Research methods and the research proposal

IB DP Psychology HL research methods, Paper 2 and the research proposal

Only a third repeated

> Methods decide which findings you can trust.

- 2015: 100 published studies repeated.
- Only 36% gave a significant result again.

Where methods are assessed

Practicals, Paper 2, the proposal.

- Four **class practicals**, four methods.
- The proposal is planned, not carried out.

Six methods

> Each method has one strength and one limit.

- **Experiment**: cause, but artificial.
- **Interview**: rich, but hard to compare.

Numbers or words

Quantitative data count; **qualitative data** describe.

- Experiments, questionnaires: mostly numbers.
- Interviews: mostly words.

IV, DV and hypotheses

> Change one thing; measure one thing.

- IV: music or silence. DV: words recalled.
- Null: no difference, or only chance.

Three designs

> Each design has a problem and a fix.

- Independent: random allocation.
- Repeated: **counterbalancing**.

Four types of experiment

> Control against real life.

- Lab: control, low **ecological validity**.
- Natural and quasi: no random allocation.

Five ways to sample

> Who takes part shapes what you can claim.

- Random needs a full list.
- Purposive and snowball suit interviews.

Questionnaires

> Closed answers count; open answers explain.

- Likert: 1 strongly disagree to 5 strongly agree.
- Anonymity reduces **social desirability bias**.

Interviews and focus groups

> Record, transcribe, find themes.

- Structured, semi-structured, unstructured.
- **Focus group**: 6 to 10 people at once.

Observations

Clear categories, two observers.

- Naturalistic or controlled; overt or covert.
- High agreement: **inter-rater reliability**.

Bias and its fixes

> Name the bias, then the fix.

- **Demand characteristics**: hide the aim.
- **Researcher bias**: **double-blind**.

Quality in qualitative work

> Credible, then transferable.

- **Credibility**: **triangulation**.
- **Transferability**: describe the setting.

Six ethical rules

Responsibility applies the rules to one study.

- Consent: parents for under-16s.
- Debrief: tell the true aim afterwards.

Paper 2 Section A

Four questions on one practical.

- Describe 4, explain 4.
- Compare 6, design 6.

Worked answer: the interview

> Aim, sample, consent, procedure, analysis.

- Purposive: four DP2 students after mocks.
- Two themes: lack of sleep, comparing scores.

Section B: the unseen study

> Detail, effect, better design.

- 15 marks; two or more concepts.
- Bias, causality, measurement, responsibility.

The research proposal

> Plan and argue; do not collect data.

- 24 marks; one class-practical method.
- Introduction, methodology, data collection, discussion.

Worked plan: making friends

> Every choice has a reason.

- Semi-structured interviews: rich data.
- Second coder against **researcher bias**.

Check yourself

Can you do each of these?

- Methods, designs, sampling, ethics.
- Paper 2 and the proposal.