Inspiration

- When an idea emerges, the researcher may frequently say that they have a theory about the study outcomes and what they might be.

- One of the differences between research-based knowledge and other types of information is that knowledge adds to a body of what is known that is structured as either a conceptual framework, theory, or model.
Objectives

• To describe the difference in structure and function of conceptual frameworks, theories, and models.
• To identify the relationship between research and conceptual models, theory, and models.
• To determine how a conceptual model, theory, or model is integrated into the research process.

Conceptual Frameworks

• Represent ways of thinking about a problem or ways of representing how complex things work the way that they do.
• Different Frameworks will emphasize different variables and outcomes and their interrelatedness.

Bordage, 2009

Conceptual Frameworks are like:

• Lighthouses
  – Lighthouses illuminate certain parts of the ocean at any given time, other parts are left in the dark.
  – Each framework highlights or emphasizes different aspects of a problem or research question.
  – Any one conceptual framework presents only a partial view of reality.
Conceptual Frameworks for Chronic Disease

- Medical Care
  - Care based on meeting present, acute and urgent needs or problems.
- Chronic Care
  - Care that is structured to manage an ongoing health need or problem over time
- Disease Management
  - A comprehensive, integrated programmatic approach to a care of individuals who are part of a population with a health care need or problem.


Conceptual Frameworks are like:

- Magnifying Glass
  - Focuses attention on and amplify certain elements of a problem

Why Does a Researcher Need a Conceptual Framework

- Operating without a conceptual framework, or jumping quickly into one, leaves you short-changed in a world of possibilities.
  - Other ways of explaining might result in a different or more comprehensive light on the problem at hand.
- Assumptions, implicit or explicit, about the way things are or how they work remain unchallenged.
- Research is not research unless it is attached to a body of knowledge.
This study examined two ART adherence conceptual frameworks to determine whether these models generalize to HIV-seropositive older adults. Analyses revealed that neuropsychological functioning was not associated with adherence. Fit indices supported a stress and coping model, with negative affect mediating the effects of social support and maladaptive coping on ART adherence. Results were consistent with stress and coping models and suggest that interventions intending to increase adherence to ART in HIV-infected older adults may be more effective if they address negative affect and enhance adaptive coping and social support.

Conceptual Frameworks: Nature and Use
Bordage, 2009

- Allow researchers to build upon one another’s work; thereby building a body of knowledge
- Programmatic, conceptually based research helps accumulate deeper understanding over time and this moves a discipline (such as nursing) forward.

Conceptual Frameworks keep research on track by:
- Providing clear links from the literature to the research goals and questions
- Informing the research design
- Providing reference points for discussion of the methodology and analysis of the data.
- Contributing to the trustworthiness of the study.
Conceptual Frameworks as opposed to Theory

- Conceptual frameworks provide a conceptual reality.
- Theory provides an empirical reality.
- A conceptual framework may incorporate several theories.
  - Shields & Tajalli, 2006

Theory

- Theory should be used to organize the exploration of the problem at hand more directly than conceptual frameworks as:
  - There is an extraordinary connection between theory and practice.
  - Theory is empirically based
- A Theory confirms the facts.

Theory

- An analytic structure designed to explain a set of observations.
  - A tool for describing, understanding, and explaining a given subject matter.
  - Consists of statements about the subject that have been or can be verified empirically.
  - A scientific theory is an accurate, predictive description supported by facts over time, that is, confirmed through observation and experimentation.
### Relationship Between Theory and Research

- Direct and Positive
- The choice of a research design depends on the question asked and the current state of theory development.
- Theory and its associated research design may be
  - Descriptive
  - Correlational
  - Experimental

---

### Descriptive Theory & Research

- Descriptive theories describe or classify specific dimensions or characteristics by summarizing commonalities found in discrete observations.
- Categories of Descriptive Theory
  - Naming
    - Description of the dimensions or characteristics
  - Classification
    - Includes with the description how the phenomenon is structurally inter-related.
- Descriptive Research
  - Answer “What is” questions

---

### Relational Theory & Correlational Research

- Relational theories specify relations between dimension or groups
  - They explain how parts are related to each other
  - Developed only after descriptive theories have been developed and validated.
- Correlational Research
  - Seek to determine to what extent two or more characteristics tend to occur together.
  - What is the relationship between (or among)....
Explanatory Theory and Experimental Research

• Explanatory Theory
  – Move beyond understanding to prediction of precise causes between dimensions or characteristics.

• Experimental Research
  – These studies ask the questions: What will happen if…?
  – Is Treatment A different from Treatment B.

As a result of scientific research, theories may be

• Reduced
  – A new theory may be better at explaining and predicting reality than an old theory. So the old theory is reduced to the new one.

• Eliminated
  – When concepts are replaced completely by a new explanation of the reality.

• Under-determined
  – If two different and inconsistent theories can be supported by the evidence.

Model

• A pattern, plan or representation (especially in miniature) or description designed to show the main object or workings of an object, system, or concept.

• Models may be
  – Graphic or representational
  – Mathematical or Logical

© Kaiser Permanente Northern and Southern California Nursing Research
Model

- Models may be generated:
  - Inductively from the physical or cognitive worlds
  - Deductively from theories.

Model

- Mathematical models have become increasingly important in research in order to describe or explain complex phenomenon.

Take Home Message

- Knowledge is organized by one of these structures.
- All research is based on a conceptual framework, theory, or model.
  - Which of these conceptual formations will depend on the previous state of the knowledge or prior research.
- If a study poorly expresses its conceptual basis, it can be argued that it is not a scientific study.
- An organized body of knowledge is fundamental to a professional discipline.
References

- Shields, R., Tajalli, H. Intermediate theory: The missing link to successful student scholarship. Faculty Publication-Political Science, Texas State University – San Marcos. 2006.

References to Consider


For more information please contact:
Nursing.Research@kp.org
http://nursingpathways.kp.org/scal/research/index.html

© Kaiser Permanente Northern and Southern California Nursing Research