

Research Methods

How Do We Know What We Know?

- If I told you that the world is flat, I'm hoping you would know that I'm wrong. But how do you know that I'm wrong?
- Understanding both what changed our minds (science) and how might tell us a lot about what we know, what we think we know, and what we think we can know.
- We will examine the ways that sociologists come to know social facts. Our focus will be on one particular way of knowing: social scientific research methods.
- Research methods are a systematic process of inquiry applied to learn something about our social world.

Different Sources of Knowledge

- What do you know about only children? Culturally, our stereotype of children without siblings is that they grow up to be rather spoiled and unpleasant. We might think that the social skills of only children will not be as well developed as those of people who were reared with siblings.
- However, sociological research shows that children who grow up without siblings are no worse off than their counterparts with siblings when it comes to developing good social skills (Bobbitt-Zeher & Downey, 2010).
- Sociologists consider precisely these types of assumptions that we take for granted when applying research methods in their investigations. Sometimes we find that our assumptions are correct. Often as in this case, we learn that the thing that everyone seems to know to be true isn't so true after all

Different Sources of Knowledge

- Many people seem to know things without having a background in sociology. Of course, they may have been trained in other social science disciplines or in the natural sciences, or perhaps they read about findings from scientific research. However, there are ways we know things that don't involve scientific research methods.
- Some people know things through experiences they've had, but they may not think about those experiences systematically; others believe they know things based on selective observation or overgeneralization; still others may assume that what they've always known to be true is true simply because they've always known it to be true.
- Let's consider some of these alternative ways of knowing before focusing on sociology's way of knowing.

Different Sources of Knowledge

- Many of us know things simply because we've experienced them directly. For example, you would know that electric fences can be pretty dangerous and painful if you touched one while standing in a puddle of water. We all probably have times we can recall when we learned something because we experienced it.
- Sometimes you would come to know what you believe to be true through **informal observation**. The problem with informal observation is that sometimes it is right, and sometimes it is wrong. And without any systematic process for observing or assessing the accuracy of our observations, we can never really be sure that our informal observations are accurate.

Different Sources of Knowledge

- Ex- Suppose a friend of yours declared that “all men lie all the time” shortly after she’d learned that her boyfriend had lied to her. The fact that one man happened to lie to her in one instance came to represent all experiences with all men.
- This friend committed what social scientists refer to as **selective observation** by noticing only the pattern that she wanted to find at the time.
- If, on the other hand, your friend’s experience with her boyfriend had been her only experience with any man, then she would have been committing what social scientists refer to as **overgeneralization**, assuming that broad patterns exist based on very limited observations.

- As a science, sociology relies on a systematic process of inquiry for gaining knowledge. That process, as noted earlier, is called research methods.
- One of the first and most important things to keep in mind about sociology is that sociologists aim to explain patterns in society. Most of the time, a pattern will not explain every single person's experience, a fact about sociology that is both fascinating and frustrating.
 - Ex -One area that sociologists commonly investigate is the impact of a person's social class background on his or her experiences and lot in life. You probably wouldn't be surprised to learn that a person's social class background has an impact on his or her educational attainment and achievement.

- Applied research lies at the other end of the continuum. In sociology, applied research refers to sociology that is conducted for some purpose beyond or in addition to a researcher's interest in a topic.
- **Qualitative methods** are ways of collecting data that yield results such as words or pictures.
- Some of the most common qualitative methods in sociology include field research, intensive interviews, and focus groups.
- **Quantitative methods**, on the other hand, result in data that can be represented by and condensed into numbers. Survey research is probably the most common quantitative method in sociology, but methods such as content analysis and interviewing can also be conducted in a way that yields quantitative data.

- While qualitative methods aim to gain an in-depth understanding of a relatively small number of cases, quantitative methods offer less depth but more breadth because they typically focus on a much larger number of cases.

Methods of data collection

- Social Surveys – are typically structured questionnaires designed to collect information from large numbers of people in standardized form.
- Social Surveys are written in advance by the researcher and tend to be pre-coded and have a limited number of closed-questions and focus on relatively simple topics.
 - A good example is Indian Census.
 - Social Surveys can be administered (carried out) in a number of different ways – they might be self-completion (completed by the respondents themselves) or they might take the form of a structured interview on the high street, as is the case with some market research.
- Experiments – aim to measure as precisely as possible the effect which one variable has on another, aiming to establish cause and effect relationships between variables.

Methods of data collection

- Experiment: the use of control and experimental groups and dependent and independent variable to test causation
- Dependent variable: a factor in an experiment that is changed by an independent variable
- Independent variable: a factor that causes a change in another variable, called the dependent variable
 - For example, sociologists interested in crime may ask how certain factors affect urban crime rates. In this example, urban crime rate is the dependent variable. Here sociologists may ask if lack of economic opportunity can be a reason for rise in urban crime? Then here lack of economic opportunity represents the independent variable, while urban crime rate is the dependent
- Experimental group: the group of subjects exposed to the independent variable in a study
- Control group: the subjects in an experiment who are not exposed to the independent variable

- Experiments typically start off with a hypothesis – a theory or explanation made on the basis of limited evidence as a starting point for further investigation, and will typically take the form of a testable statement about the effect which one or more independent variables will have on the dependent variable.
- A good experiment will be designed in such a way that objective cause and effect relationships can be established, so that the original hypothesis can be verified, or rejected and modified.
- There are two types of experiment – laboratory and field experiments – A laboratory experiment takes place in a controlled environment, such as a laboratory, whereas a field experiment takes place in a real-life setting such as a classroom, the work place or even the high street.

- Interviews – A method of gathering information by asking questions orally, either face to face or by telephone.
- Structured Interviews are basically social surveys which are read out by the researcher – they use pre-set, standardized, typically closed questions. The aim of structured interviews is to produce quantitative data.
- Unstructured Interviews, also known as informal interviews, are more like a guided conversation, and typically involve the researcher asking open-questions which generate qualitative data. The researcher will start with a general research topic in and ask questions in response to the various and differentiated responses the respondents give. Unstructured Interviews are thus a flexible, respondent-led research method.
- Semi-Structured Interviews consist of an interview schedule which typically consists of a number of open-ended questions which allow the respondent to give in-depth answers.
 - For example, the researcher might have 10 questions (hence structured) they will ask all respondents, but ask further differentiated (unstructured) questions based on the responses given.

- Participant Observation – involves the researcher joining a group of people, taking an active part in their day to day lives as a member of that group and making in-depth recordings of what she sees.
- Participant Observation may be overt, in which case the respondents know that researcher is conducting sociological research, or covert (undercover) where the respondents are deceived into thinking the researcher is ‘one of them’ do not know the researcher is conducting research.
- Ethnographies are an in-depth study of the way of life of a group of people in their natural setting. They are typically very in-depth and long-term and aim for a full (or ‘thick’), multilayered account of the culture of a group of people.
 - Participant Observation is typically the main method used, but researchers will use all other methods available to get even richer data – such as interviews and analysis of any documents associated with that culture.

- Case Studies involves researching a single case or example of something using multiple methods – for example researching one school or factory. An ethnography is simply a very in-depth case study.
- Longitudinal Studies – studies of a sample of people in which information is collected from the same people at intervals over a long period of time.
 - For example, a researcher might start off in 2015 by getting a sample of 1000 people to fill in a questionnaire, and then go back to the same people in 2020, and again in 2025 to collect further information.