Quantitative Research

- It is used to quantify the problem by generating data that can be used statistically.
- It is used to quantify attitudes, opinions, behaviors, or variables.
- Measures the level of occurrences on the basis of numbers.
- The sample size is typically large.
- Quantitative methodologies distill large amounts of information into numbers that are easily communicated to others.
Quantitative Research

- Any type of social statistic is an example of quantitative data.

- During the 2018-2019 academic year, 85% of students enrolled on a full-time basis at Rio Hondo College believed that textbooks were not affordable.

- Methods of Quantitative Research are: online surveys, paper surveys, and polls.
Qualitative Research

- Primarily exploratory research.
- It is used to gain understanding, reasons, opinions, and motivations.
- It is used to discover trends and dig deeper into information and/or problems.
- Based on words, perceptions, feelings, etc rather than numbers by using open-ended questions.
- The sample size is usually small.
Qualitative Research

- Attempt to conduct research in great detail...the complete picture.

- Methods of Qualitative Research include: focus groups, interviews, and observations.

- Qualitative researchers may engage in participant observation, in which they enter the social world they wish to study, or they may do in-depth interviews; analyze transcripts of conversations; extract data from historical books, letters, or diaries; or even use social media/networking sites or text messages as sources of data for their investigations.

  - Non-numerical data such as texts, written field notes, interview transcripts, videos, or photographs.

- Identify patterns in the collected data and engage in interpretative analysis.
**Ethnography:** a naturalistic method based on studying people in their own environment in order to understand the meanings they attribute to their activities; also, written work that results from the study.

- One of the most commonly used research methods in the social sciences.
- A qualitative method that allows for the study of a wide variety of people and places.
- **Key Feature**—**Fieldwork:** research that takes place in naturally occurring social environments out in the real world, where the researcher can study firsthand the day-to-day live of the people there...**participant observation.**
Qualitative: Ethnography/Participant Observation

- Within this research method, the researcher must become a participant in the group or setting being studied as well as an observer of it (Participant Observation).

- Participant observation requires deep immersion into a field site, sometimes lasting over a period of months or even years, so that the researcher can develop a member’s eye view and come to know the social world from the inside out.

- Ethnography is the written report of the study.
Qualitative:
Ethnography/Participant Observation

- **The first step in participant observation research is to gain entry or access to the chosen field site or setting.**

- **Certain groups or settings may be more or less difficult to approach... sometimes, there are settings where outsiders are not allowed.**

- **After gaining access, it is essential that the researcher establish a good rapport with the subjects... trust and acceptance are necessary... depending on the degree of involvement and closeness that is desired.**
Within a participant observation, data is collected primarily through writing detailed field notes everyday to document what happened.

Field Notes: detailed notes taken by an ethnographer describing his/her activities and interactions, which later become the basis of the analysis.

Some researchers may also take photos or videos in the course of their fieldwork.

Some researchers engage in a form of participant observation called auto ethnography, where they produce richly detailed accounts of their own thoughts, feelings, and experiences in the field as a focal point of their study.
Qualitative: Ethnography/Participant Observation

- Sometimes researchers must take brief, sketchy notes in the field by writing key words and short quotes on napkins, text messages, or small notebooks.

- Well written field notes provide a thick description, or rather, the presentation of detailed data on interactions and meaning within a cultural context, from the perspective of its members.

- Ethnographic researchers must pay attention to how their own social statuses—including gender, race/ethnicity, social class—shape the kind of access they can have, and hence the kind of knowledge they can obtain as part of their research.
Qualitative: Ethnography/Participant Observation

- **It is important to note, the presence of a researcher may affect the interactions and relationships within the group that they are observing, this is known as reflexivity.**
- **Reflexivity: how the identity and the activities of the researcher influence what is going on in the field setting.**
- **A researcher’s personal feelings about members of the group may influence their observations...respect, boredom, contempt, curiosity, etc.**
- **Most participant-observers are overt about their research intentions...this is the preferred approach because it eliminates the potential ethical problems of deceit.**
- **Depending on the research subjects/setting, a covert approach may be necessary.**
Based on their field notes, researchers look for patterns and themes...fitting the data into categories.

Identifying relationships among the categories allows ethnographers to build theoretical propositions, a form of analysis called grounded theory.

Grounded Theory: an inductive method of generating theory from data by creating categories in which to place data and then looking for relationships among categories.
Qualitative: Ethnography—Advantages

- Ethnographic research excels at telling richly detailed stories that contribute to our understanding of social life.

- Ethnographic research can challenge our taken-for-granted notions about groups we thought we knew.

- The detailed nature of ethnographic research can help reshape the stereotypes we hold about others and on which social policy is often based.

- Much of the pioneering methodological innovation of the last half-century has come from ethnography, especially on the issue of reflexivity and researcher roles in the field.
Ethnographic research suffers from a lack of replicability, the ability of another researcher to repeat or replicate the study.

Repeating a study in order to test the validity of its results is an important element of the scientific method, but because of the unique combinations of people, timing, setting, and researcher role, no one can ever undertake the same study twice.

Validity: the accuracy of a question or measurement tool; the degree to which a researcher is measuring what he/she thinks he/she is measuring.
A major critique has to do with ethnography's degree of representativeness—whether a particular study can apply to anything larger.

What is the value of studying relatively small groups of people if one cannot then say that these groups represent parts of the society at-large?

Participant observers must also be wary of personal bias...there is always a possibility that prejudice or favor can slip into the research process.
Interviews

- Interviews: person-to-person conversations for the purpose of gathering information by means of questions posed to respondents.

- Qualitative method conducted through systematic and scientific approach.

- Sociologists often combine interviews with other methods such as participant observations and an analysis of existing sources.

- As sociologists use interviews as a source of data collection, they must identify a target population, the entire group about which a researcher would like to be able to generalize.

- After identifying the target population, a sample, the members of the target population who will actually be studied, must be selected.

- The sample will be used to make generalizations that can apply to the larger target population.
Although most interviews are conducted on a one-on-one basis, some researchers may arrange for focus groups.

Focus Group: a process for interviewing a number of participants together, it also allows for interaction among group members.

In order to conduct an interview or focus group, researchers must receive consent from those who will be participating in the study because participants must know what they are getting into and explicitly agree to participate, especially when the interview is audio or video recorded.

Informed Consent: a safeguard through which a researcher make sure that respondents are freely participating and understand the nature of the research.
Interviews

- When conducting an interview, how do you know what to ask?
- Composing good questions is one of the most difficult parts of interviewing.
- Close-ended questions: a question asked of a respondent that imposes a limit on the possible responses.
  - Example: What is your race/ethnic background?
- Open-ended questions: a question asked of a respondent that allows the answer to take whatever form the respondent chooses.
  - Example: What do you think about interracial couples?
- As researchers ask questions, they must be careful to avoid leading questions, questions that predispose a respondent to answer in a certain way.
Interviews

- Overly complex questions are a problem.

- Double-barreled questions: questions that attempt to get at multiple issues at once, and so tend to receive incomplete or confusing answers.

- Sometimes, researchers will solicit the entire life history of a respondent, a chronological account of the story of his/her life from childhood to the present or of some portion of it.

- At the conclusion of the interviews, the data is transcribed and patterns of similarities and differences are identified among the answers.
Interviews: Advantages

- **Interviews allow respondents to speak in their own words; they can reveal their own thoughts, feelings, and beliefs...an internal state that would not necessarily be accessible by any other means.**

- **Interviews may help the researcher dispel certain preconceptions and discover issues that might have otherwise been overlooked.**
Interviews: Disadvantages

- Interview respondents are not always forthcoming or truthful. They may be selective about what they say in order to present themselves in the most favorable light.

- Another problem is representativeness: whether the conclusions of the interview research can be applied to larger groups. Face-to-face interviewing is time consuming and interviews are rarely used with large numbers of people.
Surveys: a research method based on questionnaires that are administered to a sample of respondents selected from a target population.

Macro level and quantitative in nature: looks at a large-scale social pattern and employs statistics and other mathematical means of analysis.

Most surveys are simple “yes” or “no” questions.

A common type of questionnaire is based on the Likert Scale, a format in which respondents can choose along a continuum—from “strongly agree” to “strongly disagree”.

Surveys may include open-ended questions.

Questions and possible answers on a survey must be written in such a way as to avoid confusion and ambiguity.

Common pitfalls are leading questions: negative questions which ask respondents what they don't think instead of what they do; and double-barreled questions.

Also, bias can be an issue if questions or answers are worded in a slanted fashion.
Surveys: Sampling

- The researcher must identify the specific target population he/she wishes to study.
- By using the correct sampling technique, researchers can survey a small number of respondents and then make accurate inferences about the larger population.
- In quantitative research, researchers may use probability sampling, a procedure that results in a sample group that reflects the characteristics of members in the target population.
- Simple Random Sample: a particular type of probability sample in which every member of the population has an equal chance of being selected.
- Representative Sample: a sample taken so that findings from members of the sample group can be generalized to the larger population; also referred to as a stratified sample...social class, race/ethnicity, gender, or age.
In order for a survey to be considered valid, there must be a significantly high response rate.

Response Rate: the number or percentage of surveys completed by respondents and returned to researchers.

Generally, claims can be made about a larger population from a survey with a response rate of only 20% to 30%.

Following the collection of the surveys, researchers tabulate and analyze data.

Responses are usually coded and turned into numerical figures.
Surveys: Advantages

- Survey research is one of the best methods for gathering original data on a population that is too large to study by other means, such as by direct observation or interviewing.

- Surveys can be widely distributed, reaching a large number of people. Researchers can then generalize their findings to an even larger population.

- Survey research is also relatively quick, economical, and can provide a vast amount of data. Online surveys now promise a way to gain access to even greater numbers of people at an even lower cost.

- Survey research is comparatively strong on reliability, this means that we can be sure that the same kind of data are collected each time the same question is asked.

- In survey research, there is less concern about interviewer or observer bias entering into the research process. Respondents may feel more comfortable giving candid answers to sensitive questions because they answer the questions in private and are usually assured of the anonymity of their responses.
Surveys: Disadvantages

- Survey research generally lacks qualitative data that might better capture the social reality the researcher wishes to examine because most survey questions don't allow the respondent to qualify his/her answer, they don't allow for a full range of expression and may not accurately reflect the true meaning of the respondent’s thoughts.

- In general, since not all respondents are honest in self-reports, survey research is comparatively weak on validity.

- Often, there are problems with the sampling process, especially when respondents self-select to participate, that makes generalizability more difficult. Gathering data online only exacerbates this problem.

- It is possible that survey research will be used to make a claim or support a point of view rather than for pure scientific discovery.
Existing Sources

- Existing Sources: materials that have been produced for some other reason but that can be used as data for social research.
- Includes: historical records (marriage licenses and building permits), books, magazines, TV shows, or websites.
- Although these materials may have been produced for another purpose, they can constitute valuable data to be used in social research.
- Existing sources are considered to be unobtrusive measures, research methods that rely on existing sources and where the researcher does not intrude upon or disturb the social setting or its subjects.
- Comparative Historical Research: seeks to understand relationships between elements of society in various regions and time periods...allows a researcher to analyze cultural artifacts such as literature, paintings, newspapers, and photographs.
- Content Analysis: a method in which researchers identify and study specific variables or themes that appear in a text, image, or media message.
Existing Sources: Advantages

- Researchers are able to work with information they could not possibly obtain on their own.

- For example: The U.S Census Bureau collects information about the entire national population (family size, education, income, occupational status, and residential patterns).

- Using sources such as newspapers, political speeches and cultural artifacts, sociologists are able to learn about many social worlds, in different time periods, that they would never be able to enter themselves.

- Researchers can use the same data to replicate projects that have been conducted before, which is a good way to test findings for reliability or to see changes across time.
Researchers drawing on existing sources often seek to answer questions that the original authors did not have in mind...insufficient information and unclear references.

Similarly, content analysis, although it can describe the messages inherent in the media, does not illuminate how such messages are interpreted.
Values, Objectivity, and Reactivity

- **Value-free Sociology**: an ideal whereby researchers identify facts without allowing their personal beliefs or bases to interfere.

- **Basic Research**: the search for knowledge without an agenda or practical goal in mind.

- **Applied Research**: gathering knowledge that can be used to create social change.

- **Objectivity**: impartiality, the ability to allow the facts to speak for themselves.

- **Reactivity**: the tendency of people and events to react to the process of being studied.

  - **Hawthorne Effect**: a specific example of reactivity, in which the desired effect is the result of the research itself, not the independent variable.

- From 1927-1932, a Harvard professor studied the motivation and productivity of workers at the Hawthorne Plant of Western Electric in Chicago... productivity increased with changes to lighting levels, rest breaks and increases to the pay rate... when the changes were reversed, the productivity continued to increase... concluded that increased productivity was the result of the workers reacting to being studied, not the changes within the workplace.
Research Ethics

- **Deception**: the extent to which the participants in a research project are unaware of the project or its goals.

- **Confidentiality**: the assurance that no one other than the researcher will know the identity of a respondent...protecting a person’s identity...privacy.

- **Code of Ethics**: ethical guidelines for researchers to consult as they design a project.

- **Institutional Review Board**: a group of scholars within a university who meet regularly to review and approve the research proposals of their colleagues and make recommendations for how to protect human subjects.