

Sociological Research Methods

Introduction to Sociology

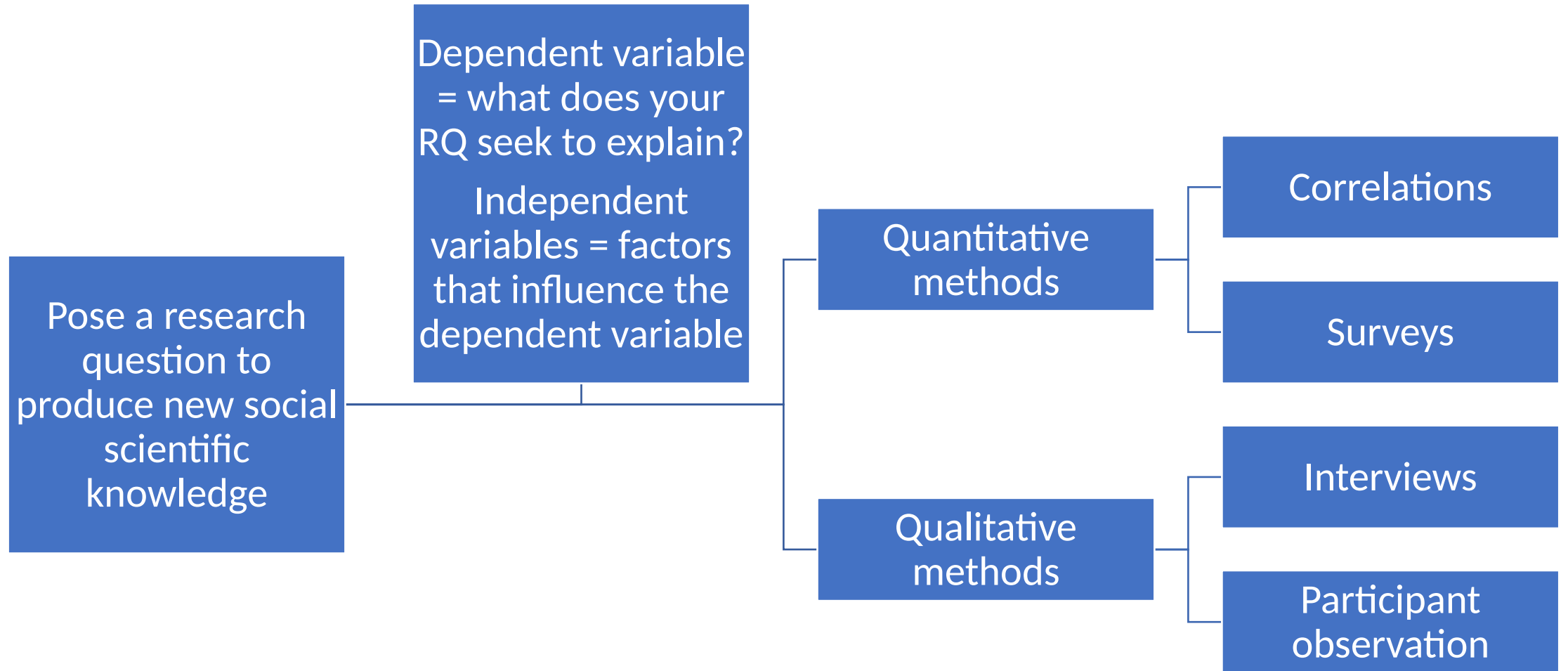


What will you learn in a research methods class?

- translate social theory into appropriate research design
- understand main qualitative and quantitative research methods and their strengths and weaknesses
- understand research process steps and the logic of each step
- analyze ethical issues involved in social research
- learn software for data collection and analysis
- communicate results of social research accurately and cogently
- critically analyze social research presented by others

Learning goals for today

- Define social science research methods
- How to formulate a social science research question
- Introduction to quantitative and qualitative methods



Defining social science research methods

How do you know what is true? Why?

“Non-citizens commit more crime than citizens”

Do you believe this statement?

Why?

Defining social science research methods

In answering the “why” questions you developed your own social theory

Social theory are explanations for why social and political change occurs

Social science research methods are ways of testing social theory

The purpose is to solve problems by producing new knowledge or challenge existing knowledge

How to formulate a research question

- RQ: a question using independent and dependent variables
- Variable: a concept that can be measured
 - Eg. GPA, political party, fear
 - How would you measure fear?
- Independent variable: explaining variable
- Dependent variable: explained variable

How to formulate a research question

RQ examples – identify the independent and dependent variables

“Do citizens or non-citizens commit more violent crime?”

“which major at RU-N has the most students who believe in aliens?”

How to formulate a research question

- Independent variable: explaininging variable
- Dependent variable: explaineded variable

How to formulate a research question

RQ examples – identify the independent and dependent variables

“why are covid death rates higher in black communities than white communities?”

“which major at RU-N has the most students who believe in aliens?”

How to formulate a research question

RQ examples – identify the **independent** and **dependent** variables

“Do **citizens or non-citizens** commit more violent **crime**?”

“which **major at RU-N** has the most students who **believe in aliens**?”

Quantitative and Qualitative methods

- Quantitative
 - Data is numbers
 - RQs include “Do”, “How much”, “How frequent”
 - Methods include surveys and correlation
- Qualitative
 - Data is text, audio, visual
 - RQs include “Why”, “What”, “How”
 - Methods include interviews, participant observation, content analysis

Quantitative methods

- Two common methods for gathering data (or information)
 - Surveys
 - Correlational analysis

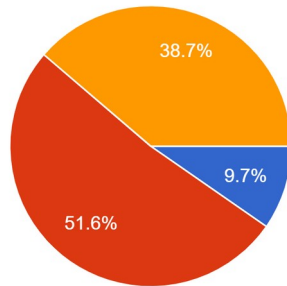
Surveys

- Researchers collect **their own** quantitative data by using questionnaires
- Surveys can be correlational studies if the survey questions are quantitative
 - Eg: “Do you believe in aliens?” Yes or No
- Surveys can be qualitative if the survey questions are open-ended questions
 - Eg: “Please tell us why you do or do not believe in aliens?”
 - The question is open-ended so it is qualitative, there is no quantitative data being collected in this question (although responses can be quantified but that is advanced for our purposes today)

Survey Example

For your average or typical sociology course, what is your preference for method of course delivery?

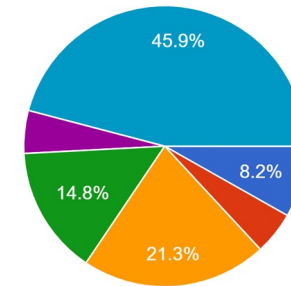
62 responses



- All in-person classes for a given course
- All online or remote classes for a given course
- 50-60 percent in-person classes and 40-50 percent online classes, with complete accommodations for students who want to take the course only online or mostly online

Imagine that you will take five courses in Spring semester, what would be your preferred ratio of in-person to online/hybrid classes?

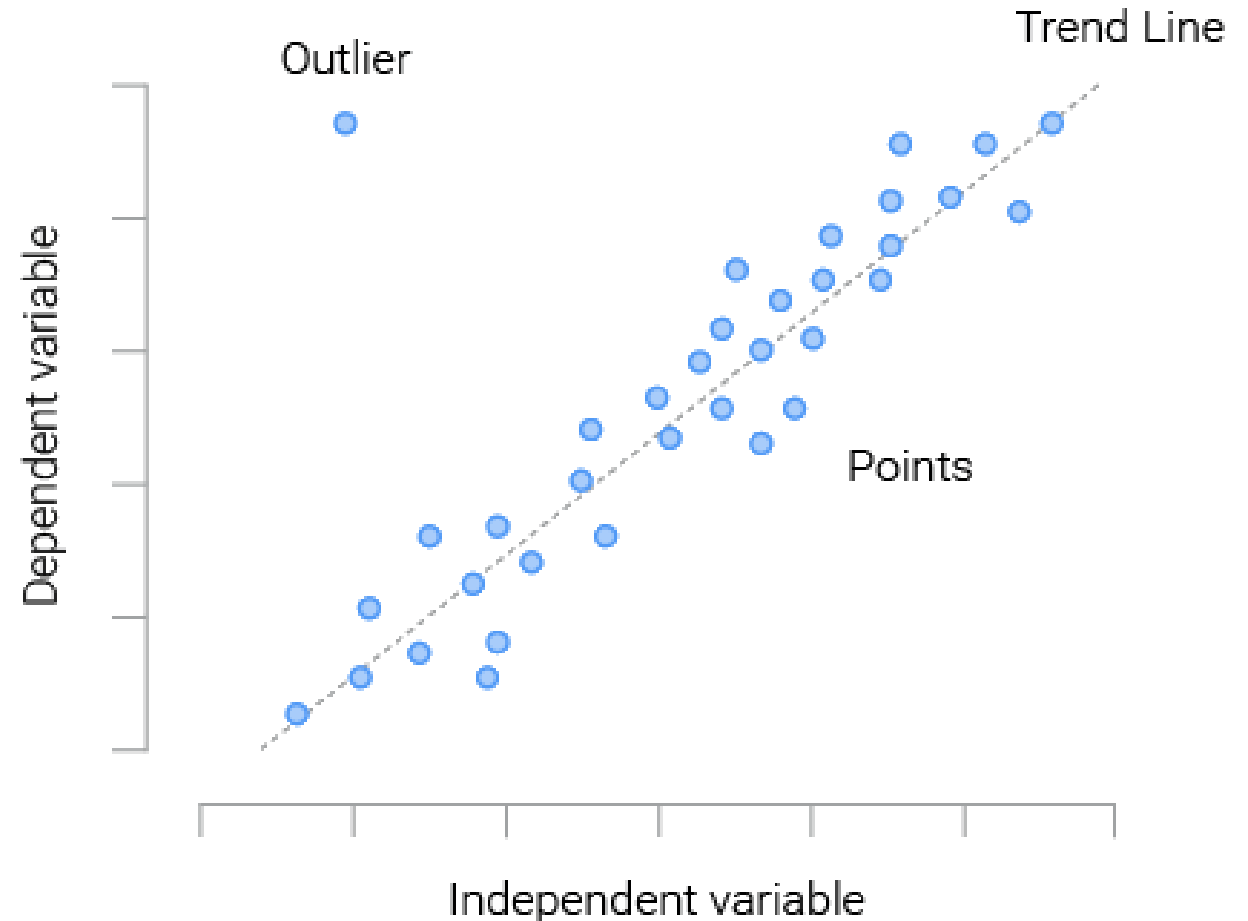
61 responses



- All in-person class
- Four in-person classes and one online or hybrid course
- Three in-person classes and two online or hybrid courses
- Two in-person classes and three online or hybrid courses
- One in-person class and four online or hybrid courses
- All online or hybrid courses

Correlational methods (in two minutes)

- In most correlational studies, researchers use **existing** datasets
- Our main interest: is there a relationship between the independent and dependent variables?
- RQ: does temperature effect ice cream sales?
- If independent variable is temperature, and dependent is ice cream sales, they are correlated but there is no causation (temperature does not cause people to buy ice cream)
- Important: correlation is not causation



Qualitative methods

- Two common methods for gathering data (or information)
 - Interviews
 - Participant observation

Saldana, Johnny. 2011. *Fundamentals of Qualitative Research*. Oxford: Oxford University Press.

Read pages: 3-4, 10-11, 32-33, 46-47, 89-91

Interviews

Why do we use interviews in sociological research? (answer in quote)

“The data collection method is an effective way of soliciting and documenting, in their own words, an individual’s or group’s perspectives, feelings, opinions, values, attitudes, and beliefs about their personal experiences and social world, in addition to factual information about their lives.” (Saldana p10-11)

What is the difference between interviews done in sociology and journalism?

What is **sampling** and why is it important for interviews?

Participant observation

“the systematic, selective observation and documentation of participants’ actions, reactions, and interactions in their natural social settings.”

- The researcher can be a “fly on the wall” or fully involved.
- We write down what we witness and experience in fieldnotes
- “The goal is to capture people’s naturalistic actions, reactions, and interactions, and to infer their ways of thinking and feeling.”

Participant observation

The purpose is to identify social patterns in the setting

What social patterns do researchers observe?

- behaviors, social relations, meetings, interactions, networks;
- situations and events;
- rules and social conventions;
- ceremonies and rituals;
- beliefs, attitudes, values, stereotypes, opinions;
- emotions, motivations;
- cultural products (such as pictures, paintings, movies, theatre plays, television programs);
- documents and texts (historical, literary, journalistic)

Participant observation

Examples:

Private sector application of participant observation

<https://www.youtube.com/watch?v=yjFkUqAeUq8>

how did ikea researchers gather this information?

Public sector application of participant observation

https://www.youtube.com/watch?v=SL_bqOt3QHc

What were some of Brotherton's conclusions and what ethnographic evidence did he gather to support these conclusions?

How do we know if a research question is quantitative or qualitative?

There are two ways that we can figure out if we should use quantitative or qualitative methods to answer a research question

1. How are the variables measured? (quantitative or qualitative)
2. How is the *relationship* between the variables measured? (quantitative or qualitative)

is the research question quantitative or qualitative?

1) How are variables measured? (quantitative or qualitative)

- Do charter schools perform better than public schools?
 - IV = charter or public school
 - DV= school performance
 - Performance as quantitative measure=
 - Performance as qualitative measure =
- If the variables are measured quantitatively then we will use quantitative methods to answer the research question, same for qualitative

is the research question quantitative or qualitative?

1) How are variables measured? (quantitative or qualitative)

- Do charter schools perform better than public schools?
 - IV = charter or public school
 - DV= school performance
 - Performance as quantitative measure= Grades, test scores, rankings, graduation and drop out rates, attendance,
 - Performance as qualitative measure = student behavior/interaction, teacher-student interaction, student experience, art
 - If the variables are measured quantitatively then we will use quantitative

is the research question quantitative or qualitative?

2) How is the *relationship* between the variables measured?
(quantitative or qualitative)

- **Why** do charter schools perform better than public schools?
 - X causes Y to occur, our research question is asking us to identify X
 - The question of 'why' is a causal question, not correlational (review slide 13)
 - If the *relationship* between variables is measured qualitatively then we must use qualitative methods to answer the research question