



YEAR 13 Spring 2 TERM

'An ambitious curriculum that meets the needs of all'

Medium Term Planning - Topic: Research Methods year 2

Curriculum Intent

Pupils will be taught the following this term: RMN year 2

Why do we teach this to students?

Students now need to develop a deeper understanding of core research methods and how they are used by psychologists in various ways, as well as to make judgements as to which methods they should themselves be using.

Why do we teach this now?

RM is taught in all aspects of the papers so it serves as a recap for year 1 RM and also prepares them for the upcoming exams. Research methods can come into any paper in the exam, although students often don't fully revise for it until paper 2 which is the whole RM paper. Therefore, by teaching this last it is fresh in their minds for whenever it may come up in any paper in the exams.

Research methods Students should demonstrate knowledge and understanding of the following research methods, scientific processes and techniques of data handling and analysis, be familiar with their use and be aware of their strengths and limitations.

- Experimental method. Types of experiment, laboratory and field experiments; natural and quasi-experiments.
- Observational techniques. Types of observation: naturalistic and controlled observation; covert and overt observation; participant and non-participant observation.
- Self-report techniques. Questionnaires; interviews, structured and unstructured.
- Correlations. Analysis of the relationship between co-variables. The difference between correlations and experiments.
- Content analysis.
- Case studies.

Scientific processes

- Aims: stating aims, the difference between aims and hypotheses.
- Hypotheses: directional and non-directional.
- Sampling: the difference between population and sample; sampling techniques including: random, systematic, stratified, opportunity and volunteer; implications of sampling techniques, including bias and generalisation.
- Pilot studies and the aims of piloting.
- Experimental designs: repeated measures, independent groups, matched pairs.
- Observational design: behavioural categories; event sampling; time sampling.
- Questionnaire construction, including use of open and closed questions; design of interviews.
- Variables: manipulation and control of variables, including independent, dependent, extraneous, confounding; operationalisation of variables.
- Control: random allocation and counterbalancing, randomisation and standardisation.
- Demand characteristics and investigator effects.
- Ethics, including the role of the British Psychological Society's code of ethics; ethical issues in the design and conduct of psychological studies; dealing with ethical issues in research.
- The role of peer review in the scientific process.
- The implications of psychological research for the economy.
- Reliability across all methods of investigation. Ways of assessing reliability: test-retest and inter-observer; improving reliability.
- Types of validity across all methods of investigation: face validity, concurrent validity, ecological validity and temporal validity. Assessment of validity. Improving validity.
- Features of science: objectivity and the empirical method; replicability and falsifiability; theory construction and hypothesis testing; paradigms and paradigm shifts.
- Reporting psychological investigations. Sections of a scientific report: abstract, introduction, method, results, discussion and referencing.

Data handling and analysis

- Quantitative and qualitative data; the distinction between qualitative and quantitative data collection techniques.
- Primary and secondary data, including meta-analysis.
- 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; positive, negative and zero correlations.
- Presentation and display of quantitative data: graphs, tables, scattergrams, bar charts, histograms.
- Distributions: normal and skewed distributions; characteristics of normal and skewed distributions.
- Analysis and interpretation of correlation, including correlation coefficients.
- Levels of measurement: nominal, ordinal and interval.

Skills/Assessment objective links

	<ul style="list-style-type: none"> • Content analysis and coding. Thematic analysis. <p>Inferential testing Students should demonstrate knowledge and understanding of inferential testing and be familiar with the use of inferential tests.</p> <ul style="list-style-type: none"> • Introduction to statistical testing; the sign test. When to use the sign test; calculation of the sign test. • Probability and significance: use of statistical tables and critical values in interpretation of significance; Type I and Type II errors. • Factors affecting the choice of statistical test, including level of measurement and experimental design. When to use the following tests: Spearman’s rho, Pearson’s r, Wilcoxon, Mann-Whitney, related t-test, unrelated t-test and Chi-Squared test <p>The exams will measure how students have achieved the following assessment objectives:</p> <p>AO1: Demonstrate knowledge and understanding of scientific ideas, processes, techniques and procedures. AO2: Apply knowledge and understanding of scientific ideas, processes, techniques and procedures :in a theoretical context, in a practical context, when handling qualitative and quantitative data. AO3: Analyse, interpret and evaluate scientific information, ideas and evidence, including in relation to issues, to make judgements and reach conclusions, develop and refine practical design and procedures.</p>
<p>Spiritual, moral, social, and cultural development</p>	<p>SMSC: understanding that psychological research can have impacts on the economy.</p> <p>PSHE:</p> <ol style="list-style-type: none"> 1. How to talk about emotions accurately and sensitively 2. That happiness is linked to being connected with others 3. How to recognise the early signs of mental wellbeing concerns 4. Common types of mental ill-health <p>British Values: Democracy – through understanding that psychological research can have impacts on the economy.</p> <p>Skills Builder: Critical thinking and analytical. communication and interpersonal, Leadership and teamwork skills, Organization/time management skills, Goal setting and prioritizing.</p> <p>Relationships discussion of ethical issues and informed consent, socially sensitive research, treatment of participants in psychological research.</p>
<p>Numeracy</p>	<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>
<p>Literacy</p>	<p>Vocabulary Tier 2: Experiment, naturalistic, controlled, covert, overt, correlations, replicability, objectivity</p> <p>Vocabulary Tier 3: 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, replicability, objectivity</p> <p>Reading: 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>Writing: 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 or a mini essay on is Psychology a Science.</p> <p>Oracy: group work in the majority of lessons, think pair share activities eg a debate on Is Psychology a science.</p>
<p>Becoming future ready</p>	<p>Personal Skills: 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> <p>Careers/Employability: 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</p>

	and behaviour and so any employment would use these skills as all employment involves working with others in some aspect or another.
Adaptation	Throughout this topic, quality first teaching will provide differentiation:
QFT/SEND Provision	<p>By product: differential outcomes using must, could, should.</p> <p>By resource: each PowerPoint has different levels of differentiation to access, 'key points' extension, stretch and challenge. Stimulus questions are of a different ability.</p> <p>By Intervention: by providing different levels of supervision and support, psychology drop ins, catch up sessions.</p> <p>By Progressive Questioning: exploring pupils' understanding through interactive dialogue.</p> <p>By Grouping: according to prior attainment, gender, social preference, preferred learning style.</p> <p>By Task: 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.</p> <p>By Offering Optional Activities: In class or as homework, to extend learning.</p> <p>This QFT/SEND provision will be explicit within the lesson-by-lesson schemes of work.</p>
Implementation Curriculum Delivery	To be able to:
	Know the experimental method. Types of experiment, laboratory and field experiments; natural and quasi experiments.
	Know the types of observation: naturalistic and controlled observation; covert and overt observation; participant and non-participant observation.
	Discuss self-report techniques. Questionnaires; interviews, structured and unstructured.
	Know the Correlations. Analysis of the relationship between co-variables.
	Know the difference between correlations and experiments.
	Know content analysis.
	Know case studies.
	Understand how to state aims, the difference between aims and hypotheses.
	Explain the different hypotheses: directional and non-directional.
Learning Outcomes	Know sampling methods: the difference between population and sample; sampling techniques including: random, systematic, stratified, opportunity and volunteer.
(Most powerful knowledge)	Discuss the implications of sampling techniques, including bias and generalisation.
	Discuss pilot studies and the aims of piloting.
	Explain the experimental designs: repeated measures, independent groups, matched pairs.
	Understand observational design: behavioural categories; event sampling; time sampling.
	Understand questionnaire construction, including use of open and closed questions
	Understand the design of interviews.
	Discuss the manipulation and control of variables, including independent, dependent, extraneous, confounding; operationalisation of variables.
	Understand control mechanisms: random allocation and counterbalancing, randomisation and standardisation.
	Explain demand characteristics and investigator effects.
	Discuss the role of the British Psychological Society's code of ethics.

Discuss ethical issues in the design and conduct of psychological studies; dealing with ethical issues in research.
Discuss the role of peer review in the scientific process.
Discuss the implications of psychological research for the economy.
Understand reliability across all methods of investigation. Ways of assessing reliability: test-retest and interobserver; improving reliability
Know the types of validity across all methods of investigation: face validity, concurrent validity, ecological validity and temporal validity. Assessment of validity. Improving validity
Understand the features of science: objectivity and the empirical method; replicability and falsifiability; theory construction and hypothesis testing
Understand paradigms and paradigm shifts
Know how to report psychological investigations. Sections of a scientific report: abstract, introduction, method, results, discussion and referencing
Understand quantitative and qualitative data; the distinction between qualitative and quantitative data collection techniques.
Know the difference between primary and secondary data, including meta-analysis.
Use measures of central tendency – mean, median, mode; calculation of mean, median and mode
Use measures of dispersion; range and standard deviation; calculation of range
Calculate of percentages; positive, negative and zero correlations
Present displays of quantitative data: graphs, tables, scattergrams, bar charts and histograms
Analysis and interpretation of correlation, including correlation coefficients
Know the levels of measurement: nominal, ordinal and interval
Understand content analysis and coding and thematic analysis
Understand distributions: normal and skewed distributions; characteristics of normal and skewed distributions.
Understand statistical testing; the sign test
Know probability and significance: use of statistical tables and critical values in interpretation of significance
Know Type I and Type II errors
Know factors affecting the choice of statistical test, including level of measurement and experimental design
Know when to use the following tests: Spearman's rho, Pearson's r, Wilcoxon, Mann-Whitney, related t-test, unrelated t-test and Chi-Squared test



Red denotes interleaving; aspects of knowledge covered previously.

Current learning to be developed in the future within:

Practice exam papers where research methods is covered within each of the topics.

Assessment

Refer to assessment maps for formative and summative assessment opportunities.

Impact

Attainment and Progress – Refer to assessment results / data review documentation.