

STAR

STEPS TOWARDS ACADEMIC RESEARCH

By: Ajay Koli | 08 January 2022



Jai Bhim! 😊

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- STAR: Steps Towards Academic Research

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- It is a free research methodology course as part of Corporate Social Responsibility (CSR) activity of Department of Travel & Tourism, Vishwakarma University - Pune, India, exclusively for the students of Digital Nalanda.

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- Free eBooks will be given and slides will be shared.
- Schedule:
 - Total sessions are eight
 -  15 Dec 2021 to 07 Jan 2022; every Wednesday & Friday
 -  from 06:30 to 08:30 PM IST.

Topics:

1. Research Framework
2. Research Approaches
3. Ethics in Research
4. Literature Review, Measurement & Sampling
5. Quantitative Methods & Analysis
6. Qualitative Methods & Analysis

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"in our everyday reasoning about the social world, prior experiences and orientations may have a major influence on what we perceive and how we interpret these perceptions. ... We need to move beyond first impressions and get reactions to more systematic methods of investigation. That's what social research does."²

Science

- A set of logical, systematic, documented methods for investigating nature and natural processes; the knowledge produced by these investigations.²

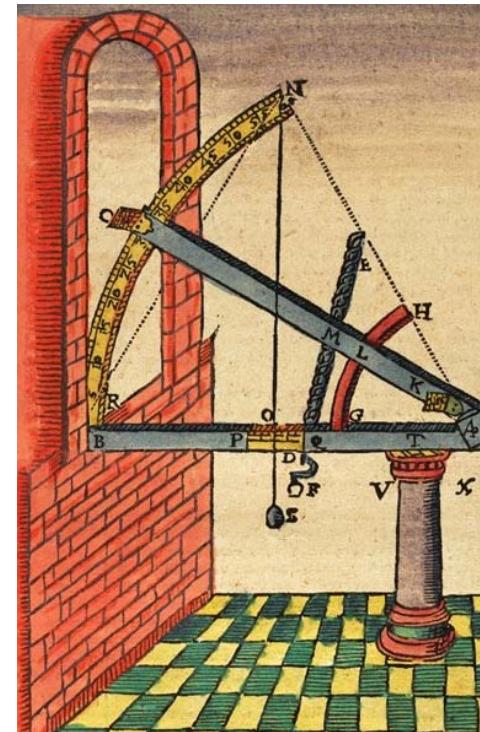


Image source: [Scientific instruments for measuring angles between two celestial bodies](#)

Social Science

- The use of scientific methods to investigate individuals, societies, and social processes; the knowledge produced by these investigations.²



Image source: [Early censuses and surveys provided demographic data.](#)

Research Hell 🔥

How to make it
less painful?





Research Framework

SESSION 1

Why research?

- "Research results in the **creation of knowledge** to solve a problem, answer a question, and better describe or understand something."



Clough, P., & Nutbrown, C. (2012). A Student's Guide to Methodology. Sage.

Why research?

- "Research results in the **creation of knowledge** to solve a problem, answer a question, and better describe or understand something."

Find your reason:

- education
- better opportunities
- curiosity
- targets
- policy critic
- climate change
- fame
- human rights for all genders & castes
- poverty alleviation
- consumption
- production
- medicine



Clough, P., & Nutbrown, C. (2012). A Student's Guide to Methodology. Sage.

What is research?



- "is about **asking** questions, exploring problems and **reflecting** on what emerges in order to make meaning from the data and tell the research **story**"

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What is research?

- "questions about the world and a desire to accurately answer them" ²

What is research?

- "questions about the world and a desire to accurately answer them" ²
- "steps from broad assumptions to detailed methods of data collection, analysis, and interpretation" ³

What is research?

- "questions about the world and a desire to accurately answer them" ²
- "steps from broad assumptions to detailed methods of data collection, analysis, and interpretation" ³
- "Just close your eyes for a minute and utter the word research to yourself."¹



Let's cook some research





Let's cook some research

- WHAT TO COOK?
INTRODUCTION + LITERATURE REVIEW





Let's cook some research

- WHAT TO COOK?

INTRODUCTION + LITERATURE REVIEW

- HOW TO COOK?

METHODOLOGY





Let's cook some research



- WHAT TO COOK?

INTRODUCTION + LITERATURE REVIEW

- HOW TO COOK?

METHODOLOGY

- WHAT IS THE RESULT OF YOUR COOKING?

DATA ANALYSIS

A vibrant collage of fresh fruits and flowers. It includes strawberries, blackberries, orange slices, tulips, and rhubarb stalks. Some Polaroid photos are scattered among the produce.

Let's cook some research



- WHAT TO COOK?

INTRODUCTION + LITERATURE REVIEW

- HOW TO COOK?

METHODOLOGY

- WHAT IS THE RESULT OF YOUR COOKING?

DATA ANALYSIS

- HOW SIMILAR OR DIFFERENT IS YOUR DISH?

DISCUSSION



Let's cook some research



- WHAT TO COOK?
INTRODUCTION + LITERATURE REVIEW
- HOW TO COOK?
METHODOLOGY
- WHAT IS THE RESULT OF YOUR COOKING?
DATA ANALYSIS
- HOW SIMILAR OR DIFFERENT IS YOUR DISH?
DISCUSSION
- SO WHAT, YOU COOKED THIS DISH (**SHIT**)?
CONCLUSION

Social science methods help to avoid² :

- **Overgeneralization:** Occurs when we unjustifiably conclude that what is true for some cases is true for all cases

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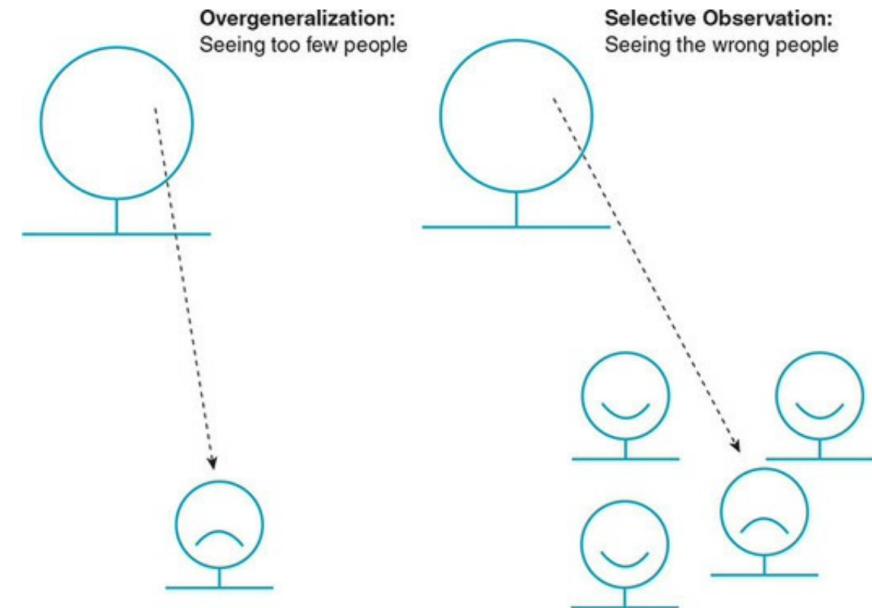
- **Overgeneralization:** Occurs when we unjustifiably conclude that what is true for some cases is true for all cases
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- **Illogical reasoning:** The premature jumping to conclusions or arguing on the basis of invalid assumptions.
- **Resistance to change:** The reluctance to change our ideas in light of new information.

Social science methods help to avoid² :

- Overgeneralization
- Selective or Inaccurate Observation
- Illogical reasoning
- Resistance to change



Four goals of social research are²:

1. **Description:** Research in which social phenomena are defined and described.

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3. **Explanation:** Seeks to identify causes and effects of social phenomena and to predict how one phenomenon will change or vary in response to variation in another phenomenon.
4. **Evaluation:** Research that describes or identifies the impact of social policies and programs.

How well have we done our research?

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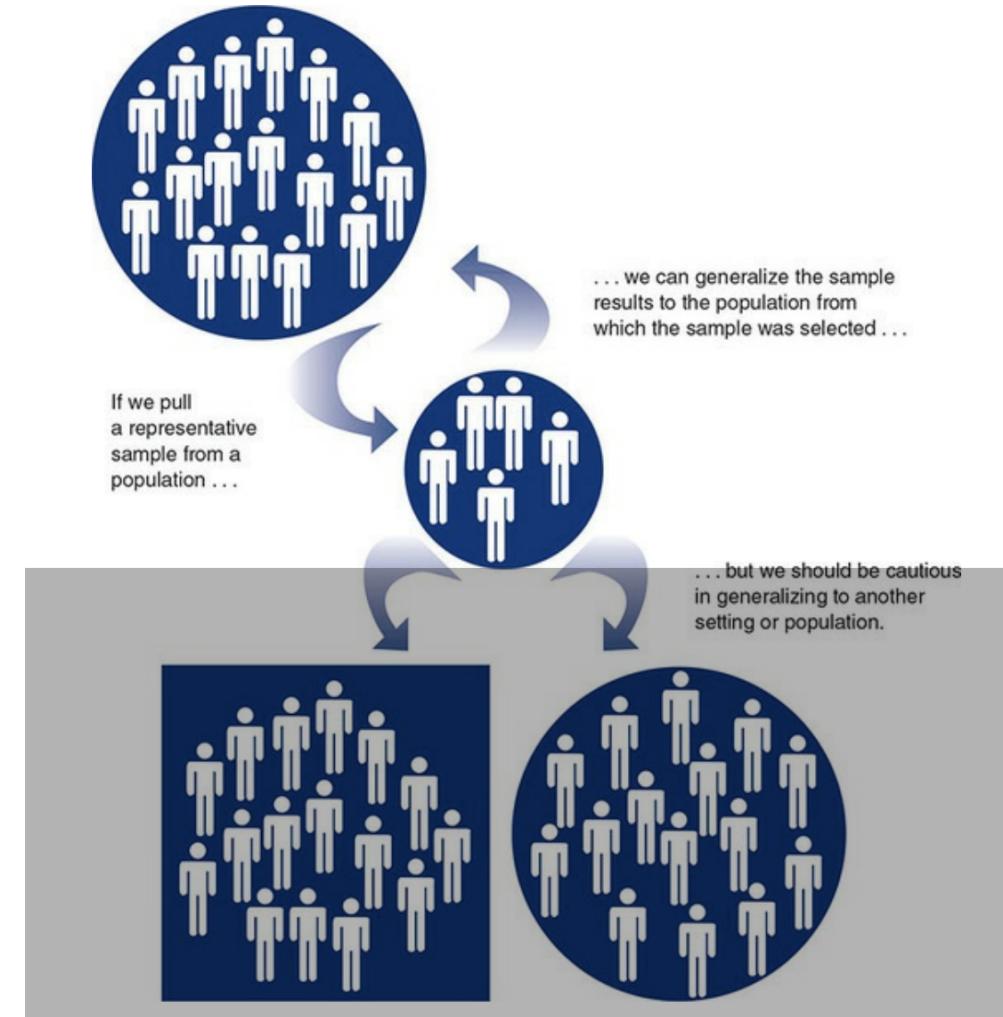
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 - **Measurement validity:** Exists when an indicator measures what we think it measures.
 - **Causal validity (Internal validity):** Exists when a conclusion that A leads to, or results in, B is correct.
 - **Generalizability:** Exists when a conclusion holds true for the population, group, settings, or event that we say it does, given the conditions that we specify; it is the extent to which a study can inform us about persons, places, or events that were not directly studied.

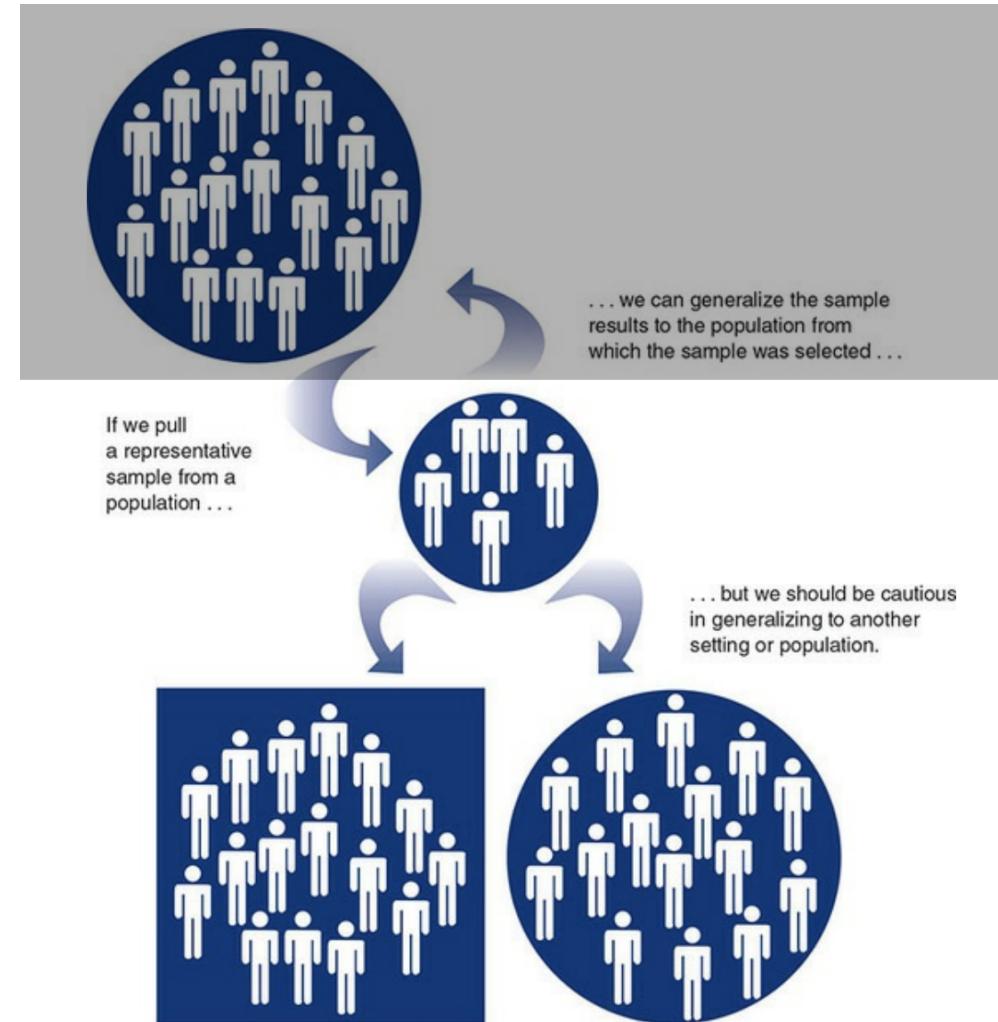
Generalizability

Sample generalizability: Exists when a conclusion based on a sample, or subset, of a larger population holds true for that population.



Generalizability

Cross-population generalizability (external validity): Exists when findings about one group, population, or setting hold true for other groups, populations, or settings.



What did we learn?

- ✓ Why you want to do research?

What did we learn?

- ✓ Why you want to do research?
- ✓ So what? 😊

What did we learn?

- ✓ Why you want to do research?
- ✓ So what? 😊
- ✓ Validity of your research 



Research Approaches

SESSION 2

Outcomes:

- Determining your research approach

Outcomes:

- Determining your research approach
- Identifying a worldview with which you are most comfortable

Outcomes:

- Determining your research approach
- Identifying a worldview with which you are most comfortable
- Defining the three types of research approaches

Outcomes:

- Determining your research approach
- Identifying a worldview with which you are most comfortable
- Defining the three types of research approaches
- Using quantitative, qualitative, and mixed methods designs and methods

This session slides are prepared from Chapter 1 of Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.

Research approach

- "Research approaches are **plans and the procedures** for research that span the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation."

Three research approaches are:

1. Qualitative
2. Quantitative, and
3. Mixed methods.



Dr Raul Pacheco-Vega
@raulpacheco



Qualitative methods, mixed methods, quantitative methods.



Qualitative approach

- "using **words**"

Qualitative approach

- "using **words**"
- "is an approach for exploring and understanding the **meaning** individuals or groups ascribe to a social or human problem."

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- **flexible** report structure
- for example **violence**



Qualitative approach

- "using **words**"
- "is an approach for exploring and understanding the **meaning** individuals or groups ascribe to a social or human problem."
- open-ended questions and responses
- **flexible** report structure
- for example **work burnout**



Qualitative approach

- "using **words**"
- "is an approach for exploring and understanding the **meaning** individuals or groups ascribe to a social or human problem."
- open-ended questions and responses
- **flexible** report structure
- for example **luxury purchase**



Quantitative approach

- "use numbers"

Quantitative approach

- "use **numbers**"
- "is an approach for testing objective theories by examining relationship among **variables**"

Quantitative approach

- "use **numbers**"
- "is an approach for testing objective theories by examining relationship among **variables**"
- closed-ended questions and responses

Quantitative approach

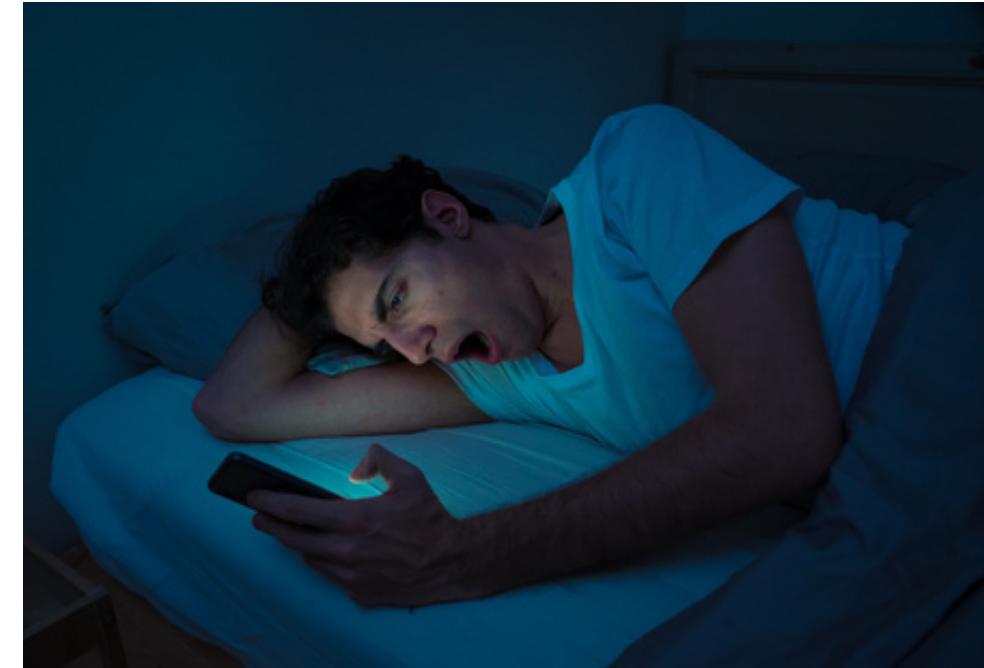
- "use **numbers**"
- "is an approach for testing objective theories by examining relationship among **variables**"
- closed-ended questions and responses
- set structure

Quantitative approach

- "use **numbers**"
- "is an approach for testing objective theories by examining relationship among **variables**"
- closed-ended questions and responses
- set structure
- example **games & violence**

Quantitative approach

- "use **numbers**"
- "is an approach for testing objective theories by examining relationship among **variables**"
- closed-ended questions and responses
- set structure
- example **mobile and sleep disorder**



Quantitative approach

- "use numbers"
- "is an approach for testing objective theories by examining relationship among variables"
- closed-ended questions and responses
- set structure
- example shelf management



Mixed methods approach

- "an approach to inquiry involving collecting **both** quantitative and qualitative data, **integrating the two** forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks."

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- "an approach to inquiry involving collecting **both** quantitative and qualitative data, **integrating the two** forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks."
- Example gender & alcohol



Paper link <https://www.tandfonline.com/doi/abs/10.1080/08870446.2011.617444>

Mixed methods approach

- "an approach to inquiry involving collecting **both** quantitative and qualitative data, **integrating the two** forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks."
- Example **student anxiety**



Paper link <https://journals.sagepub.com/doi/abs/10.1177/0193945911408444>

Mixed methods approach

- "an approach to inquiry involving collecting **both** quantitative and qualitative data, **integrating the two** forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks."
- Example **family formation**



Paper link <https://journals.sagepub.com/doi/abs/10.1177/2345678906292238>

Research approach depends upon:

- **Philosophical world-view:** a general philosophical orientation about the world and the nature of research that a researcher brings to a study

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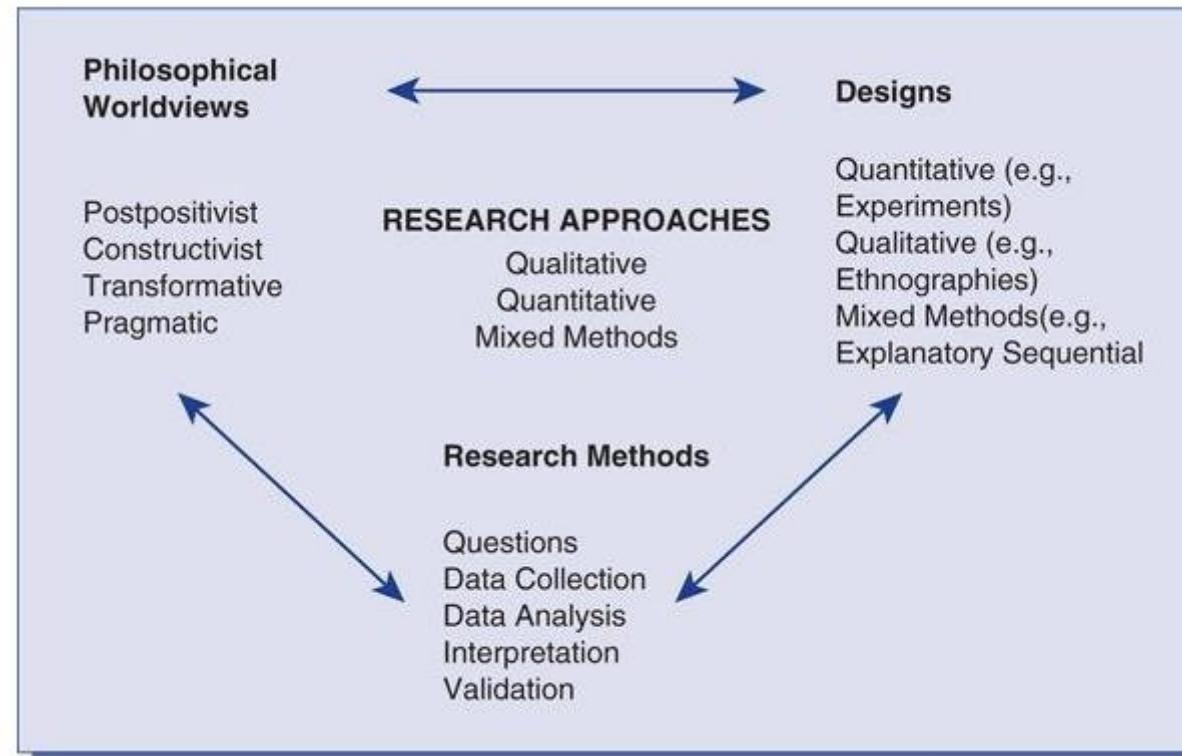
Research approach depends upon:

- Philosophical world-view: a general philosophical orientation about the world and the nature of research that a researcher brings to a study
- Research designs: procedures of inquiry as per the philosophical assumptions
- Research methods¹ of data collection, analysis and interpretation

[1] Research methodology is different from research methods. 🤯

A Framework for Research

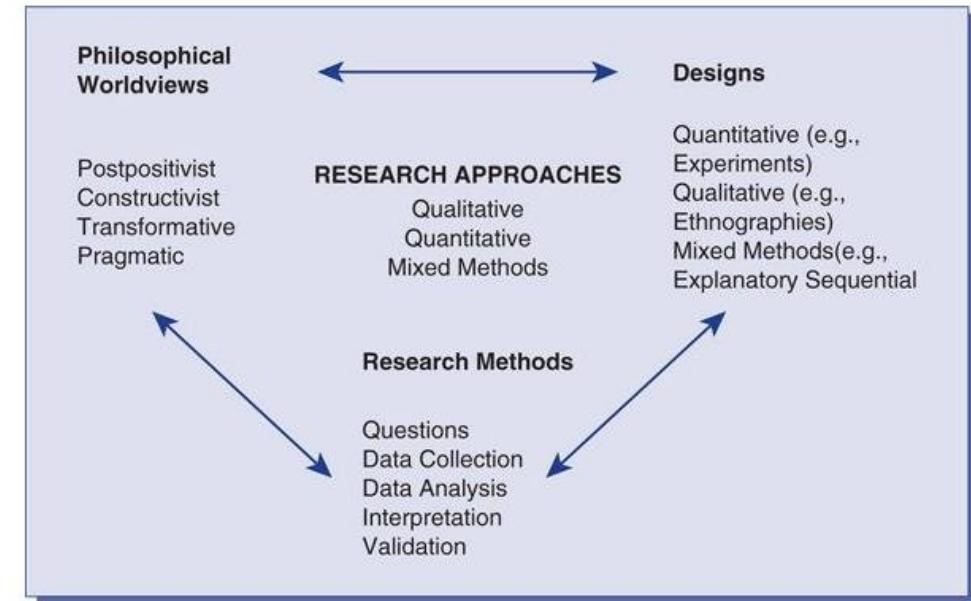
The Interconnection of World-views, Research Designs, & Research Methods



Philosophical Worldviews

Postpositivism

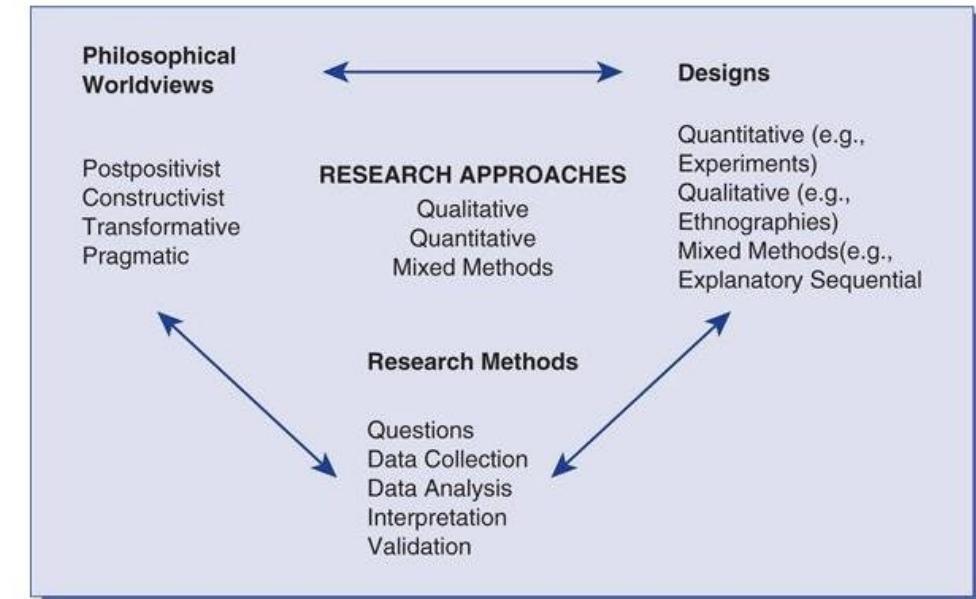
- Determination (cause & effect)
- Reductionism (idea -> variables -> hypothesis)
- Empirical observation and measurement
- Theory verification



Philosophical Worldviews

Constructivist

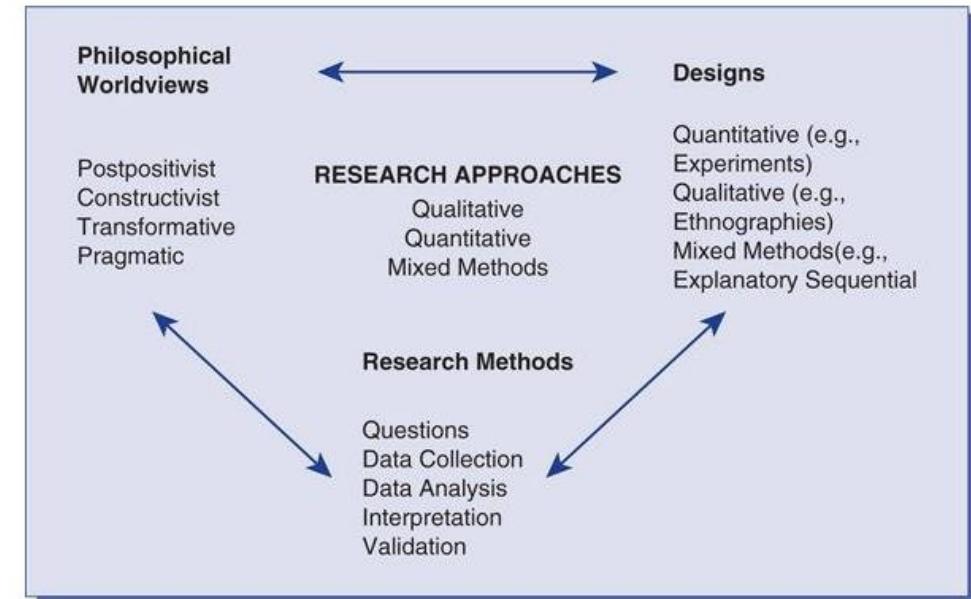
- Understanding
- Multiple participant meanings
- Social & historical construction
- Theory generation



Philosophical Worldviews

Transformative

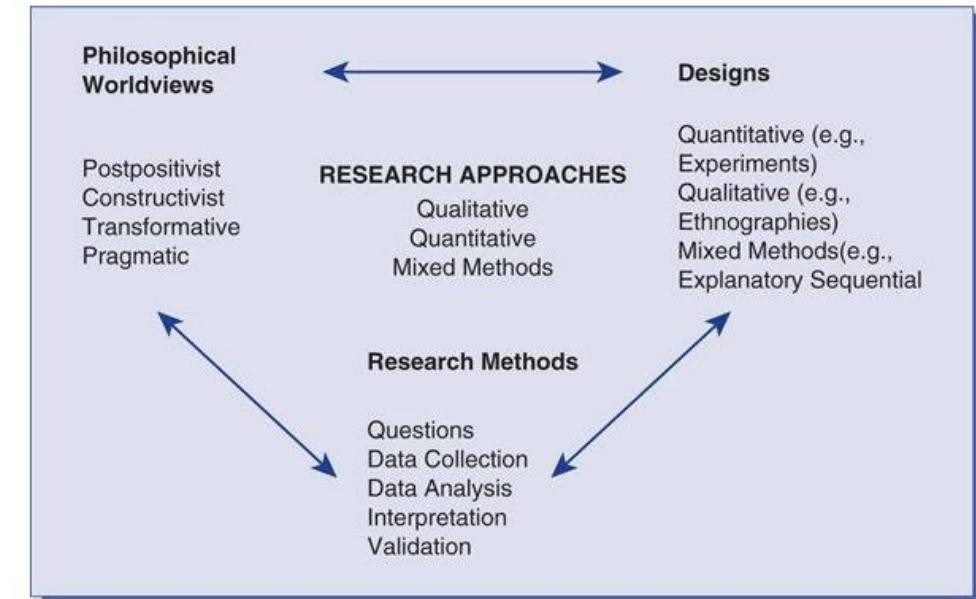
- Political
- Power & justice oriented
- Collaborative
- Change-oriented



Philosophical Worldviews

Pragmatic

- Consequence of actions
- Problem-centered
- Pluralistic
- Real-world practice oriented



Research Designs

- "are types of inquiry within qualitative, quantitative, and mixed methods approaches that provide specific direction for procedures in a research designs"

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Quantitative

Qualitative

Mixed Methods

- Experimental designs
- Non-experimental designs, such as surveys

Research Designs

- "are types of inquiry within qualitative, quantitative, and mixed methods approaches that provide specific direction for procedures in a research designs"

Quantitative

Qualitative

Mixed Methods

- Narrative research
- Phenomenology
- Grounded theory
- Ethnographies
- Case study

Research Designs

- "are types of inquiry within qualitative, quantitative, and mixed methods approaches that provide specific direction for procedures in a research designs"

Quantitative

Qualitative

Mixed Methods

- Convergent
- Explanatory sequential
- Exploratory sequential
- Transformative, embedded , or multiphase

Research Methods

- "involve the forms of data collection, analysis, and interpretation that researchers propose for their studies"

Research Methods

- "involve the forms of data collection, analysis, and interpretation that researchers propose for their studies"

Quantitative Methods

Qualitative

Mixed Methods

- Pre-determined
- Instrument based questions
- Performance data, attitude data, observational data, & census data
- Statistical analysis
- Statistical interpretation

Research Methods

- "involve the forms of data collection, analysis, and interpretation that researchers propose for their studies"

Quantitative Methods

Qualitative

Mixed Methods

- Emerging methods
- Open-ended questions
- Interview data, observation data, document data & audiovisual data
- Test & image analysis
- Themes, patterns interpretation

Research Methods

- "involve the forms of data collection, analysis, and interpretation that researchers propose for their studies"

Quantitative Methods

Qualitative

Mixed Methods

- Both predetermined & emerging methods
- Both open- and closed- ended questions
- Multiple forms of data drawing on all possibilities
- Statistical & text analysis
- Across databases interpretation

Research Approaches as Worldviews, Designs, and Methods

- **Quantitative approach:** Postpositivist worldview, experimental design, and pretest and posttest measures of attitudes

Research Approaches as Worldviews, Designs, and Methods

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Research Approaches as Worldviews, Designs, and Methods

- **Quantitative approach:** Postpositivist worldview, experimental design, and pretest and posttest measures of attitudes
- **Qualitative approach:** Constructivist worldview, ethnographic design, and observation of behavior
- **Mixed methods approach:** Pragmatic worldview, collection of both quantitative and qualitative data sequentially in the design

Criteria for Selecting a Research Approach

- The Research Problem and Questions

Criteria for Selecting a Research Approach

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- Personal training & experiences

Criteria for Selecting a Research Approach

- The Research Problem and Questions
- Personal training & experiences
- Audience

The background of the image is a dark, star-filled night sky. In the lower center, there is a silhouette of a person standing on a small, rocky outcrop or hill. The horizon line is visible at the bottom, showing some dark, silhouetted vegetation.

Ethics in Research

SESSION 3

Historical Background

NUREMBERG WAR CRIME TRIALS (1946)



Historical Background

NUREMBERG WAR CRIME TRIALS
(1946)



TUSKEGEE SYPHILIS STUDY
(1932–1972)



Three basic ethical principles:

1. **Respect for persons** - treating persons as autonomous agents and protecting those with diminished autonomy

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1. **Respect for persons** - treating persons as autonomous agents and protecting those with diminished autonomy
2. **Beneficence** - minimizing possible harms and maximizing benefits.
3. **Justice** - distributing benefits and risks of research fairly

This session slides are prepared using Chapter 3 from Chambliss, D. F., & Schutt, R. K. (2018). *Making sense of the social world: Methods of investigation*. Sage Publications.

Code of Ethics of the ASA

1. To protect research subjects

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1. To protect research subjects
2. To maintain honesty and openness
3. To achieve valid results
4. To encourage appropriate application

Protecting Research Subjects

1. Avoid harming research participants.

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2. Obtain informed consent.

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3. Avoid deception in research, except in limited circumstances.

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2. Obtain informed consent.
3. Avoid deception in research, except in limited circumstances.
4. Maintain privacy & confidentiality.

Reporting, Sharing & Storing Data

1. Falsifying authorship, evidence, data findings or conclusions.

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2. Do not plagiarize

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3. Communicate in clear straightforward, appropriate language

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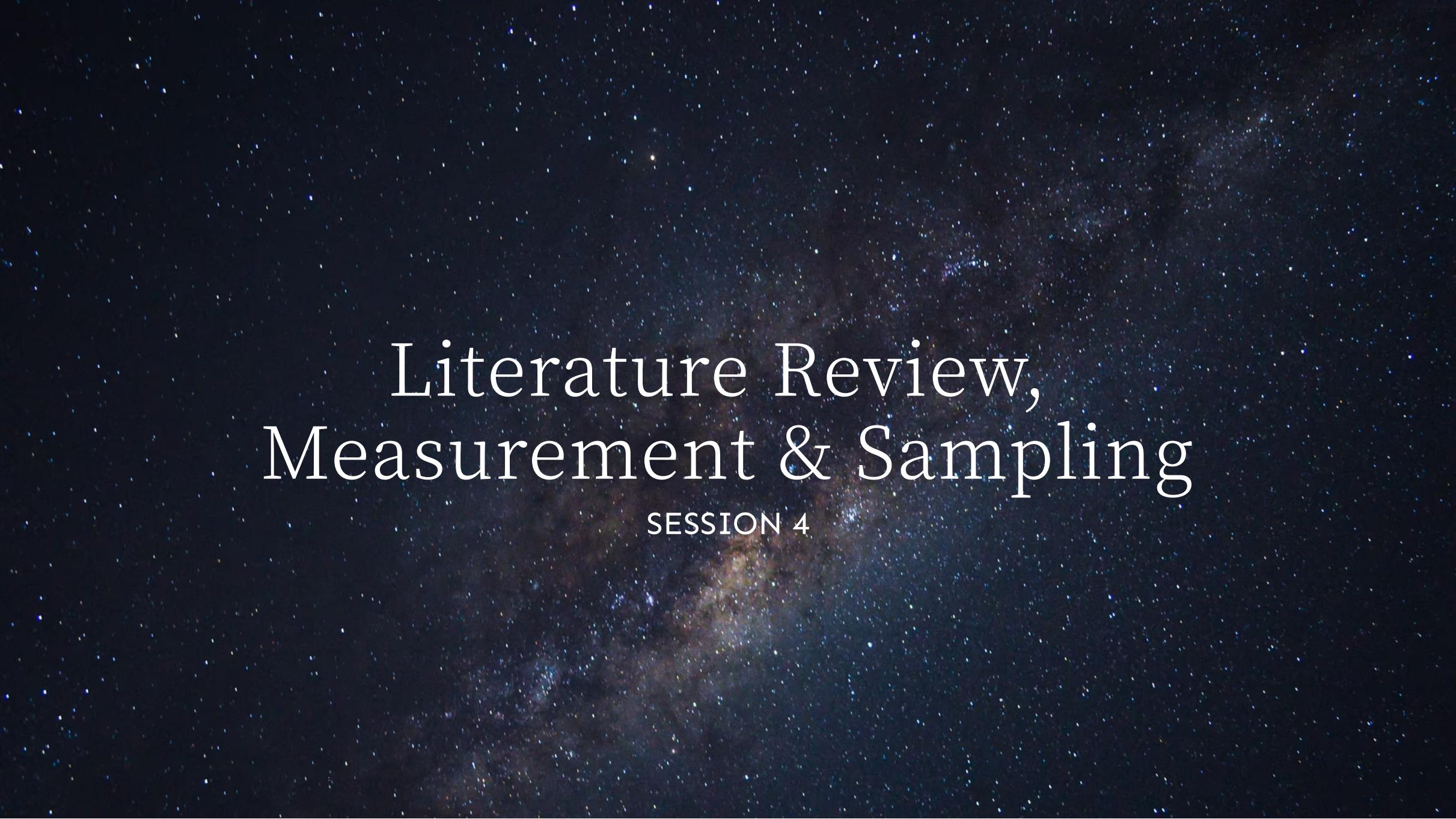
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6. Do not duplicate publication



Literature Review, Measurement & Sampling

SESSION 4

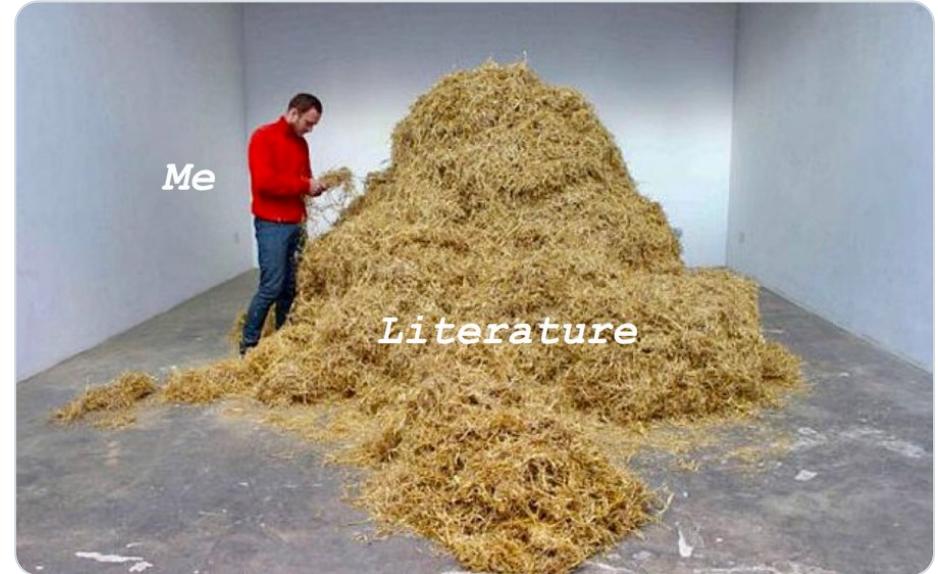
Literature Review



Dr. Imran Farooq
@drimran_farooq



Search for that one reason/sentence while writing.
#AcademicTwitter @OpenAcademics @PhDVoice
@PhD_Genie



1:40 AM · Dec 20, 2021



Heart 647 Reply ⌂ Copy link to Tweet

Slide source Chapter 2 from the book Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.

The Research Topic

- "the central idea to learn about or to explore"

The Research Topic

- "the central idea to learn about or to explore"
- My study is about ...

The Research Topic

- "the central idea to learn about or to explore"
- My study is about ...
- Pose the topic as a brief question:
 - What treatment is best for depression?
 - What does it mean to be Dalit in Indian society today?
 - What brings people to cities in India?

The Research Topic

A NEW PERSPECTIVE OR “ANGLE” TO THE EXISTING LITERATURE

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- Studying an unusual location (e.g., caste in America)

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A NEW PERSPECTIVE OR “ANGLE” TO THE EXISTING LITERATURE

- Studying an unusual location (e.g., caste in America)
- Examining an unusual group of participants (e.g., refugees)

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A NEW PERSPECTIVE OR “ANGLE” TO THE EXISTING LITERATURE

- Studying an unusual location (e.g., caste in America)
- Examining an unusual group of participants (e.g., refugees)
- Taking a perspective that may not be expected and reverses the expectation (e.g., why marriages do work rather than do not work)

The Research Topic

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- Providing novel means of collecting data (e.g., collect sounds)

The Research Topic

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- Presenting results in unusual ways (e.g., graphs that depict geographical locations)

The Research Topic

A NEW PERSPECTIVE OR “ANGLE” TO THE EXISTING LITERATURE

- Studying an unusual location (e.g., caste in America)
- Examining an unusual group of participants (e.g., refugees)
- Taking a perspective that may not be expected and reverses the expectation (e.g., why marriages do work rather than do not work)
- Providing novel means of collecting data (e.g., collect sounds)
- Presenting results in unusual ways (e.g., graphs that depict geographical locations)
- Studying a timely topic (e.g., agriculture laws, Dalits in Indian cinema)

Social research question:

A question about the social world that is answered through the collection and analysis of first-hand, verifiable, empirical data.

"Good" research question:

- **Feasibility** - Can you start and finish an investigation of your research question with available resources and in the time allotted?

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"Good" research question:

- **Feasibility** - Can you start and finish an investigation of your research question with available resources and in the time allotted?
- **Social importance** - Will an answer to your research question make a difference in the social world, even if it only helps people understand a problem they consider important?
- **Scientific relevance** - Does your research question help resolve some contradictory research findings or a puzzling issue in social theory?

Literature Review

- "literature review helps to determine whether the topic is **worth studying**, and it provides insight into ways in which the researcher can **limit the scope** to a needed area of inquiry."

Literature Review

- "literature review helps to determine whether the topic is **worth studying**, and it provides insight into ways in which the researcher can **limit the scope** to a needed area of inquiry."
- "to consider whether the **research topic** can and should be researched"

Purposes of Literature Review:

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- It provides a framework for establishing the importance of the study as well as a benchmark for **comparing the results** with other findings.

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4. Identify the central issues in a field.

Conducting a Literature Review

1. Begin by identifying key words

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4. Designing a **literature map** ... a visual picture of groupings of the literature on the topic that illustrates how your particular study will add to the existing literature and position your study within the larger body of research.

Tools for Literature Review



Anicca Harriot 
@13adh13

Academic writing is wild bc you'll read four articles just to write one sentence.

Anyway, here's a thread of resources I've been using to speed through this review I'm working on:

10:53 PM · Jun 20, 2021 

[Read the full conversation on Twitter](#)

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1. [Connected Papers](#)
2. [Open knowledge map](#)
3. [Scholarcy plug-in for Chrome](#)
4. [Speechify app](#)
5. [Scite](#)

Measurement



Concept

- A mental image that summarizes a set of similar observations, feelings, or ideas.

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- A mental image that summarizes a set of similar observations, feelings, or ideas.
- Defining concepts clearly can be difficult because many concepts have several meanings and can be measured in many ways. Example family, caste, social capital etc.
- **Conceptualization:** working out what your key terms will mean in your research - is a crucial part of the research process.

Slides from chapter 4 from book Chambliss, D. F., & Schutt, R. K. (2018). Making sense of the social world: Methods of investigation. Sage Publications.

Variable

- A characteristic or property that can vary (take on different values or attributes).

Steps to find variables:

1. Examine the theories that are relevant to our research question to identify those concepts that would be expected to have some bearing on the phenomenon we are investigating.

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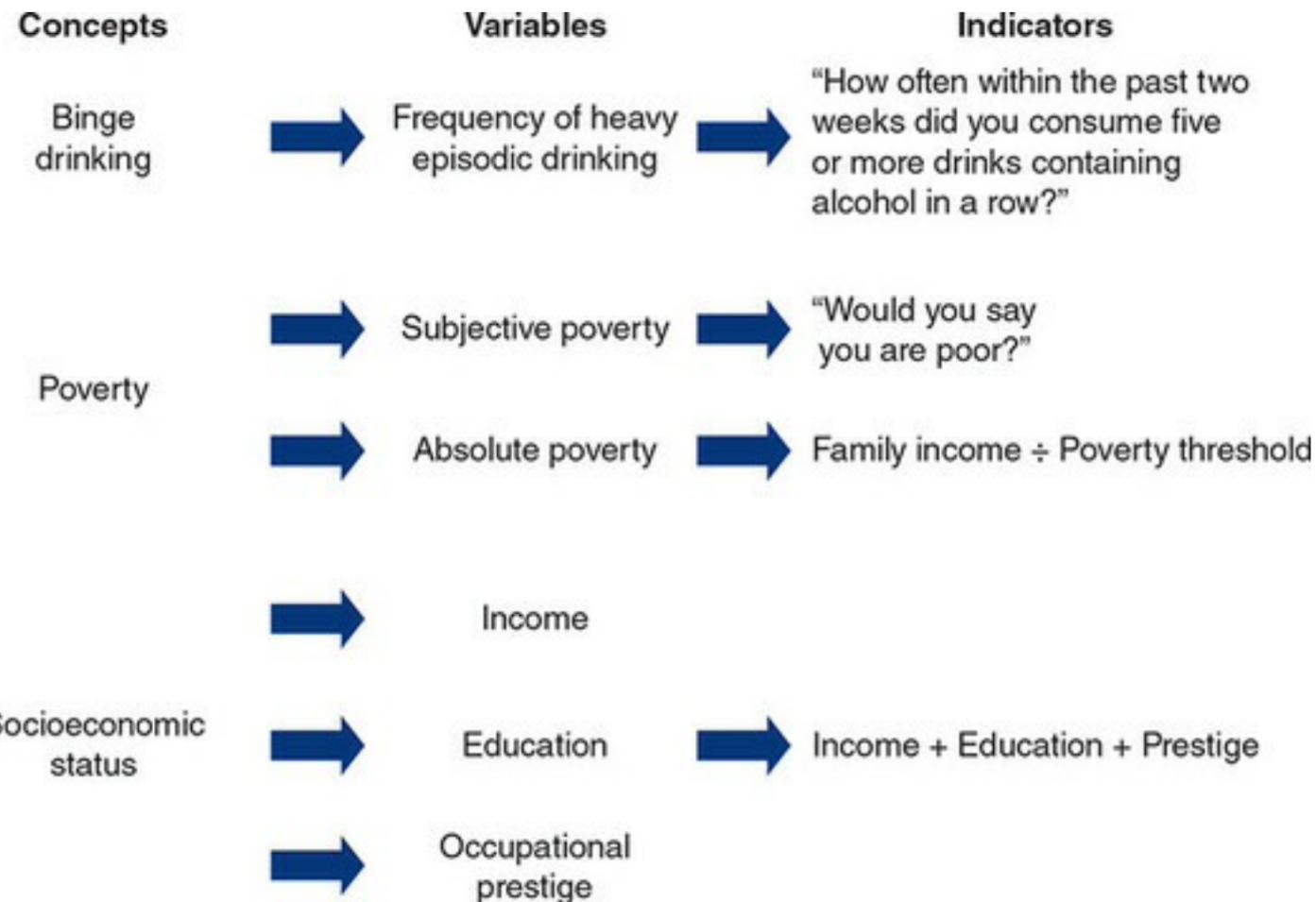
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3. Consider the constraints and opportunities for measurement that are associated with the specific setting(s) we will study.
4. Look ahead to our analysis of the data. What role will each variable play in our analysis?

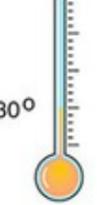
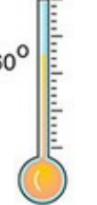
Exhibit 4.1 Concepts, Variables, and Indicators: Operationalizing Concepts.



Four levels of measurement:

1. Nominal,
2. Ordinal,
3. Interval, and
4. Ratio.

Exhibit 4.3 Levels of Measurement

<p>Qualitative</p> <p>Nominal or categorical level of measurement: Nationality</p>	 American	 Canadian	 British
<p>Ordinal level of measurement: Level of conflict</p>	 Low	 High	
<p>Quantitative</p> <p>Interval level of measurement: Temperature in degrees Fahrenheit</p>	 30°	 60°	
<p>Ratio level of measurement: Group size</p>	 5	 7	

Levels of Measurement:

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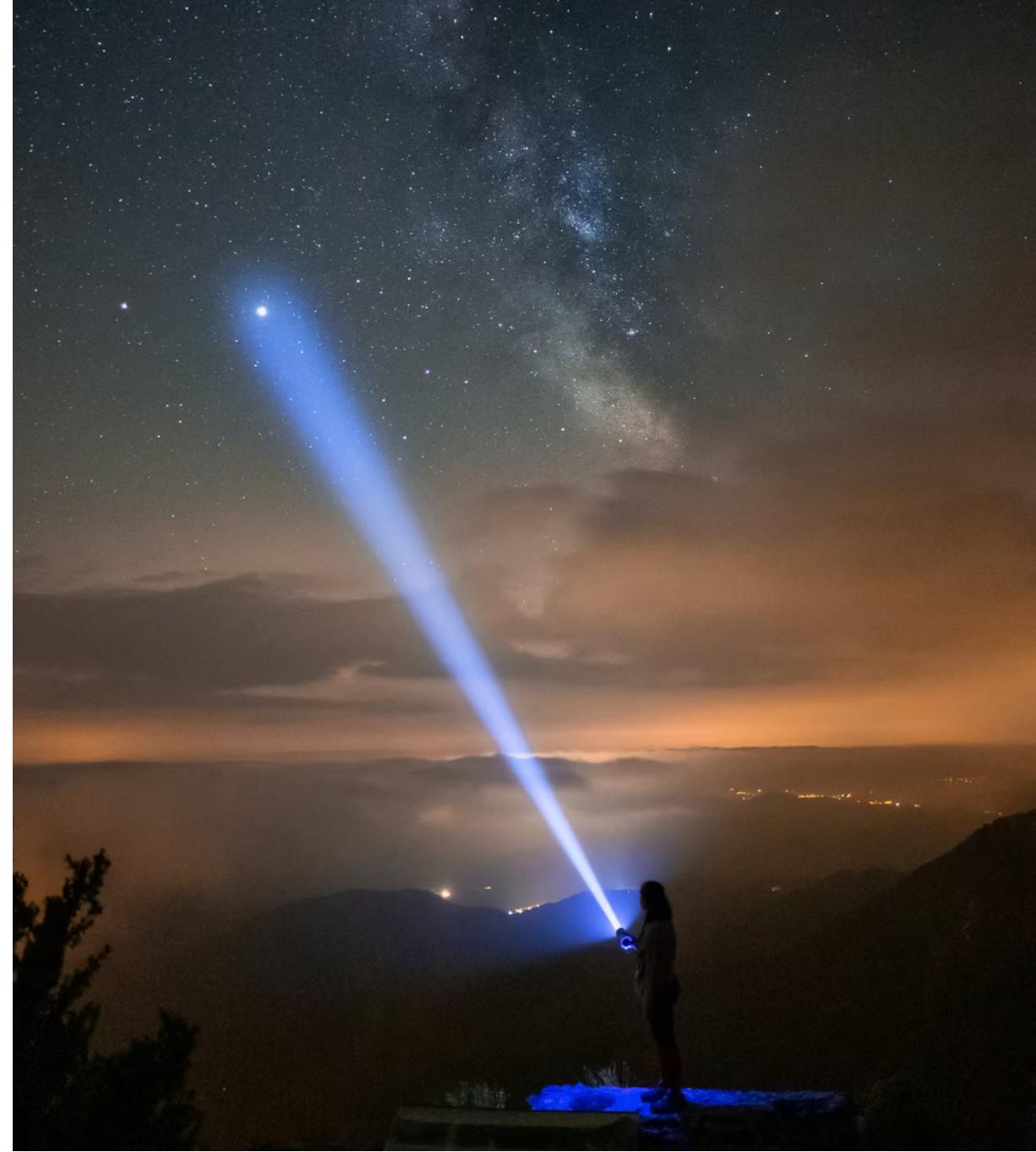
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Sampling



- “You don’t have to eat the whole tub of butter to know if it’s rancid.” Harsh, but true.

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- That is the essence of sampling: A small portion, carefully chosen, can reveal the quality of a much larger whole.

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- That is the essence of sampling: A small portion, carefully chosen, can reveal the quality of a much larger whole.
- Sampling techniques tell us how to select cases that can lead to valid generalizations about a population

Slides from chapter 5 from book Chambliss, D. F., & Schutt, R. K. (2018). Making sense of the social world: Methods of investigation. Sage Publications.

Population:

- The entire set of individuals or other entities to which study findings are to be generalized.

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Sample:

- A subset of a population used to study the population as a whole.

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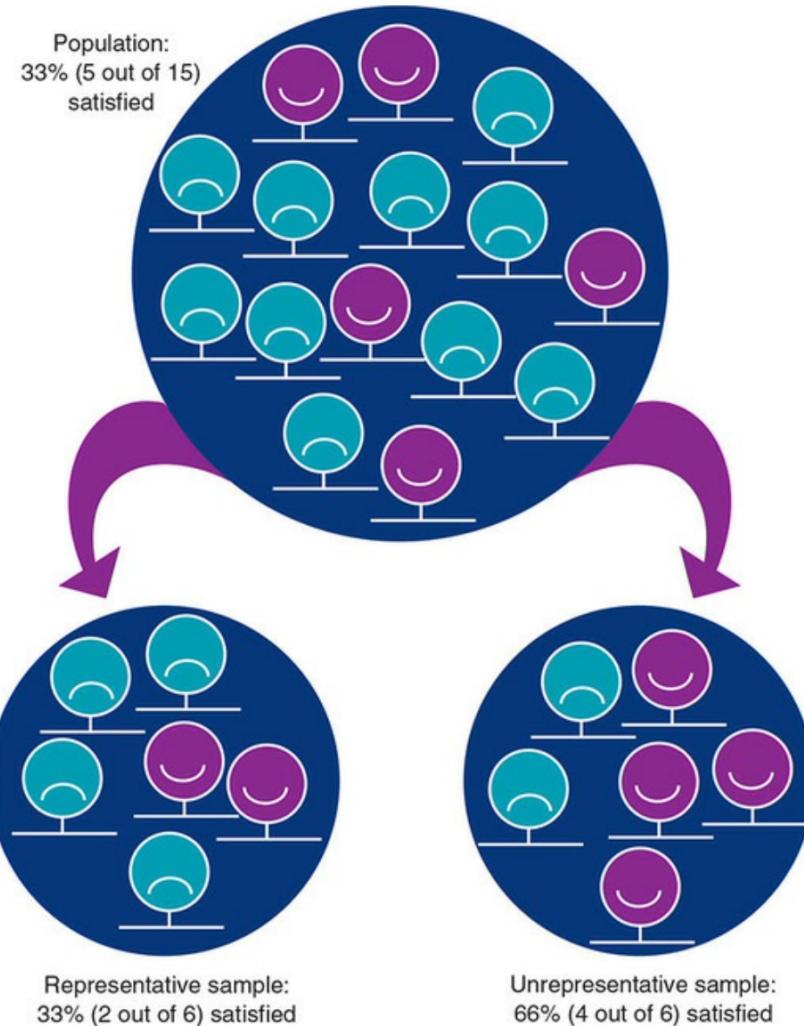
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- A subset of a population used to study the population as a whole.

SAMPLING BIAS

- Sampling bias occurs when some population characteristics are overrepresented or underrepresented in the sample because of particular features of the method of selecting the sample.

Exhibit 5.2 Representative and Unrepresentative Samples



Assess the Diversity of the Population

- Sampling is unnecessary if all the units in the population are identical.

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- **Representative sample:** A sample that “looks like” the population from which it was selected in all respects that are potentially relevant to the study. The distribution of characteristics among the elements of a representative sample is the same as the distribution of those characteristics among the total population. In an unrepresentative sample, some characteristics are overrepresented or underrepresented.

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- **Consider a Census:** Research in which information is obtained through responses from or information about all available members of an entire population.

What sampling method should we use?

Probability sampling methods:

- Sampling methods that rely on a random, or chance, selection method so that the probability of selection of population elements is known.

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Probability sampling methods:

- Sampling methods that rely on a random, or chance, selection method so that the probability of selection of population elements is known.

Nonprobability sampling methods:

- Sampling methods in which the probability of selection of population elements is unknown.

Probability sampling methods:

1. Simple random sampling,
2. Systematic random sampling,
3. Cluster sampling, and
4. Stratified random sampling.

PROBABILITY SAMPLING METHODS

Simple random sampling:

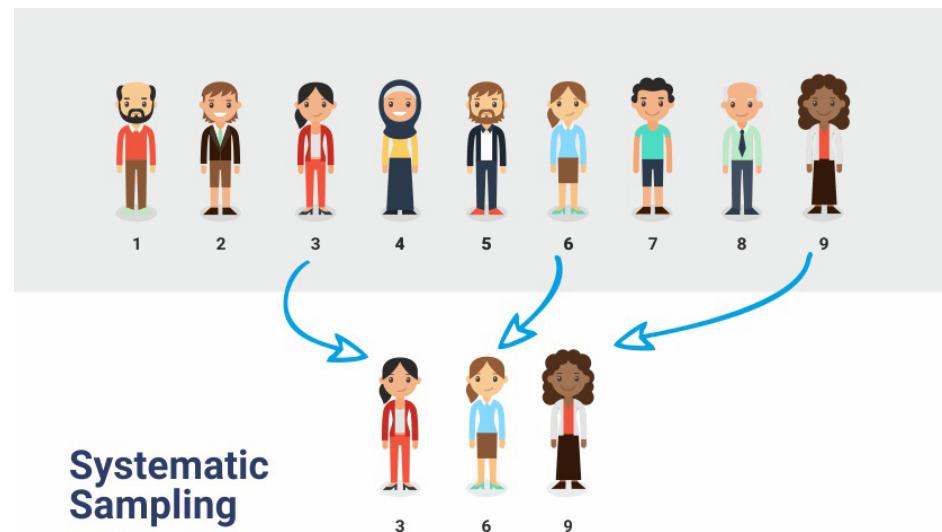
- A method of sampling in which every sample element is selected purely on the basis of chance through a random process.



PROBABILITY SAMPLING METHODS

Systematic random sampling:

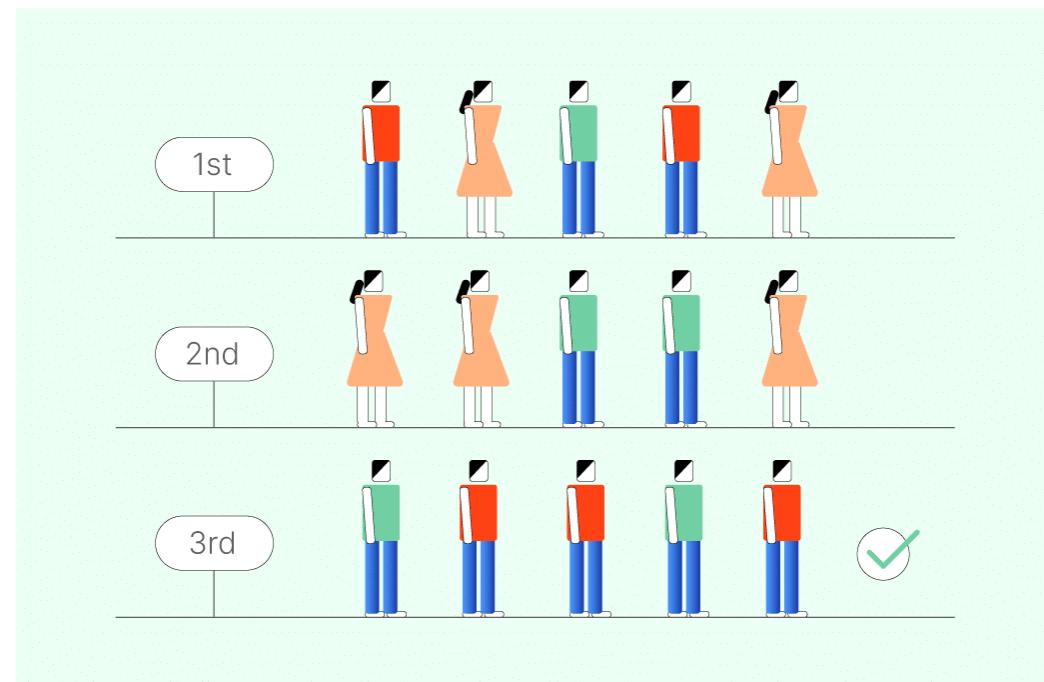
- A method of sampling in which sample elements are selected from a list or from sequential files, with every nth element being selected after the first element is selected randomly.



PROBABILITY SAMPLING METHODS

Cluster sampling

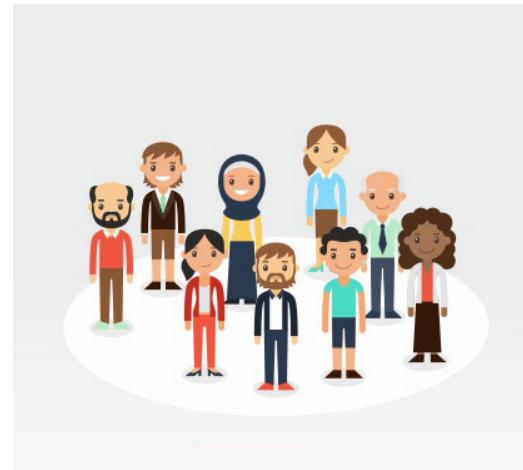
- Sampling in which elements are selected in two or more stages, with the first stage being the random selection of naturally occurring clusters and the last stage being the random selection of elements within clusters.



PROBABILITY SAMPLING METHODS

Stratified random sampling

- A method of sampling in which sample elements are selected separately from population strata that the researcher identifies in advance



Stratified Random Sampling



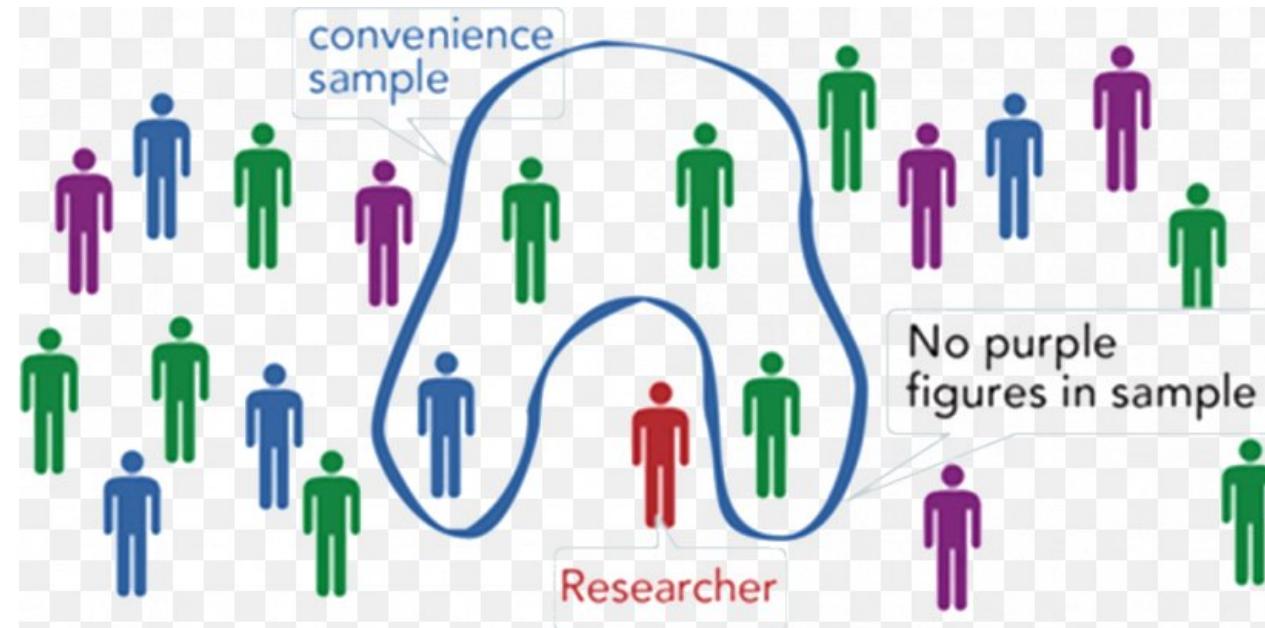
Nonprobability sampling methods:

1. Availability sampling,
2. Quota sampling,
3. Purposive sampling, and
4. Snowball sampling.

NONPROBABILITY SAMPLING METHODS

Convenience/Availability sampling

- Sampling in which elements are selected on the basis of convenience.



NONPROBABILITY SAMPLING METHODS

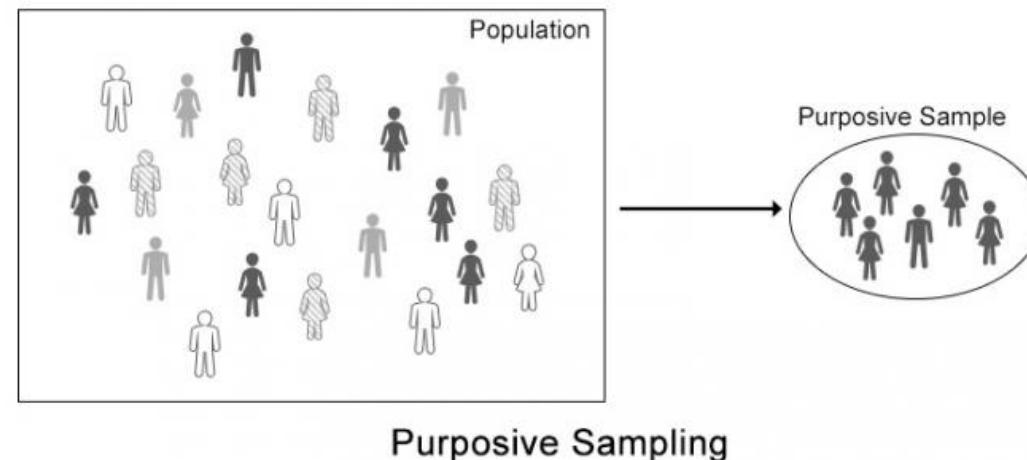
Quota sampling

- A nonprobability sampling method in which elements are selected to ensure that the sample represents certain characteristics in proportion to their prevalence in the population.

NONPROBABILITY SAMPLING METHODS

Purposive sampling

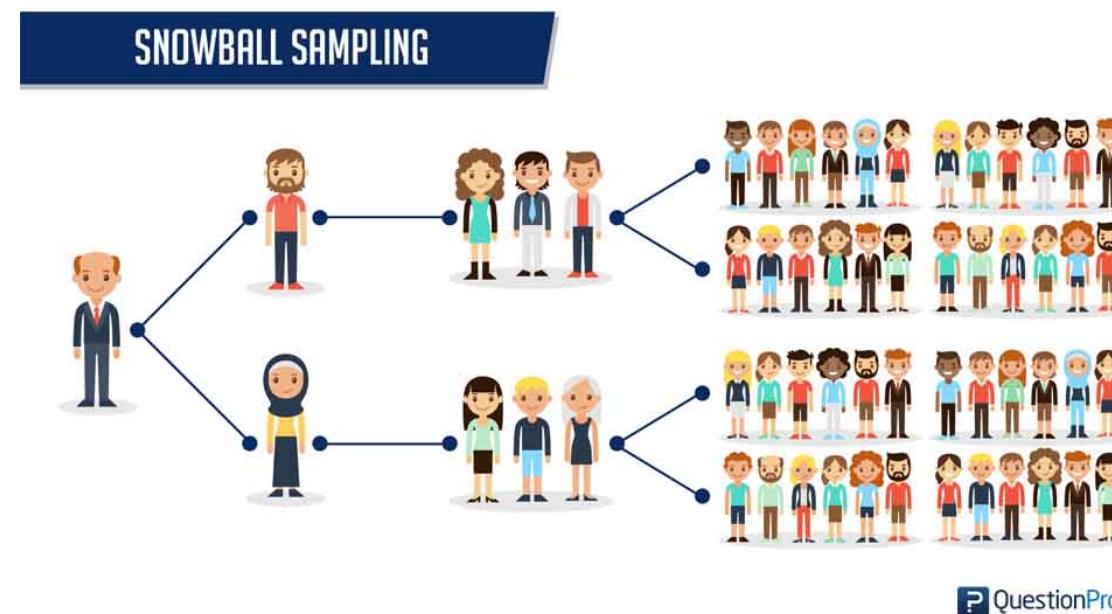
- A nonprobability sampling method in which elements are selected for a purpose, usually because of their unique position.



NONPROBABILITY SAMPLING METHODS

Snowball sampling

- A method of sampling in which sample elements are selected as successive informants or interviewees identify them.



Quantitative Methods & Analysis

SESSION 5



Survey research

It collects information from a sample of individuals through their responses to standardized questions.

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Survey Designs

1. Mailed surveys
2. Phone surveys
3. In-person surveys, and
4. Electronic (especially web) surveys

Statistic:

- A numerical description of some feature of a variable or variables in a sample from a larger population.

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Descriptive statistics:

- Statistics used to describe the distribution of and relationship among variables.

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Inferential statistics:

- Statistics used to estimate how likely it is that a statistical result based on data from a random sample is representative of the population from which the sample is assumed to have been selected

Data cleaning:

- The process of checking data for errors after the data have been entered in a computer file.

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- The process of checking data for errors after the data have been entered in a computer file.
- Missing values
- Outlier: An exceptionally high or low value in a distribution.

Descriptive Statistics

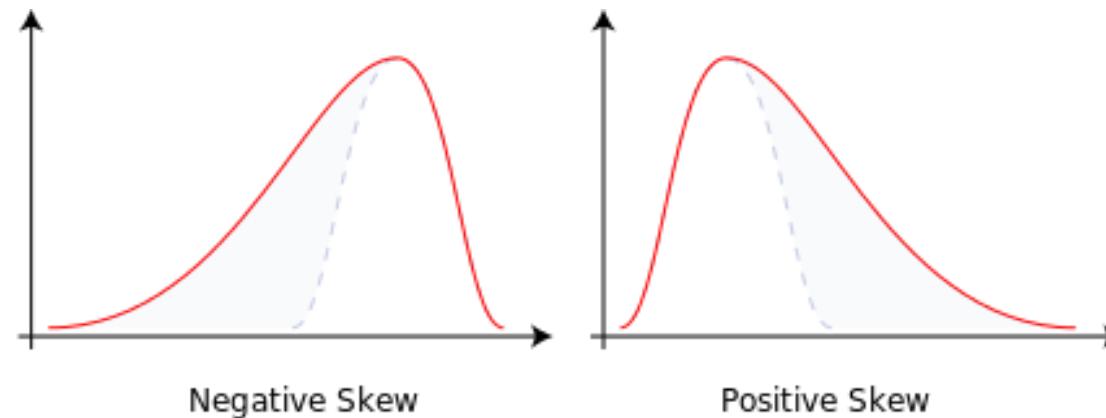
- Central tendency; mean, median and mode values

Descriptive Statistics

- Central tendency; mean, median and mode values
- Variability; standard deviation

Descriptive Statistics

- Central tendency; mean, median and mode values
- Variability; standard deviation
- Skewness



Data Visualisation

- Bar chart: A graphic for qualitative variables in which the variable's distribution is displayed with solid bars separated by spaces.

Data Visualisation

- Bar chart: A graphic for qualitative variables in which the variable's distribution is displayed with solid bars separated by spaces.
- Histogram: A graphic for quantitative variables in which the variable's distribution is displayed with adjacent bars.

Association/Correlation:

- A criterion for establishing a causal relationship between two variables: Variation in one variable is empirically related to variation in another variable.

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- A criterion for establishing a causal relationship between two variables: Variation in one variable is empirically related to variation in another variable.

Causal effect

The finding that change in one variable leads to change in another variable

Qualitative Methods & Analysis

SESSION 6



Qualitative methods:

- Methods, such as participant observation, intensive interviewing, and focus groups, that are designed to capture social life as participants experience it rather than in categories the researcher predetermines.

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- Methods, such as participant observation, intensive interviewing, and focus groups, that are designed to capture social life as participants experience it rather than in categories the researcher predetermines.
- These methods typically involve **exploratory research questions**, inductive reasoning, an orientation to social context, and a focus on **human subjectivity** and the meanings participants attach to events and to their lives.

Ethnography:

- The study and systematic recording of human cultures.



Participant observation:

- A qualitative method for gathering data that involves developing a sustained relationship with people while they go about their normal activities.

You could take the role of overt observer:



You could take the role of participant and observer:



You could take the role of covert participant:



Intensive (depth) interviewing:

- A qualitative method that involves open-ended, relatively unstructured questioning in which the interviewer seeks in-depth information on the interviewee's feelings, experiences, and perceptions.

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Focus groups:

- A qualitative method that involves unstructured group interviews in which the focus group leader actively encourages discussion among participants on the topics of interest.

Qualitative data analysis:

- Techniques used to search and code textual, aural, and pictorial data and to explore relationships among the resulting categories.

Most approaches to qualitative data analysis take five steps:

1. Documentation of the data and data collection

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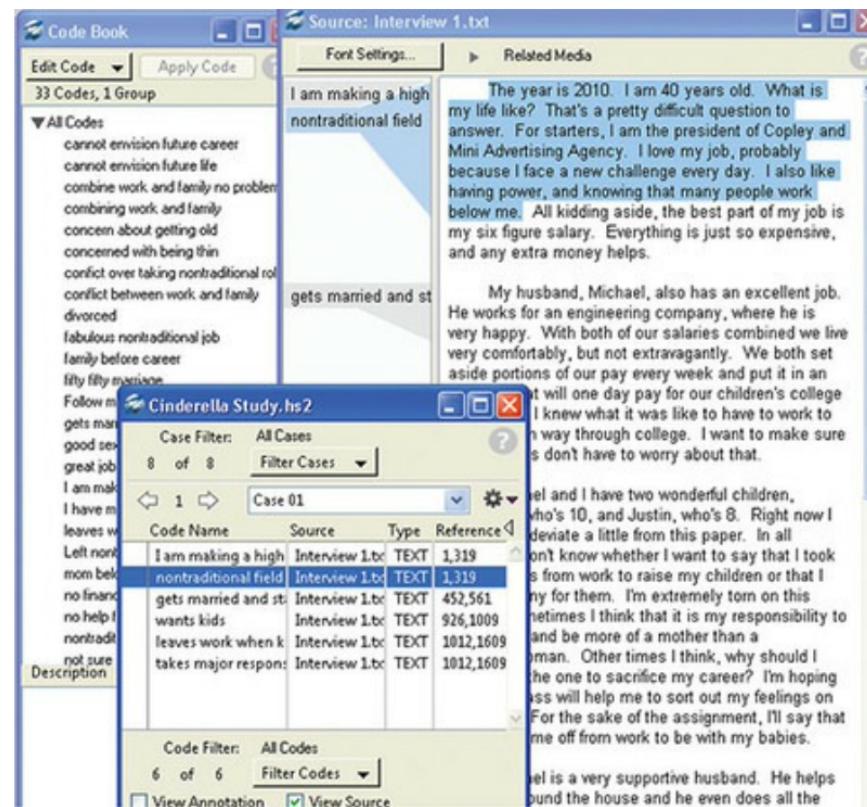
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2. Conceptualization and coding
3. Examining relationships to show how one concept may influence another
4. Authenticating conclusions by evaluating alternative explanations, disconfirming evidence, and searching for negative cases
5. Reflexivity

Computer-assisted qualitative data analysis:

- Analysis of textual, aural, or pictorial data using a special computer program that facilitates searching and coding text.



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"Educate. Agitate. Organise."

DR B. R. AMBEDKAR

THANK YOU