Exercise walk-through

3.3
The research proposal

International Baccalaureate · IB Diploma · Psychology · HL

Judging quality

- A study is only as good as its weakest point.
- Quantitative research is judged by whether its results are free of bias and apply beyond the sample; qualitative research is judged by whether its findings truly reflect what participants meant and whether they may apply in other settings.
- In the replication project of 2015, many of the studies that failed to repeat had small samples and flexible analyses: problems of **generalisability** and of **researcher bias** in deciding how to analyse the data.
- Registering the plan before collecting data is one fix.

The research proposal (internal assessment)

- The **internal assessment** is a research proposal of 24 marks.
- You choose a topic and a **population of interest** (for example, international students in their first year in China), and plan a study with one of the four class-practical methods.
- You argue for every choice, but you do not collect data.
- *The four parts of the research proposal*

Sources for this lesson

- International Baccalaureate, *Psychology guide* (first assessment 2027), Paper 2 and the **internal assessment**.
- Open Science Collaboration, "Estimating the reproducibility of psychological science", *Science* 349 (2015).
- British Psychological Society, *Code of Human Research Ethics* (2021).
- H. Coolican, *Research Methods and Statistics in Psychology* (7th edition, 2019).

Exercises 2.1·2.2

2.1 Rewrite this research question so that it is focused: “Why are people stressed?” [2]



2.2 For the question “Does background noise affect how many maths problems Year 10 students solve in 10 minutes?”, choose a method and justify your choice. [3]



$$\begin{array}{|c|}\hline 3+4\times 2 \\ 12\div 4 \\ \hline \end{array}$$

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2.1

names a population, e.g. Year 12 boarding students in one school; names one aspect that can be studied, e.g. how they experience stress in the week before mock exams

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$$3 + 4 \times 2$$
$$12 \div 4$$

2.2

an experiment; the question asks about the effect of one variable (noise) on another (problems solved), so the IV must be changed and other variables controlled; it gives numbers that can be compared between conditions / it can show cause

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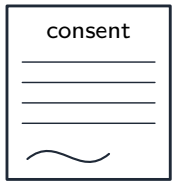


2.3

purposive sampling (snowball also accepted with reasons); the study needs people with a particular experience: international, first year, in Ningbo; a limit: the people chosen through one office may be more outgoing, so include students from several courses / countries

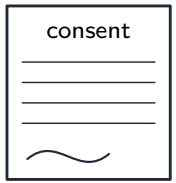
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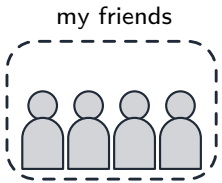


2.4

informed consent from the students (and parents if the school requires it), with the aim and the topic explained; the right to withdraw at any time, including their data; protection from harm: a gentle interview guide, stop if upset, information about the school counsellor; confidentiality: no names, recordings stored securely and deleted after analysis

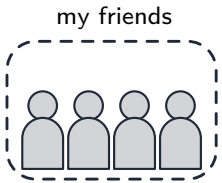
Exercise 2.5

2.5 A proposal plans to interview only the researcher's own friends. Identify **one** problem with this and suggest an improvement. [3]



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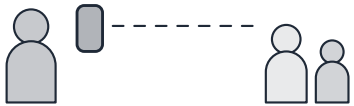
2.5

friends may give answers they think the researcher wants (participant bias) / are similar to each other, so findings may not transfer; improvement: recruit through a teacher or notice, from several classes, people the researcher does not know well

Exercise 3.1 (a)

3.1 Plan a research proposal on this topic: **how students at international schools in China use social media to keep in touch with family abroad**.

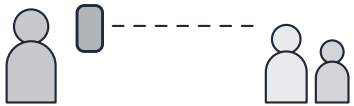
(a) Write a focused research question with a population. [2]



Exercise 3.1 (a)

3.1 Plan a research proposal on this topic: **how students at international schools in China use social media to keep in touch with family abroad**.

(a) Write a focused research question with a population. [2]



(a) focused and studiable, e.g. “How do Year 12 students at one international school in Shanghai whose parents live abroad use social media to stay close to their families?”

Exercise 3.1 (b)

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(b) Choose a method and justify it. [4]

Exercise 3.1 (b)

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(b) Choose a method and justify it. [4]

(b) semi-structured interviews (or another justified method); the question is about experience and meaning, so rich, detailed data are needed; follow-up questions let students explain how and why they use each app; a questionnaire would give counts but miss feelings

Exercise 3.1 (c)

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(c) Describe your sample and procedure. [4]

(c) purposive sample of, e.g., six to eight students whose parents live abroad, recruited through the school counsellor; informed consent, right to withdraw, no names; an interview guide with open questions, about 20 to 30 minutes, recorded; transcripts coded for themes by two researchers

Exercise 3.1 (d)

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(d) Discuss **one** limitation of your plan with reference to the concept of **bias**, and how you would reduce it. [5]

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(d) Discuss **one** limitation of your plan with reference to the concept of **bias**, and how you would reduce it. [5]

(d) award up to [5]: a clear limitation linked to bias, e.g. researcher bias: the researcher's own experience of living away from family may shape the questions and the themes found; reduction: a pilot interview, an interview guide checked by a teacher, and a second researcher coding the transcripts; or participant bias: students may present their family relationships positively; reduce with rapport, confidentiality and non-judgemental questions