



# YEAR 10 GCSE AUTUMN TERM

'An ambitious curriculum that meets the needs of all'

## Medium Term Planning - Topic: Research Methods

### Curriculum Intent

Pupils will be taught the following this half term. Research Methods

#### Why do we teach this to students?

This is at the very core of what psychology is: finding ways to explore and investigate human behaviour with scientific rigor.

#### Why do we teach this now?

After students should start to gain a good understanding of what the subject is all about, they can begin to see how psychologists do their usual work.

### Skills/Assessment objective links

<u>Planning Research</u>	Learners should have knowledge and understanding of the following features of planning research and their associated strengths and weaknesses, including reliability and validity.
Hypotheses	<ul style="list-style-type: none"><li>• Null and alternative hypotheses</li><li>• Hypotheses to predict differences, correlations, or no patterns.</li></ul>
Variables	<ul style="list-style-type: none"><li>• Independent variables and how they can be manipulated</li><li>• Dependent variables and how they can be measured</li><li>• Co-variables and how they can be measured</li><li>• Extraneous variables and how they can be controlled, including the use of standardisation.</li></ul>
Experimental Designs	<ul style="list-style-type: none"><li>• Repeated measures design</li><li>• Independent measures design.</li></ul>
Populations and Sampling	<ul style="list-style-type: none"><li>• Target populations, sampling and sample size with reference to representativeness and generalisability</li><li>• Sampling methods; random, opportunity, self-selected</li><li>• Principles of sampling as applied to scientific data.</li></ul>
Ethical Guidelines	<ul style="list-style-type: none"><li>• Ethical issues:<ul style="list-style-type: none"><li>◦ lack of informed consent</li><li>◦ protection of participants / psychological harm</li><li>◦ deception.</li></ul></li><li>• Ways of dealing with ethical issues:<ul style="list-style-type: none"><li>◦ use of debriefing</li><li>◦ right to withdraw</li><li>◦ confidentiality.</li></ul></li><li>• The British Psychological Society's Code of Ethics and Conduct.</li></ul>

#### Doing Research

Learners should have knowledge and understanding of the following features of doing research and their associated strengths and weaknesses including reliability and validity and the type of research objectives for which they are most suitable.

Experiments	<ul style="list-style-type: none"><li>• Laboratory</li><li>• Field</li><li>• Natural.</li></ul>
Interviews	<ul style="list-style-type: none"><li>• Structured</li><li>• Unstructured.</li></ul>
Questionnaires (Surveys)	<ul style="list-style-type: none"><li>• Open questions</li><li>• Closed questions</li><li>• Rating scales.</li></ul>
Observations	<ul style="list-style-type: none"><li>• Naturalistic</li><li>• Controlled</li><li>• Overt</li><li>• Covert</li><li>• Participant</li><li>• Non-participant.</li></ul>
Case Studies	<ul style="list-style-type: none"><li>• Use of qualitative data</li><li>• Use of small samples.</li></ul>

	<p>Correlations</p> <ul style="list-style-type: none"> <li>• Use of quantitative data</li> <li>• Positive, negative and zero correlations.</li> </ul> <p>There are three Assessment Objectives in the OCR GCSE (9–1) in Psychology. These are detailed in the table below.</p> <p style="text-align: center;"><b>Assessment Objective</b></p> <p><b>AO1</b> Demonstrate knowledge and understanding of psychological ideas, processes and procedures</p> <p><b>AO2</b> Apply knowledge and understanding of psychological ideas, processes and procedures</p> <p><b>AO3</b> Analyse and evaluate psychological information, ideas, processes and procedures to make judgements and draw conclusions</p>
<b>Spiritual, moral, social, and cultural development</b>	<p><b>SMSC:</b> understanding how ethical guidelines were applied to psychological research</p> <p><b>PSHE:</b></p> <p>How to talk about emotions accurately and sensitively</p> <p>That happiness is linked to being connected with others</p> <p>How to recognise the early signs of mental wellbeing concerns</p> <p>Common types of mental ill-health</p> <p><b>British Values:</b> Learning how to deal with the ethical issues, how to get participants back to the ‘state’ they were in when they entered an experiment. How to make sure that participants in research don’t have any long-term effects.</p> <p><b>Skills Builder:</b> Critical thinking and analytical. communication and interpersonal, Leadership and teamwork skills, Organization/time management skills, Goal setting and prioritizing. Knowledge of and experience with basic techniques of statistical analysis, conducting literature reviews, synthesizing and interpreting information, designing and conducting new research, data analysis, and interpreting and understanding research results</p> <p><b>Relationships</b> discussion of ethical issues and informed consent, socially sensitive research, treatment of participants in psychological research.</p>
<b>Numeracy</b>	<p>Data handling and analysis. Quantitative and qualitative data; the distinction between qualitative and quantitative data collection techniques. Primary and secondary data, including meta-analysis.</p> <p>Descriptive statistics: measures of central tendency – mean, median, mode; calculation of mean, median and mode; measures of dispersion; range and standard deviation; calculation of range; calculation of percentages.</p> <p>Presentation and display of quantitative data: graphs, tables, bar charts, histograms. Distributions: normal and skewed distributions; characteristics of normal and skewed distributions.</p>
<b>Literacy</b>	<p><b>Vocabulary Tier 2:</b> Experiment, naturalistic, controlled, covert, overt, correlations, replicability, objectivity</p> <p><b>Vocabulary Tier 3:</b> Correlation coefficient, content analysis, thematic analysis, discourse, reliability, validity, nominal data, ordinal data, interval data, null hypothesis, levels of significance, probability, critical values, calculated values, type I errors, type II errors, scientific reports, paradigms, hypothesis testing, falsifiability,</p> <p><b>Reading:</b> reciprocal reading strategies used, eg predictions – many hooks/ starters include asking what do we already know about this topic. Opportunity to summarize eg write down the main points of an argument/ theory. Questioners – does the text raise any questions, group work as an opportunity to discuss. Connectors – can the text be linked to any theories (either for or against). Opportunity to clarify – discussion of any words or ideas that the student didn’t understand.</p> <p><b>Writing:</b> As Psychology is all exam classes, many lessons are dedicated to essay writing. In research methods the main writing task will be designing a study for up to 12 marks.</p> <p><b>Oracy:</b> group work in the majority of lessons, think pair share activities eg a debate on Is Psychology a science.</p>
<b>Becoming future ready</b>	<p><b>Personal Skills:</b> As a Psychology student you will learn research skills, an understanding of how people think and behave which is essential in the real world, you will gain an ability to relate and empathise with a range of people, you will gain an understanding of how to listen to others sensitively and good questioning skills, you will learn techniques of how to cope with emotionally demanding situations, you will get the chance to work on your own and with others.</p>

	<b>Employability:</b> As well as the above personal skills leading to employability, Psychology A level delivers skills employers value, such as numerical skills, the ability to understand and work with statistics, effective communication and the ability to work productively in teams. It also gives an understanding of the human mind and behaviour and so any employment would use these skills as all employment involves working with others in some aspect or another.				
<b>Adaptation</b>	Throughout this topic, quality first teaching will provide differentiation:				
<b>QFT/SEND Provision</b>	<b>By product:</b> differential outcomes using must, could, should. <b>By resource:</b> each PowerPoint has different levels of differentiation to access, 'key points' extension, stretch and challenge. Stimulus questions are of a different ability. <b>By Intervention:</b> by providing different levels of supervision and support, psychology drop ins, catch up sessions. <b>By Progressive Questioning:</b> exploring pupils' understanding through interactive dialogue. <b>By Grouping:</b> according to prior attainment, gender, social preference, preferred learning style. <b>By Task:</b> Pupils should be involved in the identification of targets which are meaningful to them and in the selection of an appropriate task from the given range. <b>By Offering Optional Activities:</b> In class or as homework, to extend learning. This QFT/SEND provision will be explicit within the lesson-by-lesson schemes of work.				
<b>Implementation Curriculum Delivery</b>					
<b>Learning Outcomes</b>  <b>(Most powerful knowledge)</b>	<b>Research Methods – Topic 1 PLC</b>	<b>Assessment Criteria</b>	<b>RED</b>	<b>AMBER</b>	<b>GRE</b>
	Be able to identify; a) An independent variable (IV) b) A dependent variable (DV) c) Extraneous Variable	<b>A01</b>			
	Be able to write; a) A null hypothesis b) An alternative hypothesis	<b>A01</b>			
	Understand experimental and research designs, including strengths and weaknesses; a) Independent measures b) Repeated measures c) Matched pairs	<b>A01/A03</b>			
	Methods of sampling, including strengths and weaknesses of each sampling method; a) Understand target population samples b) Understand random sampling c) Opportunity sampling	<b>A01/A03</b>			
	Understand ethical issues in psychological research and how to deal with ethical issues, including; a) Informed consent b) Deception c) Confidentiality d) Right to withdraw e) Protection of participants	<b>A01</b>			
	Understand research methods, including the features, strengths and weaknesses of the following, and the types of research for which they are suitable; a) Laboratory experiment b) Field experiment c) Natural experiment	<b>A01/A03</b>			

	<ul style="list-style-type: none"> <li>d) Interviews, including structured, semi-structured and unstructured</li> <li>e) Questionnaires, including closed-ended questions to elicit quantitative data and open-ended questions to elicit qualitative data</li> <li>f) Correlation</li> <li>g) Case studies</li> <li>h) Observation</li> </ul>				
	Analysing research, including strengths and weaknesses: a) Types of data-quantitative and qualitative	<b>A01/A03</b>			
	Descriptive statistics: <ul style="list-style-type: none"> <li>a) Mean</li> <li>b) Median</li> <li>c) Mode</li> <li>d) Range</li> <li>e) Ratios</li> <li>f) Fractions</li> <li>g) Percentages</li> <li>h) Decimal place</li> <li>i) Significant figures</li> <li>j) Normal/skewed distributions</li> </ul>	<b>A01</b>			
	Tables, charts and graphs: <ul style="list-style-type: none"> <li>a) Construct and interpret frequency tables</li> <li>b) Construct and interpret bar charts</li> <li>c) Construct and interpret histograms</li> <li>d) Pie chart</li> <li>e) Line graphs</li> <li>f) Scatter graphs</li> </ul>	<b>A01</b>			
	Reliability and validity: <ul style="list-style-type: none"> <li>a) Inter-rater reliability</li> <li>b) Internal reliability</li> <li>c) External reliability</li> <li>d) Ecological reliability</li> <li>e) Construct reliability</li> <li>f) Population validity</li> <li>g) Demand characteristics</li> <li>h) Observer effect</li> <li>i) Social desirability</li> </ul>	<b>A01</b>			
	Sources of bias	<b>A01</b>			
<b>Current learning to be developed in the future within:</b>	All topics could have RM integrated in the exam and so we incorporate RN questions into each topic. See PowerPoints on teams.				
<b>Assessment</b>	Refer to assessment maps for formative and summative assessment opportunities.				
<b>Impact</b>	Attainment and Progress – Refer to assessment results / data review documentation.				

