

Research Method

EDHE6530

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Overview

- Review our progress
- Introduction of Research Methods
- Qualitative Research Methods

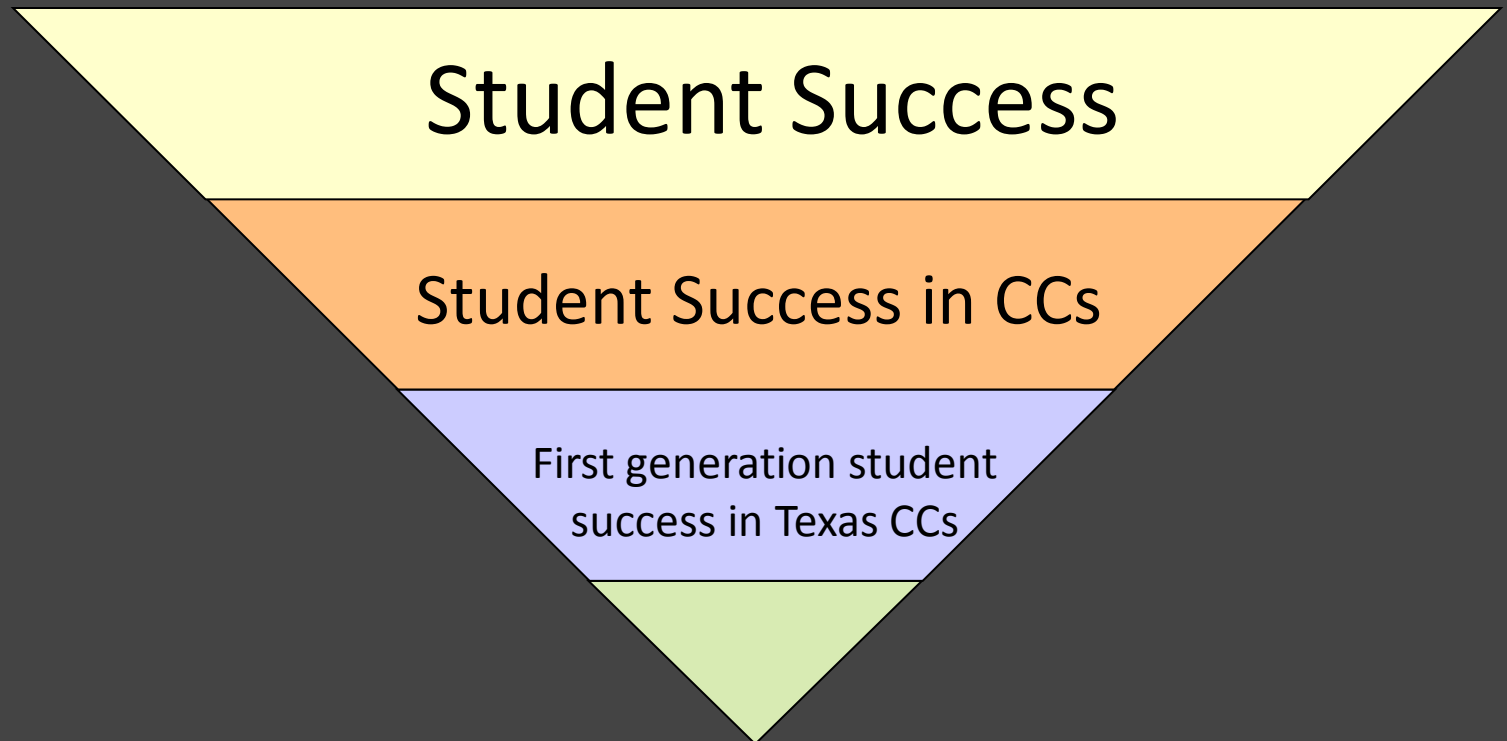
A Quick Review

Chapter One

- Introduction/problem statement
- Purpose of the study
- Conceptual framework or theoretical orientation
- Research questions and hypotheses
- Definition of terms
- Significance of the study
- Limitations and delimitations

Key to a good literature review

- Begin your search like inverted pyramid
- Broad topic to specific nature of research proposal



Key to a good literature review

- Always keep your research questions in mind
- Critically analyze the literature
- Integrate instead of summarize
- Use primary sources
- Distinguish between assertion and evidence

Other tips

- Don't ignore studies that differ from majority or personal bias
- Read most recent ones first, oldest last
- Read important landmark works
- Use data-based, empirical studies
- Opinion pieces and descriptive research helpful in introduction – set stage
- Not a literary production- be clear and concise

Research Methods

Types of Research

- Basic vs. Applied Research
- Four research paradigms:
 - Quantitative (positivist)
 - Qualitative (interpretive)
 - Ideological
 - Mixed-method (pragmatic)

Basic Research

- Theory Driven
- Discovery of knowledge



Applied Research

- **IMMEDIATE** practical problem
- **ACTUAL** problems in the field
- **Limited generalizability**



Research vs. Assessment

Research

- Generate knowledge that can be applied broadly
- Audience is not location-bounded
- Sample based

Assessment

- Evaluate the progress or results of a initiative or program
- Internally focused
- To improve the project or process
- Population based

Which is which?

Comparison of the attitude of different student ethnic groups toward General Education requirements at UNT to determine why more African-Americans than Caucasians are dropping out of college before taking courses in their major.

ASSESSMENT

Which is which?

Comparison of the attitude of different student ethnic groups toward General Education requirements at a four-year research university to determine why more African-Americans than Caucasians are dropping out of college before taking courses in their major.

APPLIED

Which is which?

Does a student's cultural identity affects his or her choice of college major and the likelihood of achieving a baccalaureate degree?

BASIC

Which is which?

- What is the relationship between self-esteem and academic achievement?

BASIC

- Do students who participate in UNT's learning communities have a higher GPA than those who do not participate?

ASSESSMENT

Which is which?

- Are senior student affairs officers who have a degree in Higher Education more effective than those who do not?

APPLIED

- What are the factors that contribute to the career success of senior student affairs officers?

BASIC

Which is which?

- What is the effects of student engagement on college student's identity development?

BASIC

- What is the effect of the No Child Left Behind Act of 2001 on student readiness in Texas community colleges?

APPLIED

Fundamental Questions

1. What constitutes knowledge?
2. Where is knowledge located?
3. How do we attain knowledge?
4. How do we describe knowledge?
5. How do we study knowledge?

Quantitative vs. Qualitative

- Epistemology
- Treatment of Theory
- Role of the researcher(s)
- Data collection and analysis
- Quality controls
- Report of findings
- Types of studies
- How to choose between the two methods

Epistemology

Quantitative

- Positivism
 - An objective reality exist that is subject to natural law such as cause and effect and there are universal truth that can be discovered through inquiry.
 - Example: A physicist studies the movement of stars and interpreted it with Quantum Chromodynamics

Qualitative

- Phenomenology
 - The world exists and different people construct it in different ways. Reality cannot be understood without the consciousness of a person. Therefore, study of objective truth is meaningless without the context.
 - Example: A study of homophobia in 19th century American society

Treatment of Theory

Quantitative

- Precise hypotheses stated at the outset
- Precise definitions stated at the outset
- Build on currently existed theoretical foundations
- Testing of the theory and hypothesis

Qualitative

- Hypotheses that emerge as the study develops
- Definitions in context as the study progresses
- Theories that emerge as the study develops

Role of the Researcher(s)

Quantitative

- Objective observers
- Try to eliminate any subjective biases through research design
- Results of the study can be replicated by any researchers

Qualitative

- Active participants
- Recognize subjective biases as part of the research
- Each researcher brings unique quality into the research therefore no results can be totally replicated

Data Collection and Analysis

Quantitative

- Random techniques for obtaining meaningful samples
- Data reduced to numbers
- Breaking complex phenomena into specific parts for analysis
- Willingness to manipulate aspects, situations, or conditions in studying complex phenomena

Qualitative

- Purposive samples or expert informants
- Preferred narrative description
- Holistic description of complex phenomena
- Unwillingness to tamper with naturally occurring phenomena

Quality Control

Quantitative

- Assessment of validity through reliance on statistical indices
- Attention to assessing and improving score reliability
- Uses design or statistical control of extraneous variables

Qualitative

- Assessment of validity through triangulation
- Assumes that reliability of inferences is adequate
- Uses logical analysis in controlling/accounting for extraneous variables

Report of Findings

Quantitative

- Statistical summary of results with charts and figures
- Tried to make the findings more generalizable
- Emphasizes objectivity

Qualitative

- Narrative description of results or themes
- Tries to understand the complex phenomena behind the obvious
- Emphasizes authenticity

Collaboration vs. Competition

Developing a theory

Testing the theory

Gaining in depth understanding

Revisiting the theory and retesting
it

Applying the theory in practice



Ideological Approaches

- Looking at the world through a particular theoretical point of view or vision
 - Postmodern thinking
 - Critical theory
 - Feminist perspective
 - Neo-Marxist
- Power and class

Ideological Approaches

- Researcher's role
 - Interpreting the phenomenon through a particular perspective
 - Identifying marginalized or endangered people in society
 - To advocate
- Challenging traditional views and usually controversial

Mixed-Method

- Philosophically torn between positivist and Phenomenology
- Pragmatism comes to save the day
- Focusing on “solving the problems” instead of philosophical arguments
- Mixed-method is **NOT** half quantitative and half qualitative

How to Choose?

- Type of questions you are interested
- Type of data that are available to you
- Personality and world view
- Your ability to conduct the research

**Purpose must always precede method or
format**

Ask yourself...

- Am I predisposed as a researcher toward achieving some sort of closure, toward seeking knowledge that can be replicated and reconfirmed and therefore held with considerable certainty?
- Is it important that my data enable me to explain, predict, or even control the outcomes of similar future events?

Ask yourself...

- Do I feel the need to eliminate plausible competing explanations for findings that I obtain through my research?
- Am I uncomfortable with uncertainty?

Ask yourself...

- Am I more inclined toward uncovering multiple or even conflicting interpretations of the phenomenon or experience I am investigating?
- Am I comfortable with the prospect of furnishing more than a single meaning to features of an experience?

Ask yourself...

- Am I predisposed toward the generation of questions that invite rather than reduce complexity?
- Am I comfortable with uncertainty?

Ask yourself...

- Do I feel a strong desire to advocate for a underprivileged social class through a particular theoretical vision?
- Will incorporate both quantitative and qualitative methods make my research more complete?

Type of Studies

Quantitative

- Experimental
- Causal-comparative
- Descriptive

Qualitative

- Ethnography
- Grounded theory
- Case study
- Narrative inquiry

Ideological Approaches

- Action Research

Experimental Design

- Independent Variable (IV) manipulated by researcher
- Dependent Variable (DV) measured
- **CONTROLLED** setting
- Simple and powerful
- Cause and effect relationships

Causal-Comparative Design

- Ex Post Facto research
- IV cannot be manipulated ethically
- Changes in IV have already occurred
- Groups may be different before IV
- Produce cause-effect relationship

Descriptive Design

- Tells what is
- Describes present state of affairs
- NO manipulation of variables

Case Study

- Detailed study of a person/group
- Person or group – atypical
- Entire range behaviors – relationships to person's history and environment
- Reactions to naturally occurring events

Ethnography

- A study of culture
- To develop a holistic and comprehensive understanding of a culture
- Emic perspective – the meaning from the actor's point of view
- Ethic perspective – observer's point of view
- Find the meaning

Grounded Theory

- To develop a substantive theory from and grounded in data
- Researchers are **NOT** blank slate
- Many forms of grounded theory
 - Systematic design
 - Emerging design
 - Constructivist approach

Narrative Inquiry

- To understand how people structure their experience and make sense of events and actions in their life
- Construct the story from many fragments
- Very small sample size
- May combine with other qualitative research methods

Which is which?

- A study of the effect of divorce on student achievement

Causal-Comparative

- Investigation of computer versus traditional instruction when students can be assigned randomly to classes

Experimental

Which is which?

- A study of gay and lesbian student culture at a Catholic university

Ethnography

- The development of a college retention model for undocumented college students

Grounded Theory

Which is which?

- A survey of graduate students' attitudes toward the increase in tuition

Descriptive

- A study of the presidency of Gretchen Bataille at the University of North Texas

Case Study