

Observation in Evaluation

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Observation can be invaluable when conducting an evaluation. Or it can also be of limited value if it is not done well. This document offers suggestions on how observation can be done effectively and also meet accepted evaluation standards.

Observation has a unique niche among evaluation methods. Those who study human behavior indicate that there is often a gap between what people say they do and what they actually do. The observed behavior is often a more dependable indicator than what is self-reported.

Observation is used in a variety of ways in evaluation. Often it is a gateway method that leads to others methods. For example, an evaluation might begin with exploratory observation where the evaluator is paying attention to a wide variety of factors. This exploratory step helps narrow the study and refines the evaluation strategy. The next step could be a more focused observation using checklists or targeting specific behaviors. Or the exploratory observation might lead to other evaluation methods such as surveys, in-depth interviews, focus groups, secondary data or other strategies.

Observation in evaluation is different from the casual, off-the-cuff manner in which we see things. Careful observation is distinctive in three important ways: the person doing the observation is (1) trained, (2) prepared, and (3) systematic. Training helps the evaluator know what to observe, when to conduct the observation, and how to document the observations. The evaluator must be prepared mentally and physically for the rigors and demands of observation. And the evaluator systematically captures the observation data often using multiple methods such as field notes, checklists, audio memos, etc.

Levels or degrees of observation

One of the decisions is how obvious should the observation be? Here are the choices:

1. Evaluator observes without being noticed.
2. Evaluator uses unobtrusive observation (observe but not in an obvious manner) and doesn't interact with participants.
3. Evaluator has limited interaction, intervening only when further clarification of actions is needed.
4. Evaluator uses active control over the observation, as in the case of a formal interview, to elicit specific types of information.
5. Evaluator fully participates in the situation with either a hidden or known identity.

Reflect on the ethics of observing

Ethical issues can arise when you are observing something that could result in injury if you decide to not intervene. But the act of intervention interferes with the opportunity to observe. Suppose you are observing a bullying encounter and threats are being made.

At what point do you step in to stop the behavior? This is the same issue that a photojournalist has when video recording a disaster. Do you try to get the compelling example of injury or do you take action to alleviate injury and thereby lose the ability to document? These issues should be discussed by the evaluation team before the observation begins.

Issues that might arise in observational studies

- Do participants act differently because they are being observed? This is called the Hawthorne effect and it occurs when people alter their behavior because they are being watched.
- How unobtrusive should the evaluator be?
- What do you tell participants when they ask what you are doing?

Know the limits of observation

Observation can be time consuming and difficult. Here are four factors that limit our ability to observe:

1. Fatigue – Observation is tedious and tiring work. What you seek to observe may not occur on a regular basis. Being attentive takes energy and the observer needs to develop strategies for remaining alert for potentially lengthy periods of time.
2. Emotional stress – Sometimes the observation itself causes stress and other times the person doing the observation is stressed about other things. Stress tends to erode our ability to observe.
3. Disruptions and distractions – Observation takes time. Disruptions and distractions should be expected.
4. Time – What is the length of the observation? The length of the observation is specified in your evaluation plan and is based on a thoughtful assessment of what is being observed, the expected occurrence of meaningful events, and the available resources. Some things can be observed in a short amount of time and in other studies your objective may be to get a longer time profile of the topic. In general it is better to have a longer period of observation because it increases the odds of observing activities or events that occur less frequently.

Consider these steps when conducting an observation

When conducting an evaluation here are steps that are often followed. They may not occur in the sequence listed.

1. Do a quick scan of research and other evaluations. What have others found? How has it been documented or measured? But keep an open mind and be ready for unexpected occurrences.
2. Develop a framework, a theory or an idea of what you are observing. Put it in writing, share it with others, and ask for feedback.

3. Do exploratory observation. Go to the location and get acquainted with the environment, the people and the situation. Watch, ask questions, listen and take notes. This exploratory investigation gives insight as to the efficacy and practicality of a more intensive observation study.
4. Develop your observational strategy. Create a plan, put it in writing and invite feedback from colleagues.
5. Practice observing with others on the evaluation team to be sure that the same things are being observed and recorded in a consistent manner.
6. As you observe think about what is NOT happening. What is missing that logically should be present?
7. Consider developing and using an observation checklist. Checklists help the observer remember what to watch for, they may have a quantifiable scale to document observations, and it creates a verifiable record. A checklist helps focus the evaluation, keeps the observation consistent, and allows for comparison. A checklist could include:
 - Time – duration
 - Frequency - how often did it occur?
 - Extensiveness – is it widespread or isolated?
 - Intensity
 - Demographics or observable characteristic of participants
 - Environmental factors
 - Sequence patterns or cause-effect relationship
 - Behaviors, attention span, eye contact, etc.
 - Comparison with a standard, guideline or ideal or to other cases

BUT: Be cautious of the dangers of checklists. They will focus your attention in a certain direction and you might miss other critical events. Be aware of other things that occur and record these in your notes for later discussion and analysis.

NOTE: For examples of evaluation checklists conduct an Internet search for judging checklists for exhibits at county fairs or science fairs.

8. Use visuals. Take detailed field notes, make sketches, create diagrams, maps, time logs, etc. Don't trust your memory. These documents are essential to later analysis. It could involve:
 - Maps – showing locations, offices, where people walk.
 - Charts – seating charts, actions taken, time spent on task, etc.
 - Flow diagrams – showing sequence of events, activities, actions.
9. Be careful of selective perception. Selective perception is when you notice things that are familiar or expected and overlook those things that are uncomfortable, unusual or don't make sense. You are seeing those things you expect to see or what you are accustomed to seeing. We easily get confused when observing things that are different or novel.

10. Consider comparison. The ability to compare one observation to another is often what is critical to analysis. An isolated observation may be meaningless unless you have a basis of comparison. You might want to compare the same person or activity over time or compare one site to another. Often what is important is the nature of the trend (a time-series study) or how it compares to observation in other locations or with other people.
11. Work with a team. Colleagues improve the process of collecting and analysis. Debrief with colleagues at the conclusion of the observation.

Begin and then be ready to make adjustments

At the beginning of a study the topic of observation often seems clear. For example, consider the engagement of students in a classroom. As we dig into the observation we find that it is more challenging than we thought. You discover the topic of observation is only vaguely defined. In order to make it workable you need to identify specific indicators that are clear, unambiguous, measurable or observable. In addition you will need to develop instructions and / or checklists on how the observations are implemented. The observational study might begin with observers in the classroom cataloging the variety of behaviors relating to engagement. Then based on this preliminary observation the evaluation team might construct more specific instructions on what to observe and how the behaviors might be documented. For example, they might conclude that there were four key behaviors that constitute engagement: note taking, asking questions, appropriate laptop use, and distractions.

In this study we might begin by identifying the observable behavioral indicators. Examples might be students taking notes, asking questions, or avoiding distractions such as texting, side conversations or sleeping. Then you might create a checklist where an unobtrusive observer might watch for behaviors and check off if the behavior occurs or the degree or intensity of the behavior.

Remember that we are making an assumption that this collection of indicators is a reliable and valid representation of student engagement. But deep in our hearts we realize that we are only measuring a set of observable behaviors. Incidentally, this is where diverse cultural backgrounds, situational differences, and individual differences can complicate the study. As a result the evaluator is always humble about what is being measured.

Be cautious when setting up indicators. Do a quick Internet search, reflect on individual or cultural differences, the role of traditions, socio-economic factors, etc. Work with a team and go into the field and test the indicators with your target audience. Invite comments on how to improve the measurement.

Analysis can be in several forms

- Aggregate the results if you are using a checklist.
- Look over your field notes. Look for patterns, themes, or overarching concepts. Draw sketches of concepts or relationships.
- Draw a picture of force fields or flow charts or time lines, etc. to illustrate the concepts.

Examples of using observation in evaluation

Observation in evaluation can be used in many ways. Here are a few examples:

1. Conducting an observational site visit of a school, office, facility
2. Testing visual posters, exhibits and displays
3. Observing participants in a meeting, conference, discussion
4. Observing how things get done (e.g. how apologies are made to inconvenienced customers)
5. Observing behaviors and patterns of shoppers, tourists, or visitors
6. Observing how new behaviors are adopted in child care, school discipline, agricultural practices, etc.
7. Watching for public health issues: coughing at public gatherings, homelessness, obesity, street people, eating behaviors, vending machine choices, picking up free condoms or health information
8. Classroom behaviors: What are students doing in class? Levels of engagement? Observing use of computers, smartphones, texting, note taking, etc.
9. Distracted drivers, texting, reading, eating, eyes off the road
10. Pedestrian or people on bicycles: obeying laws, dangerous or risky behaviors
11. Public meetings: How involved are people in speaking, listening or discussion
12. Committee behavior – Who is talking, sharing, interacting
13. Community behavior -- Rudeness, bullying, exclusion, acts of kindness, eye contact, smiles, polite greetings, littering and picking up litter
14. Travel and tourist information: questions asked, brochures taken, degree of interest
15. Police / law enforcement -- visibility, interaction level, interaction for community building, engagement with community, etc.

In summary:

- Be systematic and verifiable in your planning, your observation, your data collection and in your analysis. And be sure you can explain how you are systematic and using verifiable steps.
- Get yourself ready for the observation experience by careful planning, personal preparation and self discipline
- Work with a team of evaluators as you plan and carry out the study.
- Capture data by field notes plus other strategies such as diagrams, maps, photos, video, etc.
- Be careful of selective perception. (Seeing what you want or expect to see).
- When feasible convert observations in quantifiable scales, ratings, scores, etc.
- Describe results carefully and clearly so that the reader feels they were present at the observation.

For more information consider:

Patton, M.Q. (2014) Qualitative Research & Evaluation Methods, Thousand Oaks, CA: Sage

Taylor, S.J, Bogdan, R, DeValt, M. (2016) Introduction to Qualitative Research Methods: A Guidebook and Resource 4th Edition. Hoboken, N.J: John Wiley & Sons.

About the author:

Richard Krueger is professor emeritus at the University of Minnesota, USA. Dr. Krueger has conducted evaluations and taught evaluation skills for over 35 years. He is a former president of the American Evaluation Association. He is an internationally recognized authority on the use of focus group interviewing within the public environment. He has written seven books, authored many journal articles and lectured at venues throughout the world. He holds a PhD in research methods and holds academic appointments in education, epidemiology and public health. In his spare time he repairs his motorcycle, swaps stories with friends, and shops for tools at the local hardware store. Maybe you've seen him there.



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