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Master 2 in **Construction Projects Management**
Course: **Data Analysis**

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CHAPTER 02

Data Collection

Part 04

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About course

FOCUS GROUPS METHOD

4. Most common primary data collection methods

3. Focus Groups method Definition

This method, simply, is a mixture of interviewing and observation.
This method is used to discover human behavior, attitudes, and respondents facing a particular concept. This in-depth field method gathers a group of individuals, normally between 6-10 people in each group, commonly with a shared **characteristic such as sex, age, and educational status to discuss a specific study field.**



4. Most common primary data collection methods

Objective of the method

Focus groups aim to explore complex issues, generate new ideas, and understand collective attitudes within a targeted population.



Key Components of Focus group Method

01 **Participants**: Typically, a focus group consists of 6-10 participants who are selected based on specific criteria relevant to the research topic.

02 **Moderator**: (researcher) who guides the discussion, ensures that all participants have a chance to speak, and keeps the conversation on track.

03 **Discussion Guide**: A structured set of questions or topics prepared in advance to steer the conversation and ensure that all relevant areas are covered.

04 **Setting**: The discussion usually takes place in a comfortable, neutral environment where participants feel at ease.

05 **Data Collection**: The discussion is recorded (with participants' consent) and transcribed for analysis. Observations and notes from the session are also used to gather insights.

Advantages and Disadvantage of Focus Group

01 Advantages of Focus Group Method

- Provides in-depth insights into participants' thoughts and experiences.
- Facilitates dynamic discussion and idea generation through participant interaction.
- Allows researchers to observe non-verbal cues, like facial expressions and body language, adding depth to the data

Advantages and Disadvantage of Focus Group

02 Disadvantages of Focus group Method

- Face privacy lacks
- Coordinating schedules, securing a venue, and ensuring effective participation can be time-consuming and costly.
- Responses can be less structured and harder to analyze compared to quantitative data.



4-Example

Example : Safety Practices on Construction Sites

Objective:
To understand how workers feel about safety measures on construction sites.
Participants:
Workers, safety officers, and site managers.
Goal:
Find out what safety issues they face and how training can be improved.

4-Example

Questions:

- What safety problems do you see on-site?
- How effective is the current safety training?
- What would make you feel safer while working?

Outcomes:

- Identify common safety concerns.
- Improve training programs based on worker feedback.
- Develop better safety protocols.

OBSRVATION METHOD

4. Most common primary data collection methods

4. Observation Method Definition

In these techniques, first-hand data is gathered through the observation of events, behaviors, interactions, processes, etc. directly to obtain an understanding of the concepts.

This method can collect both qualitative and quantitative data.



Key Features of the Observation Method

01 **Natural Setting:** Observations typically occur in a real-world environment where subjects naturally engage in activities without external influences.

02 **Non-Interference:** The researcher does not intervene or manipulate variables but records data as it unfolds

03 **Detailed Data Collection:** It emphasizes the collection of rich, detailed qualitative data rather than numerical or quantitative data.

Types of Observation Methods

01 Participant Observation

The researcher actively engages with the subjects while also making observations. **For example**, a manager joining workers on a construction site to observe their workflow.

02 Non-Participant Observation

The researcher observes from a distance, without becoming part of the group being studied. For instance, watching safety practices on a construction site from afar.

03 Structured Observation

The researcher follows a specific framework or checklist for observations. This is more systematic and is often used in more controlled settings.

04 Unstructured Observation

There is no predefined structure or checklist; the researcher observes freely and makes notes on various occurrences that seem relevant or interesting.

Advantages and Disadvantage of Observation

01 Advantages of Observational Method

- Gathering direct information (the data collected reflects real-world actions and reactions).
- Offers in-depth insights into complex behaviors and interactions, especially in dynamic environments like construction sites.



Advantages and Disadvantage of Observation

02 Disadvantages of Observational Method

•It can take significant time to gather sufficient data.

•Observations can be influenced by the researcher's biases or interpretations.



4-Example

Example: Observing Safety Practices on a Construction Site
Objective:
To observe how construction workers follow safety protocols while working on a construction site.
Process:
1.Setting the Scene:

1. A researcher decides to observe a local construction site where a new building is being erected. The focus is on safety practices, such as the use of helmets, harnesses, and safety signage.

4-Example

•**Preparation:**
•The researcher creates an observation checklist that includes:
    •Are all workers wearing safety helmets?
    •Are safety harnesses being used when working at heights?
    •Is there visible safety signage in the area?

•**Conducting Observations:**
•The researcher visits the site on multiple days and observes workers during various tasks. They take notes on:
    •The frequency of safety gear usage.
    •Instances where safety protocols are followed or ignored.
    •Any conversations or interactions related to safety among the workers.

•**Data Collection:**
•The researcher documents their observations, noting specific examples (e.g., "On Day 1, 80% of workers were wearing helmets, but only 50% were using harnesses when working on the scaffolding.").

4-Example

•**Analyzing Findings:**
•After several visits, the researcher reviews their notes to identify trends and common issues. They notice that workers often forget to use harnesses when they are busy or under time pressure.

•**Conclusion:**
•The researcher concludes that while most workers adhere to safety protocols, there are gaps in compliance, particularly regarding harness usage. This insight can inform recommendations for additional safety training or reminders on-site.

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Thank You!