A Framework for Design

Research Design: Qualitative, Quantitative, and Mixed Method Approaches

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Chapter Outline

- Why do we need a framework?
- Three central questions to the design of research
- Alternative knowledge claims
- Strategies of inquiry
- Research methods
- Three approaches to research
- Criteria for selecting an approach
Why Do We Need a Framework?

- It can be adopted to provide guidance about all facets of the study
  - Assessing the general philosophical ideas behind the inquiry
  - Detailed data collection and analysis procedures
  - Situate plans in ideas that are well-grounded in the literature
Groundwork

- **What is epistemology?**
  A theory of knowledge embedded in the theoretical perspective
- **What is a theoretical perspective?**
  What lies behind the methodology in question
- **What is methodology?**
  The strategy or plan of action that links methods to outcomes
- **What are methods?**
  The techniques and procedures we propose to use
Three Central Questions of Research Design

- What knowledge claims are being made by the researcher (including the researcher’s theoretical perspective)?
- What strategies of inquiry will inform the procedures?
- What methods of data collection and analysis will be used?
Knowledge claims

Strategies of inquiry

Methods

Approaches to research

Qualitative

Quantitative

Mixed

Design process of research

Questions - Theoretical lens - Data collection
Data analysis - Write up - Validation
Alternative Knowledge Claims

- Postpositive
- Socially constructed
- Advocacy/Participatory
- Pragmatic
Postpositive Knowledge Claims

- **Determination** – causes probably determine effects or outcomes
- **Reductionism** – reduce the idea to a small set of elements to test
- **Empirical observation and measurement**
- **Theory verification** – verify and test the laws and theories that govern the world
Postpositive Knowledge Claims

- Knowledge is conjectural, antifoundational.
  - We cannot ascertain absolute truth.
- Research is a process of making and refining claims, or abandoning some for others.
- Data, evidence, and rational considerations shape knowledge.
- Research seeks to develop relevant true statements.
- Being objective is essential to competent inquiry.
Socially-constructed Knowledge Claims

- Emphasize **understanding** the world in which we live and work
- **Multiple participant meanings** lead the researcher to look for a multiplicity of views.
- **Social and historical construction** implies that meaning is formed through interaction with sensitivity to historical and cultural norms.
- **Theory generation** makes sense of the meanings others have about the world.
Socially-constructed Knowledge Claims

- Meanings are constructed by individuals as they engage with the world they are interpreting.
- Humans engage with their world and make sense of it based on their historical and social perspective.
- The basic generation of meaning is always social, arising from interaction with a human community.
Advocacy/Participatory Claims

- Concern **sociopolitical** issues
- They are oriented toward issues of **empowerment**.
- They are **collaborative**, so as not to further marginalize the participants, and
- **Change-oriented**, voicing opinions, raising consciousness, and advancing an agenda for change to improve lives.
Advocacy/Participatory Claims

- Theoretical perspectives may be integrated with philosophical assumptions.
  - Feminist perspectives
  - Radicalized discourses
  - Critical theory
  - Queer theory
  - Disability inquiry
Advocacy/Participatory Claims

- Are dialectical
- Focus on bringing about change and helping individuals free themselves from constraints
- Create political discussion so that change will occur
- Are practical and collaborative, because inquiry is completed with others rather than “on” or “to” others
Pragmatic Knowledge Claims

- Consider the consequences of actions
- Problem-centered – researchers use all approaches to understand the problem.
- Pluralistic
- Oriented toward real-world practice
Pragmatic Knowledge Claims

- **Not committed** to any one philosophy
  - There is no asking about reality and the laws of nature.
- This allows the freedom to choose among **many possible approaches**.
- Pragmatic knowledge claims are especially conducive to **mixed-methods research**.
  - Investigators use both quantitative and qualitative methods once they establish a purpose for using mixed methods.
Quantitative Approach Strategies

- **Experimental designs**
  - True experiments with random group assignment
  - Quasi-experiments that use nonrandomized designs

- **Non-experimental designs - surveys**
  - Longitudinal and cross-sectional studies using questionnaires or structured interviews
Qualitative Approach Strategies

- **Ethnography** – to study a cultural group in a natural setting over time by collecting observations
- **Grounded theory** – to derive a general theory of process or interaction grounded in participant views
- **Case studies** – to explore in depth an event, activity, or process concerning an individual
- **Phenomenological research** – to identify participant experiences concerning a phenomenon
- **Narrative research** – To study the lives of individuals through their life stories
Mixed Method Approach
Strategies

- **Sequential procedures** – to elaborate the findings of one method with another method

- **Concurrent procedures** – to converge quantitative and qualitative data to provide a comprehensive analysis

- **Transformative procedures** – to use a theoretical lens as an overarching perspective within a design that contains both quantitative and qualitative data
## Research Methods

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<th>Quantitative</th>
<th>Qualitative</th>
<th>Mixed</th>
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<td>Emerging methods</td>
<td>Both</td>
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<td>Instrument-based questions</td>
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<td>Performance, attitude, observational, and</td>
<td>Interview, observational, document, and</td>
<td>Multiple forms of data drawing on all possibilities</td>
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<td>Statistical analysis</td>
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Quantitative Approach

- Uses postpositivist claims for developing knowledge
- Employs strategies of inquiry such as experiments and surveys
- Collects data on predetermined instruments that yield statistical data
Qualitative Approach

- Makes knowledge claims based on constructivist perspectives
- Employs strategies of inquiry such as ethnography, narratives, case studies
- Collects open-ended, emerging data with the intent of developing themes from the data
Mixed-methods Approach

- Bases knowledge claims on pragmatic grounds
- Employs strategies of inquiry involving either the simultaneous or sequential collection of data
- Collects both numeric information and text information
How do we select an approach?

Use a **quantitative approach** if the problem is

- to identify factors that influence or best predict an outcome or
- to determine the utility of an intervention
How do we select an approach?

Use a **qualitative approach** if the problem is to understand

- a concept or a phenomenon
- a new topic, or
- a topic that has never been addressed with a certain group of people.
How do we select an approach?

Use a **mixed approach** if the problem is

- to generalize the findings and develop the meaning of a phenomenon or concept for individuals.

In all cases, consider the audience: journal editors and readers, graduate committees, conference attendees, and colleagues in the field.