The Distinctions Between Theory, Theoretical Framework & Conceptual Framework


Elisabeth F. M. Schlegel & Alice Fornari
Elisabeth.Schlegel@Hofstra.edu
Associate Professor of Science Education
March 26, 2020
Acknowledgment: Thank you, Lauren and Sebastian!

Conceptual Frameworks
What are they? Why do they matter?

Lauren Maggio
Sebastian Uijtdehaage
Boyer (1990): Scholarship Reconsidered

- advancing knowledge

- synthesising knowledge

- advancing/applying knowledge about how to teach/promote learning

Discovery
Integration
Teaching
Application
Health Professions Education: Conducts Research, Explores Programs & Curricula, Teaching & Learning, and Publishes Studies/Products

**Educational Research**
- New Knowledge
- Research Study Design
- Research questions
- Examining existing research data
- Generate Hypothesis
- Research methodology
- Apply theories
- Conclusions …….

**Teaching and Learning**
- Local problems or needs
- Experiential learning
- Conceptual frameworks
- New Programs, Courses; Tools; Texts; Multimedia
- Evaluations and continuous improvements
- New solutions to common problems
- Best practices

Applications of Educational Research

4th Int’l Faculty Development Conference; adapted
You Got to Have a Theory, a Theoretical Framework, and a Conceptual Framework!
Where We are Going:

1. Conceptual Framework
   - Logical argument justifying all aspects of the research: why it is important and why methodology is appropriate

2. Theoretical Framework
   - Explanation of how a theory (theories) shaped the study

3. Theory
   - Description of relationship between concepts and ideas that help us understand the world

Slide: Lauren Maggio & Sebastian Uijtdehaage
Learning Objectives and Agenda

• LWBAT define theoretical frameworks vs. conceptual frameworks
• LWBAT apply theoretical frameworks vs. conceptual frameworks to individual research interests
• Material provided:
• 20 min introduction
• 15 min break out groups
• 10 min collection on white board
• 10 min closing
Drawing from Boyer’s Paradigm of Scholarship, identify frameworks and steps of medical education research including discussing hypotheses, variables, and structures of studies.
The Research Process

1. Research Question
   - Lit search
   - Hypothesis/Aim Statement ("Our goal of this study......")

2. Refine Hypothesis/Aim Statement
   - Study design
   - Feasibility exploration

3. Tweak Design
   - Specific aims, measures outcomes
   - Instruments power calc, stats, etc
What are Theories?

A theory is a set of propositions that are logically related, expressing the relation(s) among several different constructs and propositions.

Abstract description of the relationships between concepts that help us to understand the world.

A theory can be supported by preliminary data or by a vast body of research—the more data supporting the theory, the stronger it becomes.

A Theory Supports the Research Process

Theoretical Framework

A logically developed and connected set of concepts and premises—developed from one or more theories—that a researcher creates to scaffold a study.

The researcher must define any concepts and theories that will provide the grounding of the research, unite them through logical connections, and relate these concepts to the study that is being carried out.

A theoretical framework is a reflection of the work the researcher engages in to use a theory in a given study.

Developing the Theoretical Framework

1. Identifying the research question
2. Researching literature
3. Identifying key theories
4. Summarizing the findings

Rolin Moe, Ed.D., Dean of Academic Support and Learning Technologies, Skyline College, CA
A conceptual framework is coherent argument about:

- **REASON**: Why the topic you wish to study matters
- **RIGOR**: Why your research methodology is appropriate

Constructing a conceptual framework

- Why the topic you wish to study matters
  - Problem
  - Gap
  - Hook
- Why the methodology is appropriate
  - Research question
  - Research design
  - Methods and data to be collected
  - Analytic approach

Influenced by your paradigmatic stance, informed by literature, and guided by theory.

Slide: Lauren Maggio & Sebastian Uijtdehaage
A conceptual framework is constructed by YOU

- You construct a preliminary conceptual framework prior to a study
- Your conceptual framework may evolve during a study:
- New information and ideas emerge that strengthen previous framework
Literature review

Empirical work: previous research on the topic

Theories that explain empirical work

Starting points:
What do you want to study? Why does it matter to you?

Identity and paradigmatic stance

Personal interests and goals

Justification "so what"

Research question

Research design

Data collection methods

Analytic approach

Lauren Maggio & Sebastian Uijtdehaage
Abstract

Introduction: Emotional intelligence and communication skills are important for leading interprofessional teams in health care. We implemented a three-hour workshop for interprofessional trainees to self-assess and improve their emotional intelligence and communication skills. This report describes our experience in designing, delivering, and evaluating this workshop. Methods: Participants were interprofessional trainees, including Internal Medicine residents, medical students, and graduate students in clinical pharmacy, physician assistant, and health psychology training programs. This workshop consisted of reflective activities to self-assess emotional intelligence and communication styles, a didactic presentation focused on leadership skills, emotional intelligence and communication styles, and a teamwork activity on the application of emotional intelligence and communication skills. Results: 44 trainees participated in this workshop. After the workshop, all trainees reported increased knowledge about positive strategies to communicate with team members, felt more comfortable working with other professionals to encourage positive team dynamics, and were more prepared to encourage leadership in their interprofessional teams. Examination of learner evaluations suggested that residents endorsed higher mean ratings than the other learner groups in knowledge attainment (p=0.02) and meeting the needs of all learners (p=0.01). Discussion: This workshop enhanced our trainees’ self-awareness of emotional intelligence and communication strategies. An interprofessional approach is beneficial for health professions' leadership training.
Group Work

Think about a research question you have, and create a
A. Theoretical Framework and a
B. Conceptual Framework:

1) Which theories could make up your framework?
2) Why is your research design and method appropriate?
Arrival!

Logical argument justifying *all* aspects of the research: why it is important and why methodology is appropriate

Explanation of how a theory (theories) shaped the study

Description of relationship between concepts and ideas that help us understand the world
Lauren Maggio
Sebastian Uijtdehaage
Thank you!