

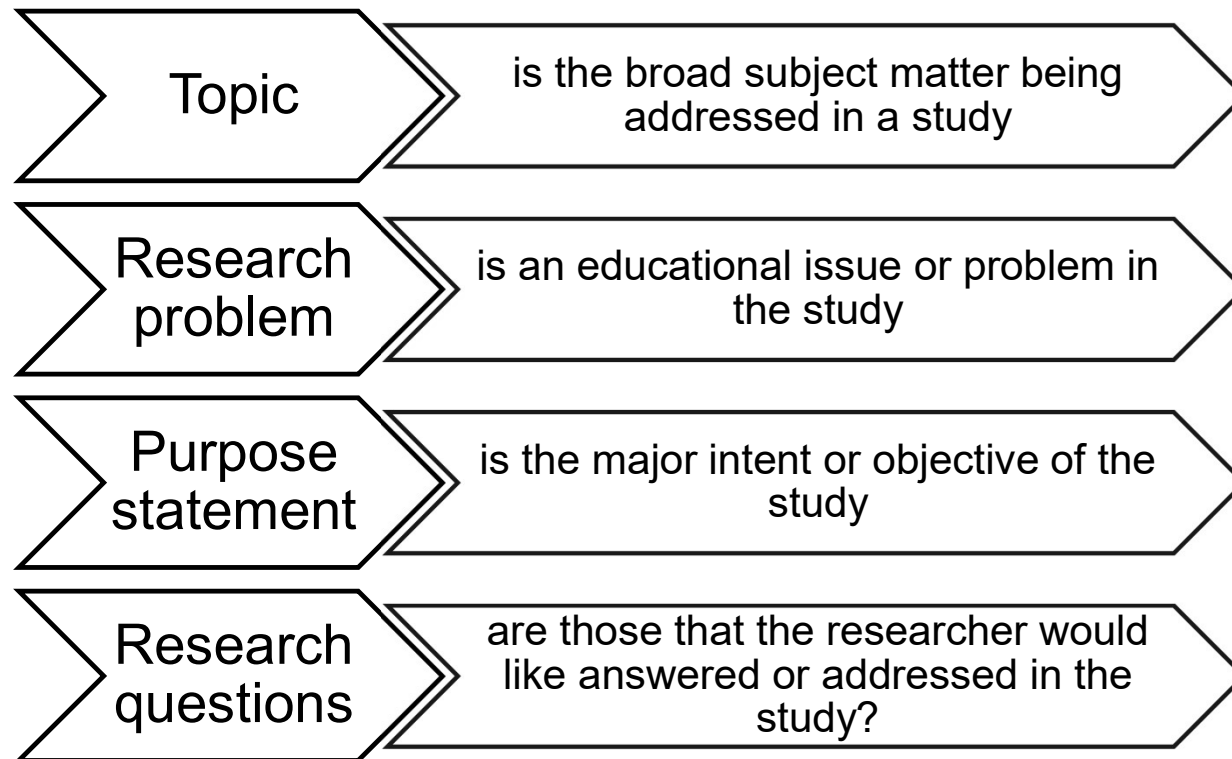


Research Project Methodology: Basic Elements

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DIFFERENCES AMONG THE TOPIC, PROBLEM, PURPOSE, AND QUESTIONS



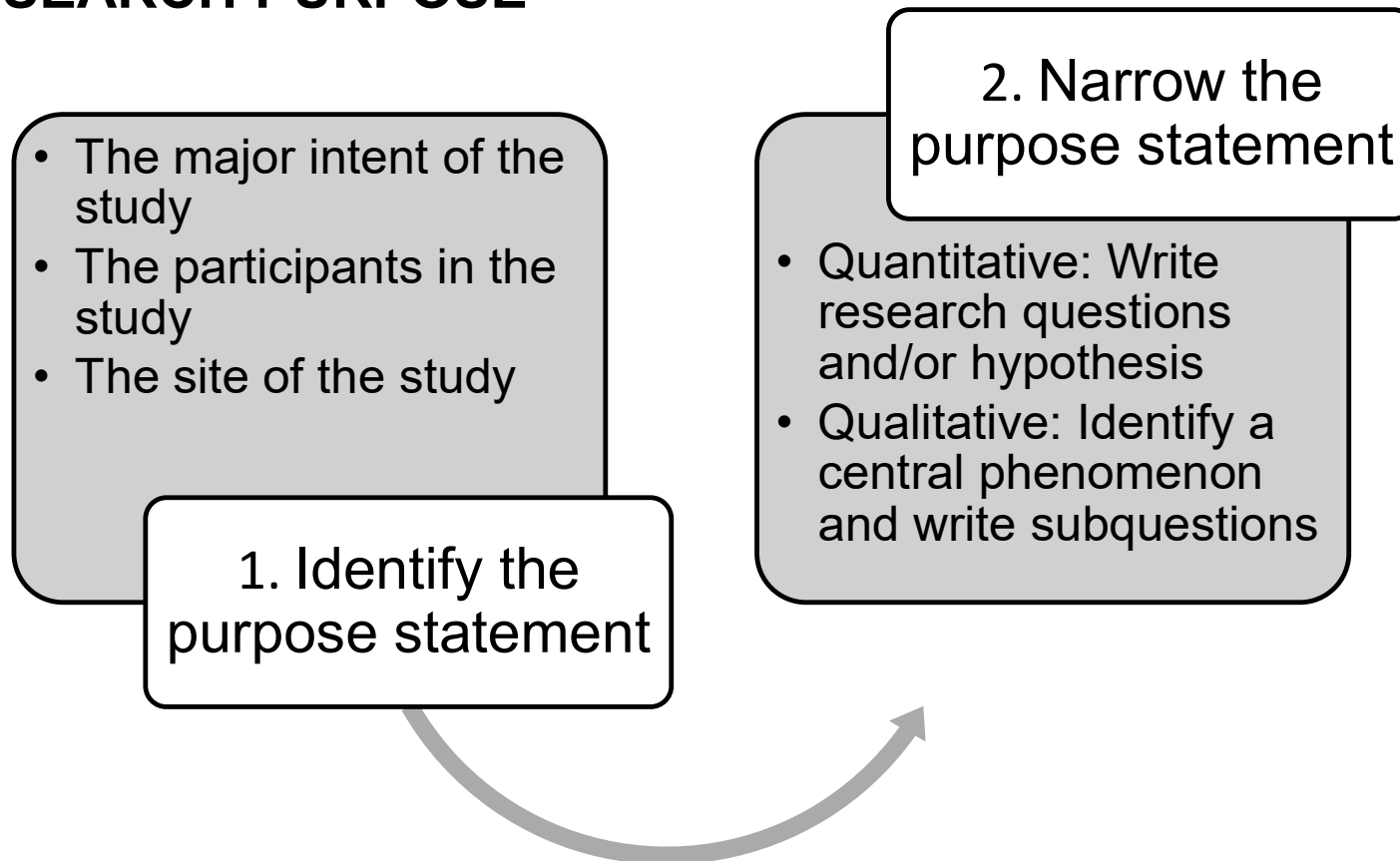


THE RESEARCH PROBLEM: GENERAL RULES

- consider numeric information for impact;
- clearly identify the research problem leading to the study;
- indicate why the problem is important by citing numerous references that justify the need to study the problem;
- refrain from using quotations;
- make sure that the problem is framed in a manner consistent with the approach to research in the study;
- consider whether there is a single problem involved in the proposed study or multiple problems that lead to a need for the study.

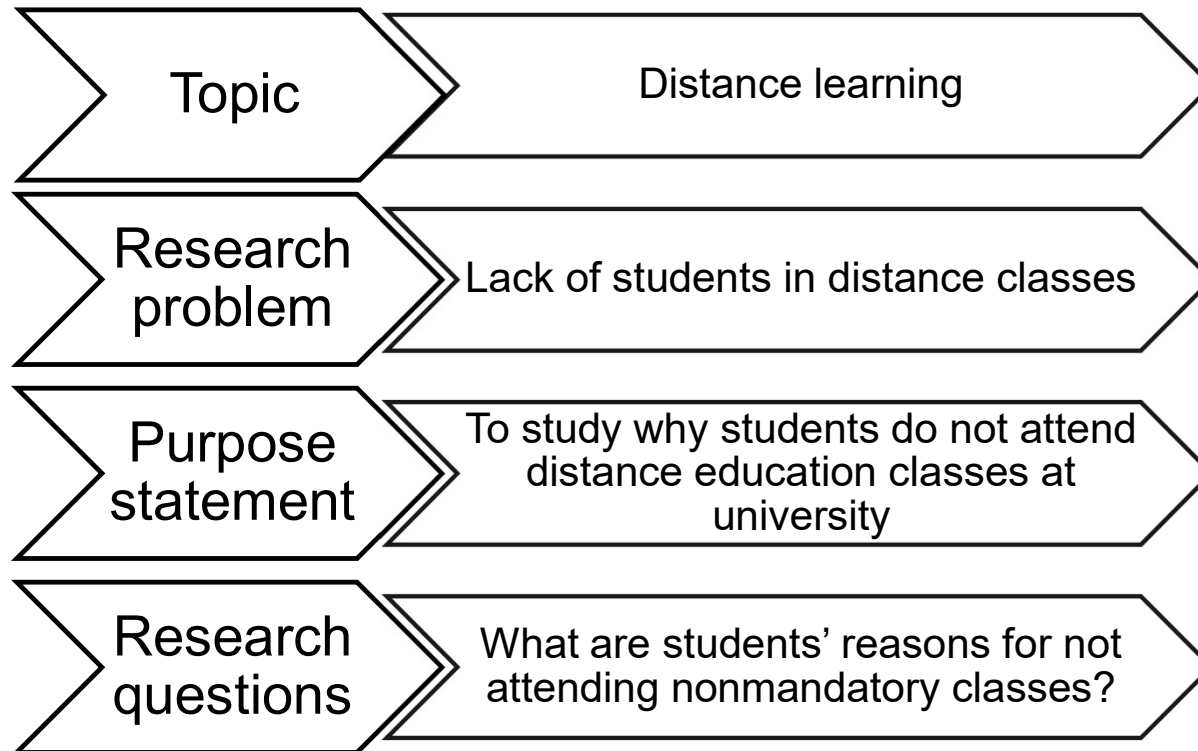


THE RESEARCH PURPOSE





DIFFERENCES AMONG THE TOPIC, PROBLEM, PURPOSE, AND QUESTIONS



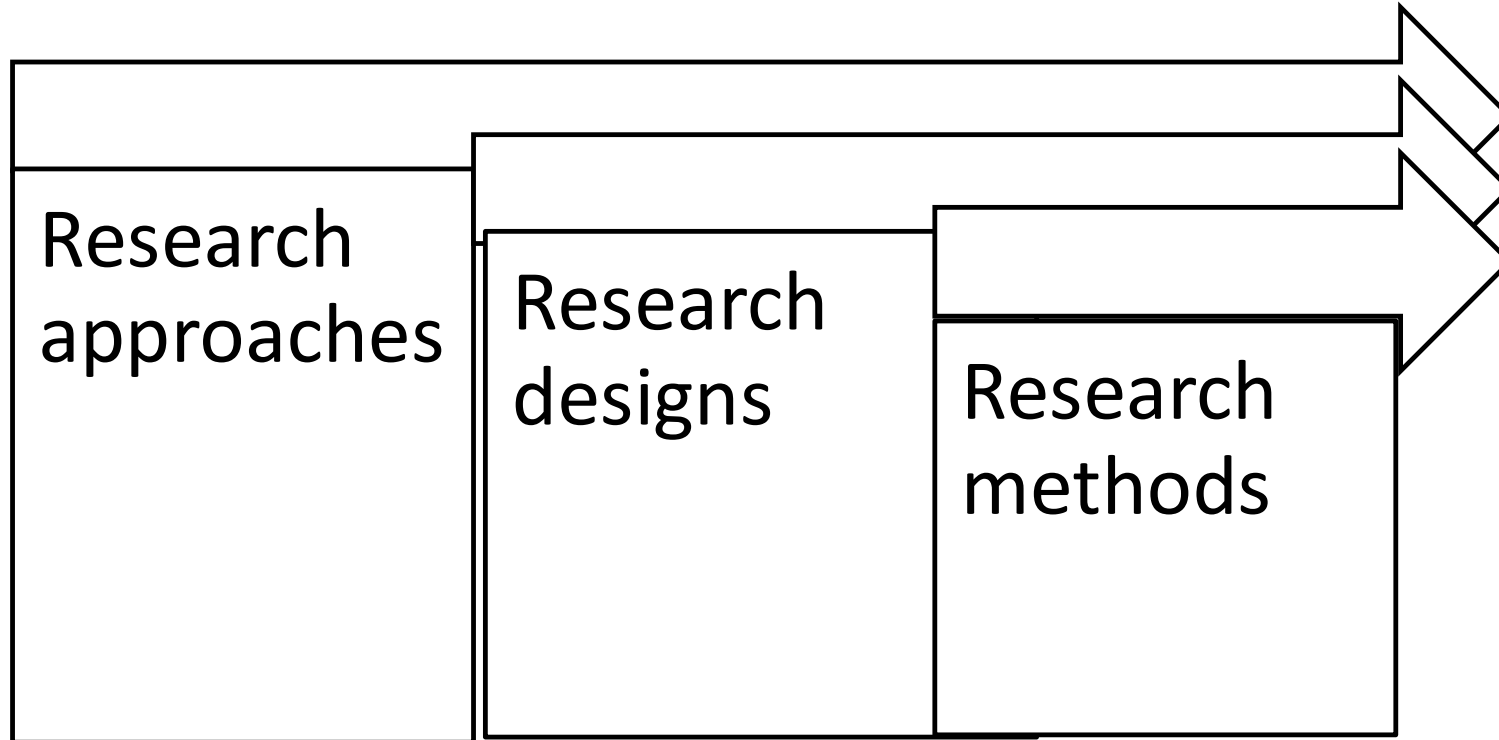


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RESEARCH APPROACHES

Qualitative

- using words;
- qualitative interview questions;
- qualitative case studies;
- collecting qualitative data through observing.

Mixed methods

Quantitative

- using numbers;
- quantitative hypotheses;
- quantitative experiments;
- collecting data quantitatively on instruments.



RESEARCH APPROACHES

Qualitative research is an approach for **exploring and understanding** the meaning individuals or groups ascribe to a social or human problem.

Quantitative research is an approach for **testing objective theories** by examining the relationship among variables.

Mixed methods research is 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.

Source: *Research Design Qualitative, Quantitative, and Mixed Methods Approaches* by John W. Creswell and J. David Creswell



RESEARCH DESIGNS

Quantitative

- Experimental designs
- Nonexperimental designs (for example survey)
- Longitudinal designs

Qualitative

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

Mixed Methods

- Convergent
- Explanatory sequential
- Exploratory sequential
- Complex designs



QUANTITATIVE DESIGNS

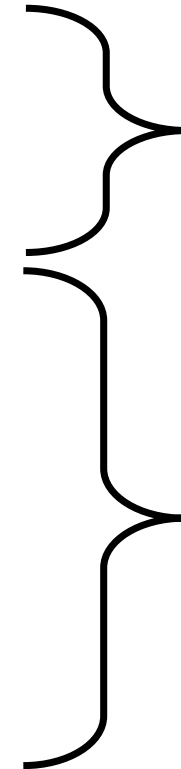
Experimental designs:

- true experiments;
- quasi-experiments.

Nonexperimental designs;

- Causal-comparative research;
- Correlational design (structural equation modeling, hierarchical linear modeling, logistic regression).

Longitudinal designs (for example World Value Survey)



Experiment

Survey



QUALITATIVE DESIGNS

Narrative research (the researcher studies the lives of individuals and asks one or more individuals to provide stories about their lives);

Phenomenological research (the researcher describes the lived experiences of individuals about a phenomenon as described by participants);

Grounded theory (the researcher derives a general, abstract theory of a process, action, or interaction grounded in the views of participants);

Ethnography (the researcher studies the shared patterns of behaviors, language, and actions of an intact cultural group in a natural setting over a prolonged period of time. Data collection often involves observations and interviews);

Case studies (the researcher develops an in-depth analysis of a case, often a program, event, activity, process, or one or more individuals. Cases are bounded by time and activity, and researchers collect detailed information using a variety of data collection procedures over a sustained period of time).



MIXED METHODS DESIGNS

Convergent mixed methods is methods design in which the researcher converges or merges quantitative and qualitative data in order to provide a comprehensive analysis of the research problem;

Explanatory sequential mixed methods is methods design in which the researcher first conducts quantitative research, analyzes the results and then builds on the results to explain them in more detail with qualitative research;

Exploratory sequential mixed methods is methods design in which the researcher first begins with a qualitative research phase and explores the views of participants. The data are then analyzed, and the information used to build into a second, quantitative phase.



RESEARCH METHODS

Quantitative

- Pre-determined
- Instrument based (closed-ended) questions
- Performance data, attitude data, observational data, census data
- Statistical analysis
- Statistical interpretation

Mixed

- Both pre-determined and emerging methods
- Both open-and closed- ended questions
- Multiple forms of data
- Statistical and text analysis
- Across database interpretation

Qualitative

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



QUANTITATIVE PURPOSE STATEMENT

Guidelines for writing

- Use a single sentence.
- Use wording such as The purpose of this study
- If using a theory, state the theory you plan to test.
- Use quantitative words (e.g., “relate,” “compare,” “describe”) to describe the relationships between variables.



ELEMENTS OF A QUANTITATIVE PURPOSE STATEMENT

- Independent variable (1st position in sentence);
- Dependent variable (2nd position in sentence) ;
- Control and/or mediating variable (3rd position in sentence);
- Research site;
- Participants.



QUANTITATIVE RESEARCH QUESTIONS

Types of quantitative research questions

- Describe results of your variables.
- Compare two or more groups on the independent variable in terms of the dependent variable.
- Relate two or more variables.

Guidelines for writing

- Begin with “how,” “what,” or “why.”
- Specify the independent, dependent, and mediating or control variables.
- Use the words describe, compare, or relate to indicate the action or connection among the variables.
- Indicate the participants and the research site for the study.



QUALITATIVE PURPOSE STATEMENT

Guidelines for writing

- Use a single sentence.
- A statement such as, “The purpose of this study”
- Use qualitative words (e.g., “explore,” “understand,” “discover”)



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ELEMENTS OF QUALITATIVE PURPOSE STATEMENT

- The central phenomenon
- The type of qualitative design
- The participants
- The research site



QUALITATIVE RESEARCH QUESTIONS

1. Central question is the overarching question you explore in the research study.
2. Subquestions divide the central question into smaller, specific questions.
 - Issue subquestions: Narrow the focus of the central question into specific issues.
 - Procedural subquestions: Indicate the steps to be used in analyzing the data in a qualitative study.



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