

Observation

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Observation

Defined

- A method of conducting research based on noticing and recording

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Observation

Types

- Direct observation
 - Observing behavior as it occurs*
- Indirect observation
 - Observe the consequences or remains of behavior*
 - Archive studies
 - Physical traces studies

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Observation

Types

- Disguised observation
 - Subjects are unaware of being observed*
- Undisguised observation
 - Subjects are aware of being observed*

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Observation

Types

- **Structured observation**
The researcher identifies what behavior to observe
- **Unstructured observation**
Observers in the field determines the behavior to observe

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Observation

Types

- **Human observation**
The observer is a person
- **Mechanical observation**
The observer is a device

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Observation

Conditions conducive for use

- Events to observe occur frequently
- Behavior to observe occurs publicly
- Faulty recall makes it a necessity

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Observation

Advantages

- Reduced response error
- May be the only way
- Higher accuracy in some situations
- Lower cost
- Does not rely on respondents memory
- Nonverbal behavior data may be obtained
- Certain data may be obtained more quickly
- Environmental conditions may be recorded
- Complements survey results

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Observation

Limitations

- Representativeness
- Limited to actual, external behavior
- Cognitive phenomena cannot be observed
- Atypical behavior may result
- Interpretation of data may be a problem
- Not all activity can be recorded
- Only short periods can be observed
- Observer bias possible
- Possible invasion of privacy

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Observation

What can be observed

- Physical actions
- Verbal behavior
- Expressive behavior
- Spatial relations and locations
- Temporal patterns
- Verbal and pictorial records

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What can be observed

Examples

- Human behavior or physical action
 - Store traffic patterns
- Verbal behavior
 - Statement of passengers waiting in line
- Expressive behavior
 - Facial or body expressions, gestures

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What can be observed

Examples

- Spatial relations
 - Distance people keep from museum exhibits
- Temporal patterns
 - Time customers willing to wait for service
- Physical objects
 - Pantry audits
- Verbal and other records
 - Product bar codes

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What can be observed

Example-physical objects

- Physical traces
 - The amount of floor wear in front of exhibits in a museum may indicate the popularity of the exhibit
 - Study of garbage (garbalogy)

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Contrived observation

Otherwise unobservable events

- Creates an artificial environment to observe behavior
 - Bringing a deliberately disabled car to a repair facility to observe service

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Response latency

Time is observed

- Recording the decision time necessary to make a choice between two alternatives
- It is presumed to indicate the strength of preference between alternatives

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Content analysis

Contents of messages

- Obtains data by observing and analyzing the content of letters, advertisements, articles, etc.
- Deals with the study of the message itself
- Measures the extent of emphasis or omission

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Observing reactions

Physical proxies for psychological constructs

- Eye tracking camera
- Pupilometer
- Psychogalvanometer
- Voice pitch analysis

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Mechanical observation

- Traffic counters
- Scanners
- Peoplemeter (for TV)
- Physiological measures

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Observing reactions

Eye tracking camera

- Records how the subject actually reads or views an advertisement
- Measure unconscious eye movements

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Observing reactions

Pupilometer

- Observes and records changes in the diameter of the subject's pupils in response to stimuli

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Observing reactions

Psychogalvanometer (lie detector)

- Measures galvanic skin response
- Involuntary changes in the electrical resistance of the skin
- Assumes that physiological changes accompany emotional reactions

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Observing reactions

Voice pitch analysis

- Measures emotional reactions through physiological changes in a person's voice

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