

**Related psychological terminology**

Students should have an understanding of the following and be able to apply them in the contexts.

Table 3.4

**Terms related to the research methodology of psychology**

| Research methodology             | Related terms                                                                                                                                                                                                                                                                                                                                                                                       | Learning objective                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data analysis and interpretation | <ul style="list-style-type: none"> <li>• Bar graph</li> <li>• Box and whisker plot</li> <li>• Distributions (e.g. normal, skewness)</li> <li>• Frequency table</li> <li>• Histogram</li> <li>• Line graph</li> <li>• Outliers</li> <li>• Scatterplot</li> <li>• Descriptive statistics</li> <li>• Inferential statistics</li> <li>• Correlation coefficient</li> <li>• Thematic analysis</li> </ul> | <ul style="list-style-type: none"> <li>• Understand that data is represented and analysed in different forms based on the design of the study and the nature of the data.</li> <li>• Analyse and interpret different types of data tables, graphs and results.</li> <li>• Analyse and interpret descriptive and inferential statistics.</li> <li>• Understand the stages of thematic analysis to uncover patterns in textual data that are then grouped into themes that are relevant to the aim of research engaging in thematic analysis.</li> <li>• Descriptive statistics: Analyse and interpret results of typical measures of central tendency (mean, median, mode) and measures of dispersion (range, standard deviation, semi-interquartile range).</li> <li>• Inferential statistics: Analyse and interpret results of typical tests of difference between two groups or conditions (such as chi-square test, related and unrelated t-test, Mann-Whitney test, Wilcoxon test) and tests of relationship between two variables (such as correlation coefficients). Understand the notions of effect size and statistical significance.</li> </ul> |
| Research considerations          | <ul style="list-style-type: none"> <li>• Reliability</li> <li>• Validity (internal, external, content, face, construct)</li> <li>• Generalizability</li> <li>• Researcher and participant biases</li> <li>• Reflexivity</li> <li>• Transferability</li> <li>• Credibility</li> </ul>                                                                                                                | <ul style="list-style-type: none"> <li>• Factors that should be considered when generalizing findings to another population or context.</li> <li>• The role of reflexivity and the process of checking for unconscious bias.</li> <li>• Factors that should be considered when transferring findings of a study to another population or context and the steps to ensuring credibility in research.</li> <li>• Strategies for ensuring the credibility of research.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Research methods                 | <ul style="list-style-type: none"> <li>• Experiments (true or quasi-)</li> <li>• Observations (naturalistic or controlled, overt or covert, participant or non-participant)</li> <li>• Surveys/questionnaires</li> <li>• Interviews (structured, semi-structured or focus group)</li> <li>• Correlational studies</li> <li>• Case studies</li> </ul>                                                | <ul style="list-style-type: none"> <li>• Differentiate between the different types of research methods.</li> <li>• The appropriate selection of research methodology to investigate a psychological question.</li> <li>• The advantages and disadvantages of different research methods.</li> <li>• The potential effects of ethical considerations on psychological research.</li> <li>• The role of external variables in drawing conclusions about causality.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Sampling techniques              | <ul style="list-style-type: none"> <li>• Self-selected</li> <li>• Opportunity</li> <li>• Stratified</li> <li>• Random</li> <li>• Snowball</li> </ul>                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>• The advantages and disadvantages of different sampling techniques.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |