

Explicit Assumptions About Knowing

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Key words: concept; theory; framework; model; oncology

ONF, 43(2), 245–247.

doi: 10.1188/16.ONF.245-247

Conceptual Foundations is a new column for *Oncology Nursing Forum (ONF)* that focuses on the frameworks that underpin research and practice initiatives. The purpose of this inaugural column is to provide an overview of what conceptual frameworks are, related terms, the role of conceptual frameworks in the research process, and why these frameworks matter. The majority of articles published in *ONF* are research manuscripts. Readers include student nurses, practicing oncology nurses, nurse managers, advanced practice oncology nurses, nurse scientists, and people in other disciplines who are interested in patients with cancer. In the guidelines for *ONF* articles, peer reviewers are asked to address the conceptual model/theory (if needed) that is included in the manuscript. For all who read, apply, and create knowledge, understanding the conceptual framework underlying a research study is an essential skill to master. The conceptual framework may be explicitly identified by the author or may be implicit. If not specifically stated, the reader must detect the underlying assumptions that form a conceptual foundation.

Definitions and Related Terms

What is a conceptual framework? *Concept* is defined as “an abstract or generic idea generalized from

particular instances” (“Concept,” n.d., para. 1). *Framework* is defined as “the basic structure of something; a set of ideas or facts that provide support for something” or “a supporting structure” (“Framework,” n.d., para. 1). Taken together, a *conceptual framework* consists of specified abstract ideas that are joined in an identified structure. Conceptual frameworks identify what is important in understanding a phenomenon and provide guidance for relationships. No universally accepted definition exists for conceptual framework, and the term is sometimes used interchangeably with conceptual model, theoretical framework, and theory (Powers & Knapp, 2011).

Many terms are related to conceptual frameworks (see Table 1). *Epistemology* is a branch of philosophy that studies “how we know” and the justification of knowledge claims. Varying epistemologic philosophic traditions have emphasized different aspects and views of knowledge, certainty, and truth, and have provided differing interpretations of theory and concepts. Empirical philosophic traditions influence much of the current research and emphasize the systematic observation of reality through sensory observation (Powers & Knapp, 2011). *Worldview* refers to a general orientation or set of beliefs about how the world operates. *Paradigm*, a term coined by philosopher Thomas Kuhn,

TABLE 1. Terminology and Definitions for Conceptual Frameworks and Related Terms

Term	Definition
Concept	Abstract idea; building blocks of theory
Conceptual framework	A conceptual framework consists of specified abstract ideas that are joined together in an identified structure. Conceptual frameworks identify what is important in understanding a phenomenon and how the important ideas fit together and are related to one another.
Empirical	Originating in or based on observation or experience
Epistemology	A philosophy of knowledge that includes an understanding of "how we know" and a justification of knowledge claims
Model	Graphic or symbolic representation of a phenomenon
Paradigm	Patterns or systems of beliefs about science and knowledge production that may be discipline-specific
Theory	A set of statements or principles devised to explain a group of facts or phenomena, particularly one that has been repeatedly tested or is widely accepted and can be used to make predictions about natural phenomena; a set of interrelated concepts that guide thinking; an idea or set of ideas that is intended to explain facts or events, the general principles or ideas that relate to a particular subject
Worldview	"A global pattern of beliefs that constitute a school of thought and its attendant knowledge claims" (Powers & Knapp, 2011, p. 203)

Note. Based on information from "Concept," n.d.; "Framework," n.d.; Powers & Knapp, 2011.

also refers to a system of beliefs about knowledge, often specific to a discipline. *Theory* is a term with many definitions; in the research realm, a scientific theory includes a set of statements or principles that explain phenomena. A theory is one type of a conceptual framework that always will include at least two concepts and at least one relational statement. Of note, not all conceptual frameworks will qualify as a theory. A *model* refers to a graphic representation; it may be a two-dimensional diagram or a three-dimensional mock-up. A *conceptual model* is a diagram or drawing of the conceptual framework.

A conceptual framework may be reflected in the worldview, major paradigm, or general orienting framework of the author. A conceptual model may be referenced or drawn in the article. A theory

may be referenced and explained. A conceptual framework may not be explicitly stated but may be discernible to the reader by the author's stated and unstated assumptions. Specifically, the reader may be able to discern the framework used by what is studied, how it is studied, and what is measured. What is not included in the study also may be an indication of the implied framework. A concept that may seem vital to a clinician or researcher but was not included in the study may reflect its relative lack of prominence in the author's conceptual framework.

Conceptual Frameworks and the Research Process

In the guidelines for manuscripts submitted to *ONF*, reviewers are asked to critique the use of conceptual frameworks in two specific

components of the manuscript. The literature review and discussion section guidelines specifically ask reviewers to consider the conceptual framework or theory (if needed) that is used in the manuscript.

However, the integration of a conceptual framework actually threads and weaves through all components of the research process. The orienting framework or worldview provides a specific lens as to how an area of study is seen and how a clinical problem is identified. The choice of a theory or conceptual framework provides structure for the content that is included in the background and literature review. The framework or theory may be specifically discussed and a figure of the conceptual model included. The conceptual framework influences the choice of method, setting, sample, instruments, procedures, and analysis strategies. The reviewer (and reader) often looks for a sense of coherence, logical consistency, and logical flow in a research study. The integration of a conceptual framework through all phases of the research process can provide a sense of coherence. For example, if the conceptual framework specifies that both patient and caregiver experiences are critical to understanding the clinical issue, one might choose to conduct a descriptive longitudinal study conducted in the home setting; include patients and caregivers in the sample; include open-ended interviews, in addition to structured questionnaires, as measurement modalities; and include dyadic evaluation techniques in the analysis.

The discussion section may include comments on whether the conceptual framework worked or was helpful in the study, if the framework was supported or inconsistent with study findings, or what revisions to the framework may be needed. Similarly, any practice implications and knowledge translation may be influenced by the

guiding paradigm of the conceptual framework. Reviewers and readers want the description of the conceptual framework to be clear and understandable. The framework or theory generally feels to be the best fit and most meaningful when it is integrated throughout the study and manuscript and does not come across as a framework that was “tacked on” as an afterthought.

Conceptual frameworks are associated with a wide range of research designs. In the case of an intervention study, the conceptual framework or theory establishes the required components for the intervention and proposes how they will work. In a study modeling relationships or explaining an outcome, the conceptual framework determines what factors will be examined and the nature or valence of the relationship. In a descriptive study, a conceptual model provides guidance on what characteristics are necessary to include in the description. When a theory is presented or hypotheses are proposed, the statement of the important concepts and their structural relationships is very clear.

When a Conceptual Framework Is Not Stated

Sometimes, perhaps often, an author does not explicitly identify his or her conceptual framework. However, clues often exist as to the underlying assumptions the author holds about the topic under study. In the introduction and background, the author provides information on what factors are important. These

factors often translate into the concepts that may reflect the operating framework for the author. This may be evident from past research that is cited and how the clinical issue is described. The instruments used in the research also provide information on the conceptual framework. For example, if the concept of self-efficacy is measured in a study, one can infer that self-efficacy is an important part of the unstated conceptual framework for understanding the phenomenon being examined. Without an explicit statement of the conceptual framework, the reader or reviewer only can attempt to identify what concepts the author thought were important and what the assumed relationships were. Each person has assumptions about what is important, how things may be related, and what counts as evidence. The use of a conceptual model makes these underlying assumptions explicit.

Conclusion

Conceptual frameworks are important because they underlie every study and article. Frequently used analogies for conceptual frameworks are that they are maps or blueprints. The blueprint tells the overall structure of relationships (framework) and the materials (concepts) that will be used in the design. Attention to conceptual frameworks is essential to building science. In addition to the facts and information about the focus of a study, knowledge about the success or failure of a conceptual framework or theory can provide

understanding for other situations and future research. Insight into the underlying mechanism of why or how something works (or did not) is examined in light of the proposed relationships of the framework or theory. For example, a conceptual framework for symptom management can be used for many different symptoms. As the conceptual framework is developed and refined, insight is gained into what needs to be included in effective symptom management interventions. The use of a conceptual framework or theory can advance understanding of multiple clinical problems.

Future columns will review specific theories and conceptual frameworks as they apply to oncology nursing and clinical problems for individuals with cancer.

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Authorship Opportunity

Conceptual Foundations provides readers with an overview of the role of conceptual frameworks in the research process. Materials or inquiries should be directed to Associate Editor Marie Flannery, PhD, RN, AOCN®, at Marie_Flannery@URMC.Rochester.edu.