Lesson 12

Observations

Lesson Objectives

- All students **will** define key terms and **identify** different types of observations.
- All students **should** **analyse** the design of studies using observational techniques.
- All students **could** **evaluate** the use of observational techniques.

Key Words

- Naturalistic vs. controlled observation
- Participant vs. non-participant observation
- Covert vs. overt observation
- Behavioural categories
- Event sampling
- Time sampling
- Inter-observer reliability

Extension activity:

- Read more about Rosenhan’s infamous study at: [http://www.holah.karoo.net/rosenhanstudy.htm](http://www.holah.karoo.net/rosenhanstudy.htm)

Questions to guide your thinking ...

- What are the different types of observation?
- What are the two ways of sampling behaviour?
- What do psychologists need to consider when developing behavioural categories?
- What can affect the reliability of observations and how can reliability be improved?
- What are the strengths and weaknesses of the different types of observation?
- What are the advantages and disadvantages of the two ways of sampling behaviour?
Observation: Techniques and Method

Observations are used in psychological research in one of two ways, as a method or a technique.

**OBSERVATION**

- **As a research technique**: This is when observations are used as part of another research method such as a lab experiment or a field experiment. Nearly all research in psychology involves some aspect of observation.

- **As a research method**: This is where the entire study is based on observation.

In this lesson, we will be focusing on the use of observation as a research method.

Used as a research method, observations are a non-experimental method of investigation. This means that there is no manipulation of variables. A researcher will simply observe behaviour, and look for patterns. Therefore, as with all non-experimental methods, we cannot draw conclusions about cause and effect relationships from observational research.

**Types of Observation**

There are different sub-types of observation. An observation can be

- Naturalistic or controlled
- Overt or covert
- Participant or non-participant

These can be combined to create several varieties of observation. For example, you could have a naturalistic, non-participant, covert observation or a controlled, non-participant, overt observation.
<table>
<thead>
<tr>
<th>Type of Observation</th>
<th>Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naturalistic</td>
<td>Takes place where the target behaviour would normally occur, e.g. listening to children talking in their classroom.</td>
</tr>
<tr>
<td>Controlled</td>
<td>Some variables are controlled/manipulated by the researcher, including extraneous variables, e.g. listening to children who have been asked to talk about their families.</td>
</tr>
<tr>
<td>Covert</td>
<td>Participants' behaviour is watched and recorded without their knowledge.</td>
</tr>
<tr>
<td>Overt</td>
<td>Participants' behaviour is watched and recorded with their knowledge.</td>
</tr>
<tr>
<td>Participant</td>
<td>The researcher becomes a participant of the group they are studying.</td>
</tr>
<tr>
<td>Non-participant</td>
<td>The researcher remains outside of the group they are studying.</td>
</tr>
</tbody>
</table>
**TASK:** Identify the type of observation – for each study, decide whether it is
a.) naturalistic or controlled; b.) participant or non-participant; c.) overt or covert.

Name the type ...

1. Observing a chimpanzee colony in a zoo

2. Observing the different phases of sleep of participants in a sleep laboratory

3. Joining a religious cult to study the beliefs and practices of the group

4. Observing the aggressiveness of children in a day care setting.

**TASK:** Consider Rosenhan's (1973) study, ‘On being sane in insane places.’ Individuals pretended to hear voices and were admitted to psychiatric hospitals. While in hospital, they observed and recorded details of the behaviour of staff and patients.

- Identify the type of observation used.

- Explain the strengths and weaknesses of the way the observation was conducted.
Observational Design: Recording Data

Structured observations

When carrying out a structured observation, it is first necessary to break the behaviour of interest down into a set of **behavioural categories**. This is essentially the processes of **operationalising** the target behaviour (i.e. the behaviour of interest).

**Behavioural categories** should:

- Be **precisely defined** and made **observable** and **measurable**.
- **Cover all behaviours**
- Be **mutually exclusive** (i.e. the categories should not overlap)

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**Observation checklist of a student when the teacher leaves the room**

<table>
<thead>
<tr>
<th>Carries on working</th>
<th>Uses mobile phone</th>
<th>Talks to another student</th>
<th>Listens to music</th>
<th>Leaves the room</th>
<th>Reads a magazine</th>
<th>Falls asleep</th>
<th>Eats</th>
</tr>
</thead>
</table>
Sampling Methods

In a continuous observation, the observer would record every instance of the behaviour being studied. However, in practice, there would be too much data to record, so therefore there needs to be a systematic method of **sampling** behaviour:

- **Event sampling**: counting each time a specific behaviour (event) occurs

  - A tally mark is made each time the behaviour/event occurs.

<table>
<thead>
<tr>
<th>John Smith</th>
<th>Date: 20/2 Time: 10:05 Duration: 30mins Subject: Maths</th>
<th>Date: 22/2 Time: 11:35 Duration: 30mins Subject: Language</th>
<th>Date: 24/2 Time: 15:00 Duration: 30mins Subject: Music</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twisting or clenching hands</td>
<td>LI</td>
<td>LI</td>
<td>LI</td>
</tr>
<tr>
<td>Rocking body/head</td>
<td>LI</td>
<td>LI</td>
<td>LI</td>
</tr>
<tr>
<td>Distracting neighbours</td>
<td>LI</td>
<td>LI</td>
<td>LI</td>
</tr>
<tr>
<td>Making nonsense sounds: humming, talking to self</td>
<td>LI</td>
<td>LI</td>
<td>LI</td>
</tr>
<tr>
<td>Thumb-sucking</td>
<td>LI</td>
<td>LI</td>
<td>LI</td>
</tr>
</tbody>
</table>

  - As the observation is continuous, event sampling allows researchers to record and study infrequent behaviour (as they are looking specifically for this particular behaviour). This could be missed if time sampling was used.

  - Complex behaviour can be oversimplified – important details of behaviour could go unrecorded. This could affect the validity of findings.

- **Time sampling**: recording data at specific intervals. For example, what is an individual doing every 30 seconds?

  - Reduces the number of observations as data is only recorded at certain intervals.

  - The observer could miss important interactions and behaviours that occur outside of the time-scale.
Issues in Observational Research

➢ Observer Bias

Observers may miss important details or only notice events that confirm their opinions or expectations. This introduces bias into the research process and therefore reduces the objectivity and reliability (i.e. consistency) of findings.

➢ Explain how researchers address the problem of observer bias:

➢ Ethical Issues

Researchers most often use covert observations when carrying out research. This raises issues around informed consent, deception and the right to withdraw. However, the British Psychological Society state that such observations are acceptable in certain situations.

➢ What are the BPS guidelines on observational research?
Exam Practice

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One situation in which disruption of attachment can occur is when a mother of a young child is admitted into hospital. A researcher decided to study the behaviour of a two-year-old boy who experienced this disruption of attachment. She decided to use naturalistic observation of the boy both before his mother was admitted into hospital and after she returned home. Each period of observation lasted for one hour.

7 (a) Suggest two suitable behavioural categories the researcher could use to record the boy’s behaviour. (2 marks)

7 (b) How might the researcher record the boy’s behaviour during the one-hour observation? (2 marks)

Specimen AS Paper 1 second set

Read the item and then answer the questions that follow.

A child psychologist carried out an overt observation of caregiver-infant interaction. She observed a baby boy interacting separately with each of his parents. Using a time sampling technique, she observed the baby with each parent for 10 minutes. Her findings are shown in Table 1 below.

Table 1: Frequency of each behaviour displayed by the infant when interacting with his mother and when interacting with his father

<table>
<thead>
<tr>
<th></th>
<th>Gazing at parent</th>
<th>Looking away from parent</th>
<th>Eyes closed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td>12</td>
<td>2</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Father</td>
<td>6</td>
<td>10</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>12</td>
<td>10</td>
<td>40</td>
</tr>
</tbody>
</table>

9.1 Using the data in Table 1, explain the procedure used for the time sampling technique in this study (3 marks)

9.4 The study in Question 09 was an overt observation. Explain what is meant by ‘overt observation’. (2 marks)

Specimen AS Paper 1 first set

Read the item and then answer the question that follows.

Proud father Abdul was talking to his friend, as they were both watching Abdul’s wife, Tasneem, interacting with their baby daughter, Aisha. ‘It’s amazing really’, said Abdul. ‘Tasneem smiles, Aisha smiles back. Tasneem moves her head, Aisha moves hers, perfectly in time with each other.’ ‘Yes’, agreed the friend. ‘It’s almost as if they are one person.’

Studies of attachment often involve observation of interactions between mother and baby pairs like Tasneem and Aisha. Researchers sometimes write down everything that happens as it takes place, including their own interpretation of the events.

10.2 Explain how such observational research might be refined through the use of behavioural categories. (4 marks)