and because questions in the Approaches and Issues and debates section will sometimes require students to make reference to content from other topic areas. On the scheme of work, Applied psychology: Work and the individual appears before the synoptic Approaches and Issues and debates so students can make references to the content of this topic in answer on the synoptic questions on Approaches and Issues and debates.

On Paper 2, questions on research methods will be confined to the specification content in Research methods 1. On Paper 3, questions on research methods can cover any of the material in the specification content in Research methods 1 and Research methods 2. Students should be reminded that questions on Paper 3 can assess any knowledge of research methods covered throughout the course, either in Research methods 1 or Research methods 2.

# Supporting the learning required for the units

# Section 3.1

Further information on some of the suggested activities on the scheme of work:

**Primacy-recency demonstration**: read aloud a list on 20 non-associated single syllable nouns. Students then write down what they recall in any order. Using whiteboard or graph paper, draw up a serial position curve using the recall data for each word. Use to illustrate the primacy-recency effect and features of the multi-store model.

**Baddeley and Dale/Conrad**: read aloud sets of 6 words, some sets sound similar, other sets sound different but have similar meaning, students to repeat aloud immediately after each set.

Set 1: sound similar eg cat, hat, bat, pat, rat, mat

Set 2: mean similar eg big, wide, high, tall, huge, great

In a short-term test like this, there should be greater confusion with similar sounding words because short-term memory (STM) is coded acoustically. Use to illustrate coding in STM.

**Digit span task**: read aloud sets of digits (eg 4791), students must recite the digits aloud after each set. Increase by one digit each time. Use to illustrate the capacity of STM.

**Jenness Bean Jar study**: use a glass jar containing large number of beans or similar. Students pass the jar round, hold it for just a few seconds, then write down on a piece of paper their personal estimate of the number of beans in the jar. The personal estimate should be kept private. Then students go into small groups, eg 4 people. The next task is to achieve a group consensus of the number of beans but members of the group should not disclose their original personal estimate. One member of the group should not disclose their original personal estimate. One member of the group should not disclose their original personal estimate. One member of the group should record the group estimate on which they all must agree. Finally, the jar is passed around again, and each person then has a final chance, they can either stick with their original estimate or change to a new personal estimate. Offer a prize for the final personal estimate that is nearest the true number of beans. At this point, all students disclose their, original estimate and their second personal estimate. Data can then be collated to show i) whether individuals conform to the group norm in giving their second personal estimate, ii) higher standard deviations/ranges in personal estimates given before the group discussion, iii) how group norms can vary between groups.

# Section 3.2

Further information on some of the suggested activities on the scheme of work:

**Cognitive explanations of depression**: examples of suitable experiences for worksheet – students need to provide examples of likely negative attributions arising after each event:

- losing a job
- failing a driving test
- falling out with girlfriend or boyfriend
- getting a poor grade in exams.

The same sheet can later be used for a discussion of how cognitive therapy might be used to change these negative beliefs into more positive beliefs.

# Scenarios to elicit list of sympathetic and parasympathetic actions:

'James was waiting to go on the theme park ride. His breathing quickened and his heart raced. His eyes were wide with excitement. He started to feel hot and sweaty. After he had been on the ride he suddenly felt thirsty and tired.'

'Maya finished work late and walked home in the dark. The hairs on the back of her neck stood on end when a cat suddenly rushed across the street in front of her. She realised that her mouth was dry and the palms of her hands were all sticky. When she reached her door she breathed a huge sigh of relief and calmed down quite quickly.

List of behavioural constructs: observational method. The students' task is to devise a set of objective behavioural categories for each construct. Suitable constructs include:

- sadness
- aggression
- friendliness in the playground
- kindness in a shopping centre
- · nervousness when waiting for an interview
- greeting at an airport.

# Section 3.3

Further information on some of the suggested activities on the scheme of work:

Sleep diary: At the start of the topic students should set up a personal diary for recording of own daily sleep habits and sleep related experiences. It would be appropriate to have a class discussion of suitable content eg hours slept, sleep disturbances, dreaming, feelings of tiredness etc. This diary is to be kept for the duration of the topic and will be analysed in a variety of ways at the end of topic. Note – students must record approximate number of hours sleep each night and morning after tiredness rating on a scale of 1 (not at all tired) to 10 (extremely tired) for Spearman's correlation later in the course.

An experiment to investigate age/cultural differences in attitudes towards people showing symptoms of schizophrenia: Designed by the students and carried out using other students, friends or family. Students' proposals should be checked by the teacher beforehand to ensure that the plans are ethical.

Firstly students will have to determine their two groups. It would make sense to compare the attitudes of late teens (people of student age) and older adults (parents or similar) or to compare people from two different cultural backgrounds. The next decision will be about how to measure attitudes. This is best done using a student-designed stimulus paragraph describing a person showing symptoms of schizophrenia and a simple rating scale to test attitudes, for example:.

On a scale of 1–10 how reliable is the person in the paragraph, 1 being not at all reliable and 10 being very reliable?

On a scale of 1–10 how kind is the person in the paragraph, 1 being not at all kind and 10 being very kind?

A variety of traits could be used but the task should be quite short and simple to analyse. Students should be able to convert the responses to an overall rating score for each person.

Data can then be analysed for a significant difference in scores between the two groups using the Mann Whitney inferential test.

**Reporting the schizophrenia investigation**: Use the following sections: abstract, introduction, method, results, discussion, references. Here is a brief guide as to what should appear in each section:

• Abstract: A very brief summary paragraph of aim, hypothesis, participants, task/method, result and conclusion.

- Introduction: A brief paragraph setting out the background. One appropriate piece of research should be included here about attitudes to people with psychological disorders or information from a textbook that includes relevant material.
- Method: Detail of how the study was conducted to include experimental design, independent variable (IV) and dependent variable (DV), participants/sample, materials and procedure.
- Results: Descriptive and inferential statistics should be presented. Medians and ranges for each group should be put into a table with some verbal description to accompany the table. Details of the Mann Whitney analysis should be included with a summary paragraph using statistical notation, for example;
- 'The calculated value of U ... was less than the critical table value for a two-tailed test where p=0.05'
- The section should conclude with a sentence stating whether or not the results of the test support the alternative hypothesis.
- Discussion: Very brief paragraphs to summarise the findings and link these to the research in the introduction, consider problems with the study and how they might be rectified, explain any implications and suggest possible further research.
- References: The study or textbook cited in the introduction should be presented in the conventional format.

**Cognitive explanation for schizophrenia - monitoring own output**: Demonstration of a technique used to study monitoring of own output can be carried out in class. Students have their eyes covered. Each is provided with a standard sheet of paper and a standard pencil. The teacher then gives a series of verbal instructions to students about what to draw on their paper eg 'draw a rectangle', 'draw a circle'. When a few shapes have been drawn, the papers are collected in by the teacher and shuffled. Students then remove their blindfolds. The task is for each student to identify his/her own piece of paper, ie identify own output. A similar task has been used by researchers investigating impaired cognitive processing in people with certain symptoms of schizophrenia (Stirling et al 1998).

# Section 3.4

Further information on some of the suggested activities on the scheme of work:

**Study of social facilitation**: Students can design and conduct a simple study of social facilitation in class. Choose a simple manual task that is quick to carry out and will give numerical data eg a pencil maze or a dot-to-dot task. Using this type of task allows for the recording of time taken to complete the task without error as the dependent variable. The task should be carried out by each participant twice: once sitting alone and once sitting next to another participant doing the same task at the same time. As there could be practice effects, the conditions will need to be counterbalanced. When all participants have completed both conditions, the mean times and the standard deviations for each condition can be calculated and put into a summary table. Students should be required to choose an appropriate statistical test to analyse the data (the related t-test) and write a paragraph to justify their choice.

**Stroop study replication**: To reinforce understanding of the role of inference in cognitive research. Students can act as participants. Stroop materials are available on the internet or students might want to make their own visual stimulus lists. The two sets of stimuli are i) a list of colour words written in coloured ink to match the word, and ii) a list of colour words, written in coloured ink that conflicts with the word eg:

List 1	List 2
RED	RED
BLUE	BLACK
GREEN	BLUE

The task is to move down the list saying aloud the colour of the ink in which the word is written. Participants should work down the list as fast as possible but make sure they do not make any mistakes. If they do make a mistake they should pick up where they left off and continue. Time in seconds to complete the list should be recoded. The design is repeated measures, and conditions should be counterbalanced. The independent variable (IV) is whether word and colour of ink match, the dependent variable (DV) is the time in seconds taken to state colour of words on the list. At the end of the demonstration ask the students what they think the results show about thinking processes. Then explain the use of 'inference' in this type of study. Students can consider how time taken to complete the list is an objective measure, but they are still making inferences about cognitive processes involved.

# Extended writing skills

Extended writing is required at both AS and A-level so students should have ample opportunity to develop essay-style skills before they come to examinations. It helps to set regular essay-style questions as homework. Students should have the opportunity to assess their own work and the work of their peers against the descriptors in the levels-based marks schemes. Students sometimes think that each point they make in an essay-style question is worth a mark, however, levels-based mark schemes do not award discrete marks for bits of information but instead assess the quality of the answer as a whole.

In writing extended responses students should write in prose, using punctuation and paragraphing. Unlike when writing an English essay, it is not so important here to write a thorough introduction and conclusion; there is not much time available and it is most important for students to prioritise the demonstration of knowledge of psychological material. A short introductory sentence and short concluding sentence will usually be sufficient. Certainly there is no benefit to be gained by writing a detailed conclusion that simply re-iterates points made earlier in the answer.

Extended responses that consist of a list of unconnected points with little or no explanation are unlikely to be very effective. It is far better to take fewer points but elaborate on them properly, presenting counter-argument where appropriate to build a sensible coherent discussion.

# Practical research skills

There is no formal requirement that students carry out practical investigations and no direct assessment of practical work as part of the course. However, knowledge and understanding of research methods, practical research skills and mathematical skills will be assessed in Papers 2 and 3. These skills should be developed through study of the specification content and through ethical practical research activities, involving:

- designing research
- conducting research
- analysing data
- interpreting data.

Some examples of suitable practical activities for learning are given in the schemes of work. Further suggested examples are given below.

# Activity 1: investigating short term memory

Research suggests that short term memory (STM) cannot hold very much information. You are going to design and carry out an experiment to see whether the capacity of STM differs between two groups: A-level students and older people.

#### Tasks

Generate a hypothesis for this study. Justify the direction of your hypothesis. Identify the IV and DV in this experiment.

Devise a brief and suitable set of instructions that will be read or given to participants in order to:

- gain their consent to take part
- enable them to carry out the task appropriately.

#### **Materials**

In small groups devise and justify an appropriate task for measuring the capacity of STM. This might be a world list containing about 20 words. Think carefully about the materials you will use and explain why these factors need to be controlled, eg:

- length of words
- type of words
- number of words
- word presentation.

## Participants

Decide upon and justify your choice of participants for the two conditions (the two age groups). Identify and justify your sampling method.

#### **Ethical issues**

Before you collect your data, identify and address any relevant ethical issues which may arise from the study you have designed. For example, consider how participants will be debriefed afterwards.

## Results

Once you have collected your results, produce a summary table which includes appropriate measures of central tendency. Also generate an appropriate graphical display. Ensure these are appropriately labelled and have a title.

Ask another student to interpret your table and graph for the rest of the class.

# Activity 2: investigating age and sleep patterns

Research has shown that the human body clock is very important in determining sleep and wake patterns. Your task will be to design a study to investigate the relationship between age and sleep duration.

#### Tasks

Generate an appropriate directional hypothesis for this correlational study.

Design a response sheet for people to complete in order to record the amount of time they sleep over a number of nights. You will need to consider how many nights, which days of the week and how they are to record their sleep (eg minutes/hours/clock times). Justify your choices.

What other information will you need on this sheet to enable you carry out the study? For example, how will you record the age of your participants?

# Participants

In terms of sampling, who will be your target population and what type of sampling will you use? Justify your choices. Decide upon and operationalise the age groups you hope to measure. You should aim to include a wide age range and therefore address the ethical requirements associated with these, particularly with regard to any participants under 16 years of age.

## Results

Once you have collected your data, produce a suitable scattergram to show the relationship between age and sleep duration.

Do the results appear to support your predictions? Justify your answer.

Which statistical test would you use to look for a significant relationship between age and sleep duration? Why would you choose to use this test?

# Discussions

In two or three paragraphs, and as part of the 'discussion' section of a psychological investigation, briefly consider the possible methodological implications of your findings, particularly with regard to confounding variables within the study.

#### References

In order to practice the skill of reference writing, find three references for studies which have investigated sleep. Include them here in an academically accepted format.

**Hint**: look at the reference section of an academic textbook. What do you notice about their order and format?

# Activity 3: investigating honesty

Some researchers believe that when we are being truthful, our eyes look to the left, but it we are not being honest, we gaze to the right and that this process is reversed for left handed people. Other researchers are not so sure.

#### Task

Your task is to design two ways in which this could be tested.

## Design 1

Design an observational study which could be carried out in a sixth form setting using random sampling.

You will need to describe:

- · how the researcher could consistently determine gaze direction
- the questions asked in order to elicit truthful and non-truthful answers
- the type of observation undertaken and why
- the ethical issues associated with a study of this nature
- how the random sample would be achieved.

# Design 2

Design a second experiment in which eye gaze direction could be measured through the use of more physiological means such as an electrooculography (EOG) (look online for this).

You will need to describe:

- the ethical issues associated with a study of this nature and how they differ from the observation study described above
- an appropriate brief and debrief and how these might differ from those given in the observation study described above
- the type of experiment undertaken and why. For example, would this be a laboratory experiment or a field experiment, and why?

#### References

In order to practice the skill of reference writing, find three references for studies which have investigated this topic. Include them here in an academically accepted format.

**Hint**: look at the reference section of an academic textbook. What do you notice about their order and format?

# Activity 4: investigating food preference

Many theories have been offered to explain food preference in humans; some of which are biological, others due to environmental influence. For example, it is said that more people are now choosing to eat vegetarian diets than ever before.

#### Task

You will carry out a study to record:

i) the number of males and females who are vegetarians

ii) how long (in months/years) the male and female participants have been vegetarian.

## Sampling

Participants in this study should be over 16 years of age. Explain why.

Design your study to gain participants using volunteers. How will you achieve this? Outline the main methodological problems arising from using volunteers in research.

#### Procedure

Decide whether this will take the form of written responses to a simple questionnaire or a verbal survey of participants. Design and justify your materials accordingly.

Whichever method you choose, you should plan and produce an appropriate set of procedures for your investigation. This way, you will know exactly what you intend to do and/or say to participants and what they have to do/say during the investigation.

## Results

Identify and justify the level of measurement you will collect in part i) and part ii) of the study.

Produce a summary of your findings using appropriate descriptive statistics. Include a written conclusion of your findings.

## Ethical issues

Eating behaviour can be a sensitive topic for some people. Perhaps their diet is governed by illness or other personal factors. Outline at least two ways in which you will ensure that your participants are not placed in a position of psychological discomfort by taking part in your study.

# Activity 5: investigating holism v reductionism

One of many important debates in psychology is that of holism versus reductionism. This debate can be illustrated in theories of face recognition. According to holistic theory, we need to see a whole face in order to identify it, whereas according to the reductionist theory, single features alone are sufficient.

#### Task

You will carry out an investigation to test holism and reductionism in face recognition.

# **Materials**

In small groups, collect and agree upon ten celebrity faces for use in this investigation. What will you need to consider when choosing the faces for this study? Perhaps how well known the person is or their gender.

Explain how these and other factors might affect the validity of your study.

You will need to duplicate these photographs. One set of the faces will remain 'whole', whilst the other set should only show the eyes of the same celebrities.

## Design/participants

Using an independent groups (unrelated) design, randomly allocate 10 people to condition 1 (whole face) and 10 people to condition 2 (eyes only). Explain why the independent groups design would be used. Could you use a different design in this study?

## Procedure

The participants simply have to name the celebrity. You will time them using a stopwatch to see how long it takes to name all 10 celebrities in each condition (whole or eyes). Devise a suitable system for accurately recording total response time.

Carry out a pilot study with two or three people prior to the main study in order to test and improve the procedure and/or materials. You may, for example, have to consider what you will do if the participant answers incorrectly, or takes a long time to answer.

## Results

Produce a summary table and graph to summarise the findings from your study. Which side of the debate seems to be supported? Explain your answer.

Name and justify an appropriate statistical test that could be used to analyse your data.

# Conclusion

The Oxford AQA International AS and A-level Psychology is an exciting new opportunity for schools and colleges outside the UK to study an AS/A-level course which contains many similar features to the UK qualification, while at the same time having distinctive features of its own. This short teachers' guide is an introduction to the course at the point of its inception. Further reports, advice and guidance will be offered once the course is up and running.

Teachers should note that in due course there will be approved text books (details of which can be found at oxfordaqaexams.org.uk)

# Appendix

# Appendix 1 - Command words

Command words are the words and phrases used in exams and other assessment tasks that tell students how they should answer the question.

The following command words are the official list of command words and their meanings that are relevant to this subject. In addition, where necessary, we have included our own command words and their meanings to complement the official list.

# Analyse

Separate information into components and identify their characteristics.

# Calculate

Work out the value of something.

## Choose

Select from a range of alternatives.

# Comment

Present an informed opinion.

# Compare

Identify similarities and/or differences.

## Complete

Finish a task by adding to given information.

## Consider

Review and respond to given information.

## Describe

Give an account of.

## Design

Set out how something will be done.

## Discuss

Present key points about different ideas or strengths and weaknesses of an idea.

# Distinguish

Explain ways in which two things differ. Provide detail of characteristic that enable a person to know the difference between ...

## Draw

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Produce a diagram.

# Evaluate

Judge from available evidence.

# Explain

Set out purposes or reasons.

# Explain how

Give a detailed account of a process or way of doing something.

## Explain why

Give a detailed account of reasons in relation to a particular situation.

# Identify

Name or otherwise characterise.

# Give

Produce an answer from recall or from given information.

# Justify

Provide reasons, reasoned argument to support, possibly provide evidence.

## Label

Provide appropriate names on a diagram.

## Name

Identify using a recognised technical term.

## Outline

Set out main characteristics.

## Select

Choose or pick out from alternatives.

## State

Express in clear terms.

# Suggest Present a possible case/solution.

# Which is

Select from alternatives.

# What is meant by

Give a definition.

# Write

Provide information in verbatim form.

# GET HELP AND SUPPORT

Visit our website for information, guidance, support and resources at oxfordaqaexams.org.uk

You can contact the psychology team directly;

E: psychology@oxfordaqaexams.org.uk

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