## Social research

Professionals who conduct social research may study a variety of topics related to human behaviours and interactions, including interpersonal encounters, the formation of societies and the development of individuals' personalities. Investigating these topics can help social scientists learn more about how individuals, groups and societies interact, develop and function. Understanding this practice and what it involves can help you determine if you want to pursue a career in psychology, sociology or anthropology.

Social research is the study of social trends, dynamics and principles that exist between individuals and within societies. Professionals perform social research in order to better understand the social factors that motivate and influence human beings and to analyse how and why humans interact with each other. This broad category of research includes topics in many social science fields, such as psychology, sociology and anthropology. Organizations may use social research to improve their marketing practices, and government institutions can use this research to inform legislature and other policies.

Social research is a research conducted by social scientists following a systematic plan. Social research methodologies can be classified as quantitative and qualitative.

- Quantitative designs approach social phenomena through quantifiable evidence, and often rely on statistical analysis of many cases (or across intentionally designed treatments in an experiment) to create valid and reliable general claims. Related to quantity.
- Qualitative designs emphasize understanding of social phenomena through direct observation, communication with participants, or analysis of texts, and may stress contextual subjective accuracy over generality. Related to quality.

While methods may be classified as quantitative or qualitative, most methods contain elements of both. For example, qualitative data analysis often involves a structured approach to coding the raw data into systematic information, and quantifying intercoder reliability. Thus, there is often a more complex relationship between "qualitative" and "quantitative" approaches than would be suggested by drawing a simple distinction between them.

Social scientists employ a range of methods in order to analyse a vast breadth of social phenomena: from census survey data derived from millions of individuals, to the in-depth analysis of a single agent's social experiences; from monitoring what is happening on contemporary streets, to the investigation of ancient historical documents. Methods rooted in classical sociology and statistics have formed the basis for research in other disciplines, such as political science, media studies, program evaluation and market research.

Quantitative Research:

Quantitative Research is a research strategy that focuses on quantifying the collection and analysis of data. It is formed from a deductive approach where emphasis is placed on the testing of theory, shaped by empiricist and positivist philosophies.

Associated with the natural, applied, formal, and social sciences this research strategy promotes the objective empirical investigation of observable phenomena to test and understand relationships. This is done through a range of quantifying methods and techniques, reflecting on its broad utilization as a research strategy across differing academic disciplines.

The objective of quantitative research is to develop and employ mathematical models, theories, and hypotheses pertaining to phenomena. The process

of measurement is central to quantitative research because it provides the fundamental connection between empirical observation and mathematical expression of quantitative relationships.

Quantitative data is any data that is in numerical form such as statistics, percentages, etc. The researcher analyses the data with the help of statistics and hopes the numbers will yield an unbiased result that can be generalized to some larger population. Qualitative research, on the other hand, inquires deeply into specific experiences, with the intention of describing and exploring meaning through text, narrative, or visual-based data, by developing themes exclusive to that set of participants.

Quantitative research is widely used in psychology, economics, demography, sociology, marketing, community health, health & human development, gender studies, and political science; and less frequently in anthropology and history. Research in mathematical sciences, such as physics, is also "quantitative" by definition, though this use of the term differs in context. In the social sciences, the term relates to empirical methods originating in both philosophical positivism and the history of statistics, in contrast with qualitative research methods.

Qualitative research produces information only on the particular cases studied, and any more general conclusions are only hypotheses. Quantitative methods can be used to verify which of such hypotheses are true. A comprehensive analysis of 1274 articles published in the top two American sociology journals between 1935 and 2005 found that roughly two-thirds of these articles used quantitative method.

Quantitative research is generally closely affiliated with ideas from 'the scientific method', which can include:

- The generation of models, theories and hypotheses
- The development of instruments and methods for measurement
- Experimental control and manipulation of variables
- Collection of empirical data
- Modeling and analysis of data

Quantitative research is often contrasted with qualitative research, which purports to be focused more on discovering underlying meanings and patterns of relationships, including classifications of types of phenomena and entities, in a manner that does not involve mathematical models. Approaches to quantitative psychology were first modelled on quantitative approaches in the physical sciences by Gustav Fechner in his work on psychophysics, which built on the work of Ernst Heinrich Weber. Although a distinction is commonly drawn between qualitative and quantitative aspects of scientific investigation, it has been argued that the two go hand in hand. For example, based on analysis of the history of science, Kuhn concludes, "large amounts of qualitative work have usually been prerequisite to fruitful quantification in the physical sciences". Qualitative research is often used to gain a general sense of phenomena and to form theories that can be tested using further quantitative research. For instance, in the social sciences qualitative research methods are often used to gain better understanding of such things as intentionality (from the speech response of the researcher) and meaning (why did this person/group say something and what did it mean to them?).

Although quantitative investigation of the world has existed since people first began to record events or objects that had been counted, the modern idea of quantitative processes have their roots in August Comte's positivist framework. Positivism emphasized the use of the scientific method through observation to empirically test hypotheses explaining and predicting what, where, why, how, and when phenomena occurred. Positivist scholars like Comte believed only scientific methods rather than previous spiritual explanations for human behaviour could advance. Quantitative methods are an integral component of the five angles of analysis fostered by the data percolation methodology, which also includes qualitative methods, reviews of the literature (including scholarly), interviews with experts and computer simulation, and which forms an extension of data triangulation. Quantitative methods have limitations. These studies do not provide reasoning behind participants' responses, they often do not reach underrepresented populations, and they may span long periods in order to collect the data.

Statistics is the most widely used branch of mathematics in quantitative research outside of the physical sciences, and finds applications within the physical sciences, such as in statistical mechanics. Statistical methods used extensively within fields such as economics, social sciences and biology. Quantitative research using statistical methods starts with the collection of data, based on the hypothesis or theory. Usually a big sample of data is collected - this would require verification, validation and recording before the analysis could take place. Software packages such as SPSS and R are typically used for this purpose. Causal relationships studied by manipulating factors thought to influence the phenomena of interest while controlling other variables relevant to the experimental outcomes. In the field of health, for example, researchers might measure and study the relationship between dietary intake and measurable physiological effects such as weight loss, controlling for other key variables such as exercise. Quantitatively based opinion surveys are widely used in the media, with statistics such as the proportion of respondents in favour of a position commonly reported. In opinion surveys, respondents are asked a set of structured questions and their responses are tabulated. In the field of climate science, researchers compile and compare statistics such as temperature or atmospheric concentrations of carbon dioxide.

Qualitative research:

Qualitative research is a type of research that aims to gather and analyse nonnumerical (descriptive) data in order to gain an understanding of individuals' social reality, including understanding their attitudes, beliefs, and motivation. This type of research typically involves in-depth interviews, focus groups, or observations in order to collect data that is rich in detail and context. Qualitative research often used to explore complex phenomena or to gain insight into people's experiences and perspectives on a particular topic. It is particularly useful when researchers want to understand the meaning that people attach to their experiences or when they want to uncover the underlying reasons for people's behaviour. Qualitative methods include ethnography, grounded theory, discourse analysis, and interpretative phenomenological analysis. Qualitative research methods have been used in sociology, anthropology, political science, psychology, social work, folklore, Educational research and software engineering research.

Qualitative research has been informed by several strands of philosophical thought and examines aspects of human life, including culture, expression, beliefs, morality, life stress, and imagination. Contemporary qualitative research has been influenced of philosophy, bv а number of branches for example, positivism, postpositivism, critical theory, and constructivism. The historical transitions or 'moments' in qualitative research, together with the notion of 'paradigms', have received widespread popularity over the past decades. However, some scholars have argued that the adoptions of paradigms may be counterproductive and lead to less philosophically engaged communities.

There are many methods can use to conduct qualitative research that will get you richly detailed information on your topic of interest.

- Interviews. One-on-one conversations that go deep into the topic at hand.
- Case studies. Collections of client stories from in-depth interviews.
- Expert opinions. High-quality information from well-informed sources.
- Focus groups. In-person or online conversation with small groups of people to listen to their views on a product or topic.
- Open-ended survey questions. A text box in a survey that lets the respondent express their thoughts on the matter at hand freely.
- Observational research. Observing people during the course of their habitual routines to understand how they interact with a product, for example.

Difference between Qualitative and Quantitative Research	
Qualitative Research	Quantitative Research
A method for developing a better understanding of human and social sciences, in understanding human behaviour and personalities better	It is the method used to generate numerical data by using a lot of techniques such as logical, statistical and mathematical techniques
It employs a subjective approach	It employs an objective approach
It is generally expressed using words	It is expressed using graphs and numbers
It has open-ended questions	It has multiple choice questions
Qualitative research needs only a few respondents	Quantitative research requires many respondents
The data collection methods involved are interviews, focus groups, literature review, ethnography	The data collection methods involved are experiments, surveys, and observations expressed in numbers
Qualitative research is holistic in nature	Quantitative Research is particularistic in nature
The reasoning used to synthesise data in this research is inductive	The reasoning used to synthesise data in this research is deductive
This method involves a process-oriented inquiry	This method does not involve a process- oriented inquiry
It develops the initial understanding of	It recommends a final course of action

data	
The data taken in the Qualitative research method is pretty verbal	The data taken in this method is pretty measurable
The objective of this research method is to engage and discover various ideas	The main objective of Quantitative research is to examine the cause and effect between the variables
It is one of the exploratory research methods	It is a conclusive research method