Instructions for Class Practical Report: Observation

The following instructions for the class practical report on observations follow the Paper 2 question patterns, but can be applied to the internal assessment task, too. Please, in addition to this document, carefully read **Kognity 3.3**.

Ethics in Observations

Observations should always be done under the supervision of a teacher, and everyone involved must follow ethical standards. Participants must have the option not to participate and can stop at any time.

If carried out in school, participants must sign a **consent form**. Before they agree to take part, everyone must know what the observation is about.

Parental permission is not needed for students 16 and older. A parent or guardian must give written permission for students under 16. If students under 12 are involved, extra care must be taken, especially for parental consent. Teachers must also give their written approval if an observation is done in a school with younger children.

When doing a **naturalistic observation**, the people being observed won't be able to give their consent, and explaining the study afterward might not be possible. If you tell participants they're being studied, it could change how they act. It is acceptable to observe people in public places where they would expect to be seen, like in a shopping mall, on public transportation, or on the street.

All information collected during the observation must be kept private and not shared with others. The names and details of the participants must stay anonymous even after the experiment is over.

Section A 1: Description of The Observation

Question 1 in Paper 2 Section A is a description of how you carried out your observation. The description must make appropriate use of terminology. This question is perhaps the most important for this section of Paper 2 because the other three questions are based on the *aim* and *procedure* that you describe here.

Example: *Describe how you used an observation in your class practical.*

Your description of the observation should include the following details:

- **Aim of the study:** What was the *aim* of the observation? This is not a formal hypothesis but a statement of the study's goal.
- **Research method:** What kind of observation method did you use? *Overt* or *covert*? *Naturalistic* or *lab*? *Participant* or *non-participant*?
- **Sampling technique:** How was the sampling done? Was it (1) *self-selected/volunteer*, (2) *opportunity* or (3) *snowball* sampling?
- **The procedure and the development of the observation guide:** (1) Explain the *identified behaviour* you observed. (2) Explain the *location* where you conducted your observation. (3) Explain the *observation guide* you used to record the identified observation. Include clear definitions of the behaviours you observed. Was a pilot study used to test your ideas? (4) Explain how you followed *ethical standards* in your observation. Consent (if possible) should have been obtained and anonymity should have been maintained. (5) Explain *how you recorded your data*. What techniques or technologies you used? How was accuracy ensured? What did you do to prevent forgetting the details?
- **How data was analysed:** Did you collect *quantitative* or *qualitative* data or both? Did you use *frequency counts* of different behaviours? Did you use *thematic analysis* to interpret patterns in behaviour

For your observation report, write an account of the things above in a way that is easily understandable for you and easy to remember. This account will be the base for your response in Paper 2.

Section A 2: Linking to Concepts

Question 2 in Paper 2 Section A asks you to link a specific concept to your observational study: *bias*, *causality*, *change*, *measurement*, *perspective*, or *responsibility*. You don't know which one of the six concepts will be asked; therefore, you need to consider them all in advance.

Example: *Explain the concept of bias in relation to the observation in your class practical.*

When you link the concept to the research method, remember that it needs to be in the context of your own study. The examples below are generic links to the experiment as a research method, but they are not enough to earn top marks.

For your observation report, write a brief account of each basic concept in the context of your experiment. These accounts will be the base for your response in Paper 2.

Bias

Observer bias occurs when researchers' expectations or past experiences influence how they interpret or record behaviours. **Confirmation bias** may arise when observers selectively focus on actions that support their hypotheses, neglecting contradictory evidence.

Additionally, **participant reactivity**, where children alter their behaviour because they are aware of being observed, can skew results, particularly in naturalistic settings.

Cultural biases may also influence a study if observers interpret behaviours through their own cultural lens rather than the child's context.

Researchers often use standardized coding systems to minimize bias, train multiple observers to ensure inter-rater reliability and conduct blind observations where possible.

Causality

Establishing causality in naturalistic observations is challenging because there is limited control over extraneous variables. Observations are valuable for identifying correlations and patterns, such as how peer interactions influence language development, but they cannot determine whether one behaviour directly causes another.

Many observations are cross-sectional, making it difficult to infer causality. Developmental behaviours often emerge gradually, making it difficult to pinpoint direct cause-and-effect relationships. Longitudinal studies are better for implying causality because **causality requires a clear temporal order**: The cause must precede the effect.

Change

Observational methods are useful for studying gradual changes in naturalistic or structured settings, such as language acquisition, motor skills, or social behaviours. Longitudinal observations, where children are studied repeatedly across developmental stages, allow researchers to track behaviour patterns and identify milestones or delays.

Measuring change requires consistency in observational methods, as variations in setting, context, or observer interpretation can affect results. For example, a child's behaviour in a familiar environment may differ from that in a laboratory setting.

Measurement

Valid measurement requires clear operational definitions of the studied behaviours, such as identifying specific indicators of attachment, language use, or problem-solving skills. Researchers often use checklists to ensure consistency across observations and reduce subjectivity. Inter-rater reliability ensures different observers interpret and record behaviours consistently, while repeated observations enhance the accuracy of findings. However, naturalistic settings can introduce variability, as environmental factors or children's moods may influence behaviours.

Using tools like video recordings allows for detailed analysis and improves measurement precision.

Perspective

Researchers' **theoretical frameworks,** such as Piaget's cognitive development theory or Vygotsky's sociocultural theory, influence how researchers approach their observation.

Culture plays a role, as observers may overlook culturally specific developmental patterns. For instance, independence in play may be viewed positively in one culture but interpreted as disengagement in another.

Incorporating multiple perspectives, such as comparing observations from parents, teachers, and peers, provides a more comprehensive understanding of children's behaviour.

Responsibility

Observing children requires particular care, as they are a vulnerable population. Researchers must obtain **informed consent** from parents or guardians and, when appropriate, **assent** from the child. **Confidentiality** is essential to protect participants' identities, especially when documenting sensitive behaviours. Observers must avoid interfering with the child's natural environment or routines, as this could disrupt behaviour or cause distress.

Cultural sensitivity is also important to avoid misinterpreting behaviours based on the observer's perspective. Additionally, findings must be reported honestly and used responsibly to benefit children's development, whether through educational applications or policy recommendations.

Section A 3: Contrasting Methods

Question 3 in Paper 2 Section A asks you to *compare and contrast* an observation with another method (specified on the exam) for the topic you investigated. You don't know what another method will be asked; therefore, you need consider them all (*experiment*, *interview* and *survey/questionnaire*) in advance.

Example: *Compare and contrast the research methodology of an observation used in your class practical with the research methodology of an experiment.*

When answering this question, you should know the key similarities and differences between the two research methods. You should also consider how these are reflected in your specific study. As in the example above, consider what would be *similar* if you did an experiment with the same aim; Consider what would be *different* if you studied the same aim but with an experiment.

For your observation report, write brief accounts on the similarities and differences between all the research methods in relation to experiment. These accounts will be the base for your response in Paper 2. You may use the information below.

Observations vs experiments

- Similarities (compare)
  - Both use a **systematic approach** to collecting data.
  - Both can be conducted in either **labs or the field.**
  - Both may collect **quantitative data.**
- Differences (contrast)
  - **Observations** have limited control over variables, and no IV is manipulated. **Experiments** manipulate an independent variable and have high control over extraneous variables.
  - **Observations** cannot determine causation; they identify correlations and patterns. **Experiments** establish a cause-and-effect relationship.

- **Observations** are often conducted under naturalistic conditions with high ecological validity while **experiments** are usually conducted under laboratory conditions with low ecological validity.
- **Observations** may collect quantitative data (e.g., behaviour frequencies) but often focus more on qualitative data. **Experiments** collect primarily quantitative data.
- **Observations** process data through thematic analysis, while **experiments** process data using statistical tests.
- **Observations** try to establish credibility, wanting to confirm that the results match the participants' experiences. **Experiments** are concerned with internal validity.
- **Observations** often use purposive sampling, while **Experiments** often do not.

Observation vs interviews

- Similarities (compare)
  - Both research methods have a **systematic approach** to collecting data.
  - Both can **determine relationships** between variables but **cannot determine causality**.
  - Both collect **qualitative data**, although observations may also collect quantitative data.
  - Interviews follow an interview guide; observations use checklists. This **standardizes the procedure** and allows for replication.
  - Credibility is important for both methods as they are subject to **researcher biases**. Member checking and researcher triangulation are used to check the credibility of the researchers' interpretation of the data.
- Differences (contrast)
  - **Observations** have minimal control in a naturalistic setting and only moderate control in a lab setting; **interviews** have minimal control as the responses depend on participants' willingness to disclose information.
  - **Observations** describe patterns or correlations in behaviour, while **interviews** focus on understanding subjective experiences or opinions.

- **Observations** collect data on the frequency and nature of participants' behaviours; **interviews** collect verbal self-reported data.
- **Observations** are conducted in natural settings or lab environments; **interviews** are conducted face-to-face, virtually, or over the phone.
- **Observer bias** may influence how behaviours are recorded or interpreted. **Interviewer bias** may influence how questions are asked or interpreted.
- **Observations** follow standardized procedures to maintain internal validity; **semi-structured interviews** and **focus groups** are highly flexible; questions can be adapted during the interview, and follow-up questions may be asked.

Observations vs surveys/questionnaires

- Similarities (compare)
  - Both can determine relationships between variables but **cannot determine causality**.
  - Observations and questionnaires collect **qualitative data**.
  - **Credibility** is important for both methods as they are subject to **researcher biases**. Member checking and researcher triangulation are used to check the credibility of the researchers' interpretation of the data.
  - Both research methods may be standardized. **Observations** often use an observation checklist, and **surveys and questionnaires** ask all participants the same questions in the same order.
- Differences (contrast)
  - **Observations** have minimal control in a naturalistic setting and moderate control in lab settings, while **surveys/questionnaires** have no control over external variables.
  - **Observations** describe patterns or correlations in behaviour. **Surveys/questionnaires** focus on understanding subjective experiences or opinions.

- **Observations** may obtain either qualitative or quantitative data; **surveys** collect quantitative data, whereas **questionnaires** obtain qualitative data through open-ended questions.
- **Observations** record current observed behaviour. **Surveys/questionnaires** collect self-reported data that may be current or retrospective.

Section A 4: Designing Alternatives

Question 4 in Paper 2 Section A asks you to design another study to investigate the same question you investigated in your practical. The exam will specify the method you must use. You don't know it in advance.

Example: *Design a survey/questionnaire to investigate the same topic you investigated in your class practical.*

When answering this question, you must keep **the same aim** as in the original study.

For your observation report, create a table like the one below and fill in the blanks. Use the previous task on contrasting methods and previous report as a source of inspiration.

	Class practical: **observation**	Alternative method 1: **experiment**	Alternative method 2: **interview**	Alternative method 3: **Survey**
Aim				
Procedure				
Sample and sampling technique				
Findings				
Research considerations				
Ethical considerations				