JIGSAW READINGS

1. Participant Observation:

Participant Observation is a method used by many researchers that involves immersion into the group being studied. Participant observation can be used to get a better understanding of a community, religious organization, or other group of people. This research method consists of actively participating in the day-to-day tasks of groups as a way of better understanding them. Additionally, the researcher collects data through observation, record keeping, unstructured interviews, or formal questionnaires. When conducting research this way, it is important to have agreements with participants on how data is going to be collected. It is also important to remain objective during the research period.

Immersing yourself into someone's everyday life is not an easy task, so researchers break it down into steps. To start, the researcher must go in with an objective mindset and establish a connection with the participants. This consists of getting to know the participants or being accepted into the community. This type of connection is known as rapport. Once rapport is established, the researcher goes into the field to immerse themselves into the group's everyday life. In other words, they're trying to "fit in." Once the researcher is immersed in the community, they begin collecting data through record keeping, journaling, or setting up interviews. The next step is organizing the data and locating trends.

One strength of this method is the high degree of validity to the data it yields. Researchers can observe participants in their natural setting, which is not often the case in a lab setting or a formal interview. Another advantage is that the researcher is able to see things through the eyes of the research participants as they develop empathy with them over the course of the research period.

However, a downside of this method is that it requires the researcher to spend long periods of time in one location to establish rapport and collect data. While for some researchers time is not a constraint, many do not have the ability or resources to maintain such a long study. Another possible disadvantage is that researchers could, over time, become less objective as they develop relationships with participants.

2. Naturalistic Observation:

Naturalistic Observation is another research method often used by social scientists. This method is used when a researcher wishes to gain insight into the participants' behavior in their natural habitat, something that might not always be readily available in a closed lab setting. For best results with this method, the researcher makes no attempts to intervene or manipulate the situation. This research method yields data with high levels of validity, as it is based on participants' behavior in their natural setting.

There are two types of naturalistic observation, covert and overt. Covert observation consists of hiding the experiment from the group being studied. An example of covert observation would be an undercover police officer infiltrating a group without their knowledge and recording their behavior. While the ethics of covert observation can be questionable, it is known to yield data of high validity, given that participants don't know they're being observed.

Natural observation also includes studies where the researcher's presence is known. Known as overt observation, the researcher can also choose to manipulate the environment while observing in a natural setting. For example, if a researcher is studying teacher and student relationships, they can observe a classroom and record their observations. If the researcher wants to introduce something new, like incentives for the students to be more attentive, these can be introduced during observation and any changes in behavior are recorded. The participants have knowledge of the researcher's presence, but research still takes place in the participants' natural setting.

Naturalistic observation has many advantages. Researchers can observe and study situations that cannot be recreated in lab settings due to ethical concerns. For example, if you are trying to learn how patients are treated in different facilities, you observe those patients in that setting. It would be unethical to recreate a facility and find patients to submit to the experiment for the sake of your research. Because naturalistic observation takes place in participants' own environments, it yields data of high validity.

Naturalistic observation has one major disadvantage: ethics. Oftentimes, the most accurate and authentic results come from the researcher observing a group without the participants' knowledge. This is considered unethical in almost all cases, so informed consent is required from the research group. Another disadvantage to this method, and really any method that relies on observation alone, is that it can tell us what people do but not why they do it.

3. Experiments:

Laboratory experiments are one of the most widely known research methods, but a newer phenomenon in the social sciences. Social scientists began using laboratory experiments towards the end of World War II due to the growth of technology. These developments led to laboratories with one-way mirrors, televisions and computers to facilitate communication, video recording with sound, and the ability to record group discussions.

Lab experiments allowed scientists to test their theories without traveling long distances and spending long hours in observation. Lab experiments were not an area of concentration in the training of social scientists, so many felt unprepared. But over time, new topics led to new theories and more opportunities to experiment. As technology continued to develop, more universities and private institutions built laboratories for the purpose of social sciences research.

Researchers come to a lab experiment with a hypothesis, or theory. To test their hypothesis, they measure the effects an independent variable has on a dependent variable. Independent variables are controlled by the researcher, while dependent variables are left free to vary. For example, perhaps a researcher predicts that a participant's facial expression will change when shown a sad image. The independent variable is the image the researcher chooses to show the participant, while the dependent variable would be the participant's reaction.

A major advantage of this research method is that it allows the researcher to determine cause and effect relationships between variables. The artificial nature of lab experiments is also an advantage, as a researcher can design and test a scenario rather than wait for it to occur in a natural setting.

While experiments allow us to test a theory, there are some limitations to using them in the social sciences. Sociologists study the "real world," so many of the variables they want to study cannot be controlled for an experiment. Also, the groups that sociologists study are often so large that controlling variables can be difficult. Lastly, while lab experiments can help explain human behavior, they struggle to reveal how human emotion affects that behavior.

4. Library Research:

Library research is a common method used not only in sociology but for research in any field. Rather than directly communicating with or observing research participants, researchers gather and examine written materials to investigate a claim, make an argument, or create a literature review of a topic. These written materials can be primary or secondary sources.

Primary sources are documents that contain first-hand accounts of an event or original research findings from an experiment. These may be interviews, case studies, or data and records from participant observation. Primary sources should generally form the basis upon which you answer your research question or form your argument. Examples of primary sources include manuscripts, data, speeches, autobiographies, diaries, interviews, and oral histories.

Secondary sources are documents like journal articles which investigate and synthesize primary sources to make an argument or defend a claim. Researchers use secondary sources to learn how others have answered research questions like their own or responded to the primary sources they are examining. Secondary can sources include books, journals, magazines, handbooks, and encyclopedias.

A major strength of library research is availability and convenience. While methods like participant and naturalistic research often yield strong results, it can be quite difficult to set up the project, establish trust and rapport among a community, and keep detailed records of findings. The only necessary materials for library research are primary and secondary resources, which can be accessed at your school library and on their website.

A weakness of library research is the inability to study participants first-hand. While access to the research findings of others is often a crucial part of any research project, it shouldn't replace actually observing and interacting with research participants.

5. Interviews:

Interviewing is one of the most effective ways of gathering information about research participants. Interviews consist of actual conversations with participants, aimed at better understanding their thoughts, feelings, and opinions. These conversations can provide helpful insight into how research participants explain their own behavior, and why they do the things they do.

Interviews can take many forms. You can conduct an interview over the phone, over a video conference tool, or in person.

Interviewing, as a research method, should look and feel more like a conversation than a highly formal process like a job interview. While the interviewer generally has a list of questions and a subject they'd like to focus on, questions are usually open-ended and allow for a wide range of responses from the research participant. This takes a high degree of skill on the part of the interviewer. On the one hand, the research participant should be encouraged to deviate from the set questions and discuss what they want; on the other hand, sometimes the interviewer must subtly redirect the conversation back to the key subject.

The best way to use interviewing is in conjunction with other research methods, particularly observation. Data from interviews can help frame and contextualize data from observations, as research participants can explain the habits, experiences, or behaviors the researcher noticed in observation.

The major strength of interviewing is the ability to hear directly from research participants. While observation on its own can be helpful, actually speaking to participants provides rich, detailed data.

One potential weakness of interviewing is that they can be hard to set up and execute. Also, some research participants who may wish to remain anonymous may find an interview less private than a method like a questionnaire survey. When conducting an interview, researchers must be mindful of the well-being of the participant, being careful not to ask questions which may trigger emotional trauma.

6. Questionnaires:

Sometimes, setting up group observations or interviews isn't possible. Questionnaires provide a nice way of gaining information about a group without having to physically immerse yourself into that community. Questionnaires can also be helpful when you need to get information from a larger group of people than is feasible with methods like interviewing.

Questionnaires ask participants to answer a standardized set of questions. These surveys can be delivered via mail, telephone, or as is more common today, the internet. Questionnaires provide a different type of data than observations or interviews. For example, if you wanted to know how a group of people navigate a public park, actually observing the way people use the park would probably be the best choice. However, if you wanted to know how many people from an entire neighborhood go to their public park on a weekly basis, a questionnaire would be the better option. It would provide you access to a larger data set and would be more efficient and feasible than talking individually to several people.

Several different question types can be used in questionnaires. You can ask participants to rank items in order of preference, respond to a simple yes/no, or provide multiple choices for each response.

The strengths of a questionnaire are the ability to collect data from a very large group, and to do so in a way that is efficient and less expensive than most other methods. Further, because surveys ask several participants the same questions, data tends to be more consistent than with methods like interviewing.

However, the straightforward, cut and dry nature of questionnaires can also be a weakness. Oftentimes, issues are far too complicated to be adequately explained by the types of questions surveys can ask. For example, imagine you use a survey to ask, "do you enjoy using your public park," and a participant answers "no." You still don't know *why* they don't enjoy it; maybe they think it is dangerous, or maybe it's too far from their house and they don't have a car. Or, just as likely, it may be for a reason that you don't think to ask on a survey.

While questionnaires are great ways of gaining large amounts of data, that data is usually more general and less nuanced than what you might get from observation or an interview.

7. Case Studies:

Case studies are a great way of generating rich, detailed data about one person or small group. Researchers use case studies for several reasons. Early in the research process, a case study might help you explore your research question or help you come up with a hypothesis to test. Case studies can also be used later in the research process to provide a detailed and nuanced look at a representative case from a larger data set.

Within the social sciences, case studies are typically used to collect non-numerical data in order to interpret the meaning of something. While data from large samples is often used to make generalizations, case studies focus on one individual or small group in order to shed light on social relations, structures, processes, and to stimulate further research.

It might be helpful to think of a case study as serving the opposite purpose of a questionnaire survey. While you might use a survey to gain basic information about a large number of people, you would use a case study to learn a large amount of complex information about one person or small group. For example, you might be interested in the relationship between urban communities and public transportation. Rather than observing or sending out questionnaires to mass amounts of people, a case study might focus on one single person, employing several different research methods. You might get to know the person over several interviews, go with them from place to place as they use (or don't use) the public transportation in their city, and make notes of their thoughts, feelings, memories, etc. With a case study, you're interested in gaining deep understanding—learning the intricate contexts that often lie behind what can seem like straightforward data. Case studies aren't meant to take the place of other methods, but to provide a fleshed out, real-world *case* that humanizes your data.

Like all research methods, case studies have their advantages and disadvantages. A major advantage is that they allow researchers to learn complex information that isn't available with methods that focus on larger groups. Case studies also allow researchers to utilize multiple research methods, capitalizing on the advantages of each. A disadvantage is that the results of a case study cannot be used to make generalizations. So, while case studies are a good way to generate large amounts of data, they shouldn't be used to make arguments concerning large groups.

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