

КАЗАНСКИЙ
ГОСУДАРСТВЕННЫЙ
МЕДИЦИНСКИЙ
УНИВЕРСИТЕТ



APPLIED SOCIOLOGY

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INSTRUCTION

Social Study: Research Design and Methods

Sociology and common sense

Overview of research methods

Methods of collecting data: survey, participant observation, secondary analysis,

Steps of the sociological research

Research Ethics

Value free research and research with values



lecture 3 

документ PDF



test lecture 3 

- The duration of the lecture is 45 min -1 hour
Remaining time for studying **lectures and writing**
test will open at 11:00 until 00:00
(Mart 12 **Batch I**) (Mart 18 **Batch II**)
- the link to connect remains the old one
- 1. **Batch I** (1,3,5,7,9,11 weeks)
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- 2. **Batch II** (2,4,6,8,10,12 weeks)



What is applied sociology?

- Applied sociology is a subfield of sociology that involves the practical application of sociological theories, concepts, and methods to real-world issues and problems. It seeks to use sociological knowledge and skills to inform social policy and practice, with the goal of improving social conditions and promoting social justice.
- Overall, applied sociology seeks to bridge the gap between academic sociology and practical problem-solving, by applying sociological knowledge and methods to address real-world problems and promote positive social change.



What is a sociological study ?

- A sociological study is a method of systematically and objectively investigating social phenomena and processes with the aim of understanding and explaining human behavior in society. Sociological studies are conducted by sociologists, who use a variety of research methods and techniques to collect and analyze data.
- Sociological studies may focus on a wide range of social phenomena, including social structures, institutions, cultures, values, norms, and relationships.
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Quantitative and qualitative approach in sociological research

- Quantitative and qualitative approaches are two different strategies that sociologists use to conduct research.
- Quantitative approach: The quantitative approach involves collecting and analyzing numerical data to draw statistical inferences about the relationships between variables. This approach is often used to test hypotheses and theories and to make generalizations about a population. It typically involves collecting data through structured surveys or experiments, and the analysis of data is done using statistical methods. This approach is often associated with the positivist tradition in sociology, which emphasizes objectivity and empirical observation.
- Qualitative approach: The qualitative approach involves collecting and analyzing non-numerical data such as narratives, interviews, observations, and documents to understand the social phenomena being studied. This approach emphasizes the subjective experiences and interpretations of individuals and seeks to understand the meanings they attach to their experiences. Qualitative research is often used to explore new areas of inquiry, to gain a deeper understanding of social processes, and to generate theories or hypotheses that can be tested using quantitative methods. The analysis of data in this approach is typically done through coding and categorizing themes and patterns in the data. Overall, both quantitative and qualitative approaches have their strengths and weaknesses and can be used in different situations depending on the research question and the nature of the phenomenon being studied. Many sociologists use mixed-methods approaches, which involve combining both quantitative and qualitative methods to gain a more comprehensive understanding of the social phenomena being studied.



Van Dijk scheme

- Sociologist Van Dijk provides a useful scheme to illustrate the differences between quantitative and qualitative approaches in sociological research:
 - **Quantitative approach:**
 - Focus on measurement and quantification
 - Emphasis on objectivity and generalizability
 - Use of statistical analysis
 - Use of large-scale, standardized data collection techniques (e.g. surveys)
 - **Qualitative approach:**
 - Focus on understanding and interpretation
 - Emphasis on subjectivity and context-specificity
 - Use of non-statistical analysis (e.g. content analysis, discourse analysis)
 - Use of small-scale, flexible data collection techniques (e.g. interviews, participant observation)
- It is worth noting that these are not mutually exclusive approaches, and many studies use a combination of both quantitative and qualitative methods.



Types of sociological research

- **By the nature of the knowledge obtained:**
 - Intelligence research
 - Descriptive research
 - Analytical research
- **By the depth and breadth of the knowledge obtained:**
 - Narrow research
 - Broad research
- **In scale:**
 - Local research
 - Regional research
 - Industry research
 - National research
 - International research
- **In frequency:**
 - One-time research
 - *Repeated research:*
 - Trend studies
 - Cohort studies
 - Panel studies
 - Monitor studies
- **By the method of selection of research units:**
 - Continuous research
 - Selective research



- The **general population** refers to the entire group of individuals who share a particular characteristic, such as residents of a specific country, students at a particular school, or people who have experienced a certain health condition. In sociology, researchers are often interested in studying particular aspects of the general population, such as their attitudes, behaviors, and experiences.
- To study the **general population**, sociologists often use a **sample population** or **sampling**. A sample population is a smaller group of individuals selected from the general population to represent the larger group. The sample population should be **representative**, meaning that it accurately reflects the characteristics of the general population being studied. This helps to ensure that the findings of the study can be generalized to the larger group.
- The law of large numbers in sociology is a statistical principle that states that the accuracy of a statistical estimate increases as the size of the sample population increases. This means that the larger the sample population, the more reliable and accurate the findings of the study are likely to be.



Types of samples

- Non-random sampling refers to the selection of survey units based on a specific criterion, such as age, gender, income, or occupation, rather than at random. *One of the most common types of non-random sampling is quota sampling.*
- *In quota sampling, the researcher identifies different categories or strata within the population, such as age groups, genders, or income levels, and then selects a certain number of individuals from each category to be included in the sample.*



Types of samples

- Random sampling is a statistical technique used in research to ensure that a representative sample of a population is selected for study. In random sampling, each member of the population has an equal chance of being selected for the sample.
- There are different types of random sampling, including:
 - *Simple random sampling*: In this type of sampling, each member of the population has an equal chance of being selected. The sample is selected randomly, without any bias.
 - *Systematic random sampling*: In this type of sampling, the population is first divided into groups, and then a random sample is selected from each group. The members of the sample are selected systematically, based on a specific pattern.
 - *Stratified random sampling*: In this type of sampling, the population is first divided into subgroups or strata based on certain characteristics (such as age, gender, income, etc.). A random sample is then selected from each subgroup, ensuring that the sample is representative of the entire population.
 - *Cluster random sampling*: In this type of sampling, the population is first divided into clusters based on certain characteristics (such as geographical location). A random sample of clusters is then selected, and all members within the selected clusters are included in the sample.
- Overall, random sampling is considered to be a fair and reliable method of selecting a representative sample from a population, as it minimizes bias and ensures that each member of the population has an equal chance of being selected.



The stages of sociological research can vary depending on the type of research being conducted, but generally include:

1. Research question or problem: The first stage involves identifying the research question or problem to be investigated.
2. Literature review: This stage involves reviewing existing research and literature related to the research question or problem.
3. Formulation of a hypothesis or research objective: Based on the research question and literature review, a hypothesis or research objective is formulated.
4. Research design: This stage involves selecting the appropriate research design based on the research question and hypothesis, and determining the methods and techniques to be used.
5. Data collection: Data is collected using various methods such as surveys, interviews, observation, or experiments.
6. Data analysis: This stage involves analyzing the data collected using statistical techniques, content analysis, or other methods.
7. Interpretation and conclusions: The findings from the data analysis are interpreted and conclusions are drawn based on the research question and hypothesis.
8. Reporting and dissemination of results: The final stage involves reporting the findings and results to the relevant stakeholders and disseminating the research through academic publications, conferences, or other means.



SURVEY

- A survey is a research method that involves collecting information from a sample of individuals using standardized questionnaires or interviews. Surveys can be conducted in a variety of ways, including face-to-face interviews, telephone interviews, online surveys, and paper questionnaires.

The process of conducting a survey typically involves several steps:

- Defining the research question: The researcher identifies the research question or problem that they want to investigate.
- Developing the survey instrument: The researcher develops a survey instrument, which typically consists of a set of questions that are designed to collect data on the variables of interest.
- Sampling: The researcher selects a sample of individuals who will participate in the survey. The sample should be representative of the population of interest.
- Administering the survey: The survey is administered to the selected sample of individuals. This can be done in various ways, depending on the method of data collection chosen.
- Data cleaning and analysis: The data collected from the survey is cleaned and analyzed to answer the research question.
- Reporting and dissemination: The results of the survey are reported and disseminated to relevant stakeholders, including policymakers, researchers, and the general public.



QUESTIONNAIRE

- Self-administered surveys: These surveys involve distributing questionnaires to respondents, who then complete the survey on their own. Self-administered surveys can be delivered via mail, email, or online. This method can be cost-effective and efficient, but may have lower response rates.
- Phone surveys: In these surveys, researchers contact respondents by phone and ask them to answer the questions. This method can allow for more in-depth questioning and higher response rates, but may be more time-consuming and expensive.
- Face-to-face surveys: In these surveys, researchers meet with respondents in person and ask them to complete the questionnaire. This method can provide high response rates and allow for complex questioning, but may be the most time-consuming and costly.
- Group-administered surveys: In these surveys, researchers distribute questionnaires to a group of respondents and ask them to complete the survey in a group setting. This method can be efficient and cost-effective, but may have limitations in terms of privacy and individual responses.
- Each distribution method has its own advantages and disadvantages, and the choice of method should be based on the research goals, resources, and target population.



QUESTIONNAIRE

- Introduction
- Demographic information: This section collects basic information about the respondent such as age, gender, education level, and occupation.
- Closed-ended questions: These are questions that require the respondent to select an answer from a list of predetermined options. Closed-ended questions are useful for collecting data that can be easily quantified and analyzed.
- Open-ended questions: These are questions that allow the respondent to provide a free-text response. Open-ended questions are useful for collecting qualitative data and can provide insight into the respondent's thought processes.
- Rating scales: These are questions that ask the respondent to rate a particular item or statement on a scale. Rating scales can be used to measure attitudes, opinions, or perceptions.
- Matrix questions: These are questions that group similar items together in a matrix format, allowing the respondent to provide a single response for multiple items.
- Conclusion: This section provides a summary of the survey and may also include a thank you message or incentive for completing the questionnaire.

Overall, the structure of a questionnaire should be designed to ensure that the questions are clear, concise, and relevant to the research question. It should also be easy to complete and should minimize the risk of respondent confusion or bias.



Types of questions

- neutral and sensitive;
- contact questions, filter questions, control questions, leading questions;
- direct and indirect menu questions;
- alternative, dichotomous, yes-no questions;
- scale questions program-thematic and procedural questions;



- **Likert Scale:** This is a type of scale that consists of a series of statements or items that respondents are asked to indicate their level of agreement or disagreement with on a scale of, for example, 1 to 5. It is often used to measure attitudes towards a particular topic.
- **Semantic Differential Scale:** This type of scale consists of pairs of opposite adjectives or phrases, such as "good-bad," "strong-weak," or "happy-sad." Respondents are asked to rate a particular concept or item on a scale between the two opposite adjectives or phrases.
- **Thurstone Scale:** This type of scale involves a set of statements that represent a range of attitudes towards a particular topic. Respondents are asked to rate each statement on a scale of, for example, 1 to 11, based on how strongly they agree or disagree with the statement.
- **Guttman Scale:** This type of scale is also known as the cumulative or scalogram analysis. It involves a set of statements or items that are arranged in order of increasing intensity or difficulty. Respondents are asked to indicate which statements they agree with, and their responses are used to determine their level of agreement or disagreement with each item.
- **Numerical Scale:** This type of scale involves asking respondents to rate a particular concept or item on a numerical scale, such as a scale of 1 to 10. It is often used to measure the intensity of an attitude or belief.



Interview

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- There are several types of interviews:
 1. Structured interviews: In this type of interview, the questions are predetermined and standardized. The interviewer asks the same set of questions in the same order to each participant.
 2. Unstructured interviews: In this type of interview, the interviewer has a general idea of what topics they want to discuss but does not have a set list of questions. The interviewer allows the conversation to flow naturally and asks follow-up questions as needed.
 3. Semi-structured interviews: This type of interview is a combination of structured and unstructured interviews. The interviewer has a set list of questions, but also allows for follow-up questions and open-ended discussion.
 4. Group interviews: In this type of interview, the researcher interviews a group of people at once. This can be useful for gaining insights into group dynamics and interactions.
 5. Online interviews: This type of interview is conducted over the internet, typically through video conferencing software. Online interviews can be structured or unstructured, and can be useful for conducting interviews with people who are geographically distant.
 6. Phone interviews: This type of interview is conducted over the phone. Phone interviews can be structured or unstructured, and can be useful for conducting interviews with people who are unable to meet in person.
 7. Focus group interviews: In this type of interview, the researcher interviews a group of people at once, but the focus is on group discussion rather than individual responses. Focus group interviews can be useful for gaining insights into group dynamics and perceptions of a particular topic.



The main types of interviews (Bryman)

- Structured interview
- Standardized interview
- Semi-structured interview
- Unstructured interview
- Intensive interview
- Quality interview
- In-depth interview
- Focused Interview
- Focus groups
- Group interview
- Interviews – Oral histories
- Interview – life stories



Life History Interviews:

- Life History Interviews: These interviews involve asking individuals to recount their life experiences in detail, often with a focus on a specific theme or topic. This type of interview is useful for understanding the ways in which social, cultural, and historical factors shape individual lives.



Sociologist Ken Plummer identified six types of life stories:

1. Classic Narrative: This type of life story is a traditional form of storytelling that follows a linear chronological order. The narrator starts at the beginning and proceeds through a series of events, leading to a conclusion.
2. Fragmented Narrative: This type of life story is characterized by a fragmented and disjointed structure. The narrator jumps from one event or experience to another without a clear connection or coherence.
3. Confessional Narrative: This type of life story is characterized by the narrator's willingness to reveal intimate and personal details. The focus is on the narrator's inner world, emotions, and struggles.
4. Restorative Narrative: This type of life story is a form of therapy in which the narrator reconstructs his or her life in a positive way. The focus is on the narrator's strengths and resilience, and how he or she has overcome adversity.
5. Reflexive Narrative: This type of life story is characterized by the narrator's awareness of the social and cultural factors that shape his or her experiences. The narrator reflects on his or her position in society, and how this has affected his or her life.
6. Abandoned Narrative: This type of life story is characterized by an inability or unwillingness to construct a coherent narrative. The narrator may have experienced trauma or loss that makes it difficult to make sense of his or her life experiences.



Dorothy Atkinson

- Early life experiences: This category includes questions about family background, childhood memories, and school experiences.
- Education and work experiences: This category includes questions about education, career choices, and work experiences.
- Relationships and family: This category includes questions about romantic relationships, family life, and parenting experiences.
- Health and well-being: This category includes questions about physical and mental health, lifestyle choices, and coping strategies.
- Social and political context: This category includes questions about the individual's social and political beliefs and experiences.
- Culture and society: This category includes questions about the individual's cultural background and experiences, including religion, ethnicity, and traditions.
- Life reflections: This category includes questions about the individual's personal philosophy, values, and beliefs, as well as reflections on the past and hopes for the future.
- These categories and questions provide a framework for conducting life story interviews that can help researchers gain a deeper understanding of an individual's life experiences and perspectives.



Here are some example categories and simple questions that can be used for life story interviews according to sociologist Atkinson

1. Childhood

- Where were you born and what was your family like?
- What were some of your favorite childhood memories?
- What was your school experience like?

2. Family and relationships

- Tell me about your romantic relationships throughout your life.
- What kind of relationship did you have with your parents and siblings?
- Have you experienced any significant losses in your life?

3. Work and career

- What was your first job and how did you get it?
- What motivated you in your career?
- Did you ever experience any conflicts or challenges at work?

4. Accomplishments and regrets

- What are you most proud of in your life?
- Do you have any regrets or things you wish you had done differently?
- Have you ever had to make a difficult decision?

5. Beliefs and values

- What is your philosophy on life?
- What role does religion or spirituality play in your life?
- How do you feel about social issues like politics and activism?



Sociologist Kathy Charmaz proposed three types of interview questions that can be used in qualitative research:

- **Grand tour questions:** These are broad and open-ended questions that invite participants to share their experiences and perspectives on a particular topic. Examples of grand tour questions include:
 - Can you tell me about your experience with [topic]?
 - What does [topic] mean to you?
 - How has [topic] affected your life?
- **Follow-up probes:** These questions are used to elicit more detailed information about a particular aspect of the participant's response. Follow-up probes can be used to clarify, elaborate, or explore a participant's answer. Examples of follow-up probes include:
 - Can you tell me more about that?
 - What specifically do you mean by [term]?
 - How did you feel when [event] happened?
- **Structural questions:** These questions are used to elicit information about the social, cultural, and historical contexts that shape the participant's experiences and perspectives. Structural questions can help to reveal patterns, connections, and social processes that may be influencing the participant's experiences. Examples of structural questions include:
 - Can you describe the social context in which [event] happened?
 - How have your experiences with [topic] changed over time?
 - What cultural beliefs or values are important to you in relation to [topic]?



Types of Interview Questions (Quale)

- An introductory question, for example: "Could you tell me about...?", "Can you remember a case when...?", "What happened in the episode you mentioned?", "Could you describe in as much detail as possible the situation in which you learned something?«
- Tracking questions: aimed at developing the topic, obtaining additional information on the issues raised by the informant (may take the form of pauses, nods, "mmm", etc.)
- Clarifying questions, for example: "Could you tell me something else about it?", "Can you describe in more detail what happened?", "Has anything else like this happened?«
- Concretizing questions, for example: "What did you think then?", "What did you do when you felt, that your anxiety is growing?", "How did your body react?«
- Direct questions: the interviewer directly asks the topics and aspects of their consideration; it is better not to ask such questions at the beginning of the interview
- Indirect questions: projective questions like "How do you think other students perceive the competition for the grades they received?«
- Structuring questions, for example: "Now I would like to move on to another topic...«
- Silence
- Interpretation questions, for example: "So you think that...?", "If I understood correctly, you felt that...?", "Is it possible to describe what you were just talking about in these words: ...?"



Topics that it is desirable to touch upon in an interview (Bryman)

- values – interviewees, groups, organizations
- faith – interviewees, others
- groups norms of behavior – interviewees,
- others formal and informal roles – interviewees, others relationships – interviewees,
- others place and location
- emotions – interviewees involved, but also possibly other unexpected encounters stories



Typical interviewer mistakes

1. Biases: Interviewer biases can affect the results of the interview. This can happen if the interviewer has preconceived notions about the interviewee, or if they unintentionally use leading questions.
2. Incomplete or vague questions: Incomplete or vague questions can lead to incomplete or inaccurate answers. The interviewer needs to be clear and concise in their questioning to ensure that they get the information they need.
3. Interruptions: Interrupting the interviewee can be a mistake as it can cause them to lose their train of thought or feel disrespected.
4. Lack of follow-up questions: Failing to ask follow-up questions can result in missing out on important information that could provide a deeper understanding of the interviewee's perspective.
5. Lack of preparation: Interviewers who are not adequately prepared may not ask the right questions, or may not be familiar with the subject matter, which can affect the quality of the interview.
6. Overuse of closed-ended questions: Overusing closed-ended questions can limit the information obtained during an interview, as they typically only require short answers.
7. Overuse of jargon: Using jargon that is specific to a particular field can make it difficult for the interviewee to understand the question or to respond appropriately.
8. Insensitivity: Interviewers need to be sensitive to the interviewee's background and culture to ensure that they feel comfortable and are able to provide honest and accurate answers.
9. Failure to establish rapport: Establishing rapport is essential to building trust between the interviewer and interviewee, which can result in more candid and detailed responses.
10. Failure to listen: Interviewers need to be good listeners and pay close attention to the interviewee's responses. Failure to listen can result in missing out on important information.



Typical questionnaire errors

1. Poorly worded questions: Questions that are unclear, confusing, or contain double negatives can lead to respondents providing inaccurate or inconsistent answers.
2. Leading questions: Questions that suggest a particular answer or contain biased language can influence how respondents answer and result in inaccurate data.
3. Response bias: Respondents may provide answers that they believe the interviewer wants to hear or that reflect societal norms, rather than their true beliefs or behaviors.
4. Question order: The order in which questions are asked can influence responses. For example, asking about sensitive topics at the beginning of a survey may lead to respondents feeling uncomfortable and providing inaccurate answers.
5. Social desirability bias: Respondents may provide answers that reflect positively on themselves, rather than their true beliefs or behaviors, to avoid social disapproval.
6. Non-response bias: When certain groups of people are less likely to respond to a survey, the resulting data may be biased and not representative of the population.
7. Incomplete response options: Questions with limited response options may not accurately reflect the range of possible answers.
8. Measurement error: Errors in data collection or recording can result in inaccurate data. For example, misreading a respondent's answer or recording it incorrectly.



Typical errors hypothesis

1. Lack of clarity: Hypotheses should be clear and specific, avoiding vague or ambiguous language that can lead to confusion or misinterpretation.
2. Lack of testability: Hypotheses should be testable using empirical evidence. If a hypothesis cannot be tested or falsified, it is not a scientific hypothesis.
3. Overgeneralization: Hypotheses should be grounded in empirical observations and data, not based on personal beliefs or assumptions. Overgeneralization occurs when a hypothesis is too broad or applies to too many situations, making it difficult to test.
4. Biased hypothesis: Hypotheses should be formulated without any preconceived notions or biases. A biased hypothesis is one that is influenced by personal beliefs, prejudices, or other factors that can lead to inaccurate or unreliable results.
5. Inadequate sampling: Hypotheses should be tested using appropriate sampling methods that ensure the representativeness of the sample. Inadequate sampling can result in biased or unreliable results.
6. Confounding variables: Hypotheses should take into account any potential confounding variables that could influence the results. Confounding variables are factors that are not being tested but may influence the outcome of the study.
7. Incorrect statistical analysis: Hypotheses should be tested using appropriate statistical methods that are designed to evaluate the hypothesis being tested. Incorrect statistical analysis can lead to inaccurate or unreliable results.



errors in the research program

1. Inadequate research design: The research design should be carefully planned and executed to ensure that it addresses the research questions and hypotheses adequately. Inadequate research design can lead to biased or inaccurate results.
2. Inappropriate sampling: Selecting an inappropriate sample can also result in biased or inaccurate results. Researchers need to ensure that their sample is representative of the population they are studying and that it is large enough to provide valid results.
3. Data collection errors: Errors can occur during data collection, such as inaccurate measurements, incomplete or missing data, and errors in recording data. Researchers should ensure that data collection methods are standardized and that data are collected accurately and consistently.
4. Data analysis errors: Errors can also occur during data analysis, such as incorrect statistical analyses, misinterpretation of results, and errors in data entry. Researchers should have a clear understanding of the statistical methods they are using and ensure that they are applied correctly.
5. Biases: Researchers should be aware of their own biases and take steps to minimize their impact on the research. Biases can occur in many forms, such as confirmation bias, selection bias, and reporting bias.
6. Ethical issues: Researchers should ensure that their research is conducted ethically, and that the rights and well-being of their participants are protected. Ethical issues can include informed consent, confidentiality, and the potential for harm to participants.



Thank you for your attention!

