

# RESEARCH METHODOLOGIES AND ETHICAL PRINCIPLES

The following table shows the research methodologies and ethical principles which are to be applied across each of VCE Psychology Units 1 and 2. Teachers are able to integrate these methodologies and principles as appropriate across learning and assessment activities.

<b>General category of research methodologies and ethical principles</b>	<b>Unit 1: Introduction to psychology</b>	<b>Unit 2: Self and others</b>
experimental research	construction of hypotheses; identification of independent, dependent and extraneous variables	operational independent and dependent variables; identification of extraneous and potential confounding variables; identification of control and experimental groups; reporting conventions
sampling procedures in selection and allocation of participants	random sampling and stratified sampling	random sampling, stratified sampling, random-stratified sampling, random allocation
techniques of qualitative and quantitative data collection	case studies; observational studies; surveys; questionnaires; interviews; rating scales; longitudinal, cross-sectional, twin and adoption studies	observational studies, self-reports; surveys; questionnaires; interviews; rating scales; standardised and non-standardised tests
statistics	calculation of percentages; construction of tables, bar charts, histograms, pie charts, line graphs and frequency polygons; generalisation of findings to other populations (external validity)	measures of central tendency including mean, median and mode; spread of scores including standard deviation and variance; frequency distributions showing bimodal, normal and skew (positive and negative) distributions; scatter plots and correlation; reliability including test-retest, inter-rater, parallel forms and internal consistency; and validity including content, criterion-related, construct and external
ethics and professional conduct	the role of the experimenter; protection and security of participant's rights; confidentiality; voluntary participation; withdrawal rights; informed consent procedures; use of deception in research; debriefing; use of animals in research; role of ethics committees	the role of the experimenter; protection and security of participant's rights; confidentiality; voluntary participation; withdrawal rights; informed consent procedures; use of deception in research; debriefing; role of ethics committees