

CHAPTER OBJECTIVES

At the end of this chapter, you will be able to:

- < Define the terms *theory* and *research* as they relate to the practice of nursing
- < Distinguish between conceptual and empirical definitions
- < Describe how theory and research influence each other in a professional discipline
- < Apply the language of the discipline in describing the relevance of linking theory, research, and practice in nursing
- < Discuss how honoring prior work ethically builds nursing knowledge

KEY TERMS

concepts
conceptual definitions
construct
empirical indicators

metaparadigm
model
operational definitions
proposition

theoretical framework
theory



CHAPTER

5

Linking Theory, Research, and Practice

Elsabeth Jensen

5.1 How Are Theory, Research, and Practice Related?

At the end of this section, you will be able to:

- < Define the *terms* theory and *research* as they relate to the practice of nursing
- < Distinguish between conceptual and empirical definitions
- < Describe how theory and research influence each other in a professional discipline
- < Apply the language of the discipline in describing the relevance of linking theory, research, and practice in nursing

“The bringing together or nexus of nursing theory, practice and research creates a true integration of knowledge designed to support the service to clients and the health of society” (Butcher, 2006, p. 112). In the profession of nursing, theories and research provide an essential foundation for practice and exist to serve the goals of practice. At the same time, practice is the source of the questions to be addressed by research. The relationships between theory, research, and practice are reciprocal in that each informs the other in the development of disciplinary knowledge. Practice is also the testing ground for theory, where only those theories found helpful to practice survive and evolve. Practice is also a source for new theories. In the same way, the disciplinary knowledge that is nursing knowledge is also dynamic and evolving. As students prepare for practice as nurses, it is easy for them to believe that what is being learned is

FYI

Knowledge is not static, but rather it develops out of asking questions and seeking answers. Learning to ask good questions is as essential as learning how to find good answers.

sound and should never be questioned. Learning to ask good questions and developing a critical mind are essential. A curious mind is invaluable in the pursuit of providing the best nursing service possible.

Knowledge is not static, but rather it develops out of asking questions and seeking answers. Learning to ask good questions is as essential as learning how to find good answers.

Understanding Theory, Research, and Practice from a Practice Perspective

There are terms applicable when discussing theory, research, and practice. Understanding these terms allows nurses to communicate ideas effectively with other members of the healthcare team to develop an evidence-based practice.

The Special Language of Theory

A *theory* is a set of concepts linked through propositions to provide an explanation of a phenomenon. Nursing theories are belief systems that guide practice (Parse, 2006). Theory provides the lens through which nurses view clients. In any discipline there is usually one model that defines it at any point in time (Butcher, 2006). Currently in nursing, the concepts of person, environment, health, and nursing are the focus of the development of disciplinary knowledge (Fawcett, 1984; Graham, 2003). These four concepts have been present from the time of Nightingale (1859/1969). Nurses have many formal nursing theories available from which to choose. Although it is beyond the scope of this chapter to describe them, it is important for students and nurses to study them because they represent the many ways that nursing practice can be approached.

Using theory in practice provides a framework to nurses as they assess and provide care. The study of theory introduces a new language that is specific to nursing. Fawcett and Downs (1992) are considered to be authorities on the study of theory and research. As mentioned earlier, the concepts that are core to nursing are person, environment, health, and nursing. These are known as the *metaparadigm* of nursing. The concepts are very broad, and each nursing theory provides definitions for how they are used in that model. *Concepts* are the words or phrases that convey a unique idea or mental image that is relevant to the theory. For example, Hildegard Peplau (1952) defined health as the forward movement of personality, whereas Martha Rogers (1970) defined health as being what the person says it is, that is to say, individuals define health for themselves, and nurses need to know what that definition is for each person. As another example, Nightingale defined environment as

KEY TERMS

theory: A set of concepts linked through propositions to explain a phenomenon

metaparadigm: Four broad concepts core to nursing: person, environment, health, and nursing

concepts: Words or phrases that convey a unique idea that is relevant to a theory



CRITICAL THINKING EXERCISE 5-1

In your nursing program, how are the concepts of the metaparadigm defined? Is there a model or theory that is used?

everything outside the person, whereas Rogers defined environment as being integral with the person. These are different views and lead to some differences in the focus of practice of nurses guided by each of these theories.

Concepts are individual building blocks joined together in statements to create propositions. A **proposition** is a statement about the relationship between two or more concepts. For example, Nightingale (1859/1969) linked a concept from the environment, sunlight, to the concept of health when she wrote:

It is the unqualified result of all my experience with the sick, that second only to their need of fresh air is their need of light . . . not only light, but direct sunlight they want. . . . People think the effect is upon the spirits only. . . . we must admit that light has quite as real and tangible effects upon the human body. (p. 84)

Nightingale's proposition is that exposure to sunlight promotes healing and recovery in the person. Knowing this, nurses will expose people to sunlight to promote health.

Another important word in the language of theory is **construct**. A construct is a property that is neither directly nor indirectly observed. It is a word or phrase to communicate a specific, key idea to others. One example of a construct is social support. Social support cannot actually be seen, but it can be inferred through assessment of other observable attributes. To assess social support, nurses could count the number of people in a patient's circle of family and friends or could ask patients about their perceptions of the support they receive.

The Importance of Testing Theory

Nurses look to research to develop and test ideas that may be useful and also look to researchers to address practice questions for which there are no answers. Nursing researchers are responsible for developing and testing knowledge to guide nursing practice (Butcher, 2006). There are important distinctions to note in order to understand what is and what is not nursing research. Nursing research is research that provides results that are relevant for practice, either at the level of basic research or at the level of applied research.

KEY TERMS

proposition: A statement about the relationship between two or more concepts

construct: A word or phrase used to communicate a specific key idea to others



Some researchers claim their work is nursing research because the researcher is a nurse or because the researcher studied nurses. But it is the focus on nursing practice that defines nursing research. The mere fact that the research was conducted by a nurse or that nurses were studied does not necessarily qualify the research as nursing research. Historically, and even today, approaches to practice are often based on “professional opinion” when research is absent. **Case Example 5-1** provides such a historical illustration. It also demonstrates the value of systematically studying the effects of interventions.

CASE EXAMPLE 5-1

Early Methods of Resuscitation: An Example of Practice Based on Untested Theory

Throughout the past century, nursing students have been taught how to resuscitate patients who stop breathing. As early as 1912, students were taught a variety of methods for providing artificial respiration. It was theorized that moving air in and out of the lungs would be effective. One of these techniques was designed for resuscitating infants. Byrd’s Method of Infant Resuscitation (Goodnow, 1919) directed the nurse to hold the infant’s legs in one hand, and the head and back in the other. The nurse would then double the child over by pressing the head and the knees against the chest. Then the nurse would extend the knees to undouble the child. This would be repeated, but “not too rapidly” (Goodnow, 1919, p. 305). At intervals, the nurse would dip the child into a mustard bath in the hope that this would also stimulate respiration. The nurse would continue this until help arrived.

Other methods of artificial respiration taught included Sylvester’s method for adults (Goodnow, 1919). The patient was placed flat on his back. The nurse would grasp the patient’s elbows and press them close to his sides, pushing in the ribs to expel air from the chest. The arms would then be slowly pulled over the head, allowing the chest to expand. The arms would be lowered to put pressure on the chest, and the cycle was then repeated. This was to be done at the rate of 18 to 20 cycles per minute.

By 1939, postmortem examinations after unsuccessful resuscitations showed veins to be engorged while the arteries were empty (Harmer & Henderson, 1942). Although this evidence indicated other factors needed to be considered, resuscitation techniques continued to focus only on the respiratory system. The same methods of resuscitation that were in use in 1919 were still being taught in 1942. Although students were still being taught the Sylvester method, they were also learning the new “Schäfer method” (Harmer & Henderson, 1942, p. 9401). This method involved placing the patient in a prone position. The nurse would straddle the thighs, facing the patient’s head, and alternatively apply and remove pressure to the thorax.

Eventually, it was noted that what was believed to be best practice was not effective. Results of postmortem examinations indicated that something was missing in the techniques, and therefore research was begun to determine best practice. Today, nursing students are taught cardiopulmonary resuscitation techniques based on updated research and theories.

This case example clearly illustrates how knowledge changes over time and how ineffective practices are replaced with innovations. What is considered to be state-of-the-art practice at one time is replaced when new knowledge based on evidence emerges. Understanding the cycle of science compels nurses to continue learning throughout their careers to avoid becoming laggards. This case also underscores the importance of ordinary observations in the field of practice. In this case example, postmortem observations pointed to the need for another, sounder approach to resuscitation. This case also illustrates how slowly innovations are adopted, even with evidence that a current practice is unsound.

Another area of nursing that has seen many changes over time is wound care. Daunton, Kothari, Smith, and Steele (2012) reviewed the approaches to wound care from 2500 BC to the present. One can see that some old approaches may have been on the right track, such as ancient Egyptians putting moldy bread into a wound (we now know bread mold can be a source of penicillin). Other approaches, such as the use of dry gauze, also have long roots but are now falling out of favor. For example, removal of dry gauze from the wound damages the tissue, slowing healing; the move is now toward use of newer products and less frequent dressing changes. Kohr (2001) demonstrated both effectiveness in practice and efficiency in cost reductions in the use of these new approaches in a practice setting.

FYI

Nursing research provides results that are relevant to and expand or enhance practice. For research to be considered *nursing* research, the focus is on nursing practice rather than that the research happens to be conducted by a nurse.

The Special Language of Research

It is important to understand the special language associated with research (Fawcett & Downs, 1992). Research can be either deductive or inductive. It can be quantitative, qualitative, or a combination of both approaches. Regardless of the approach used, theory provides a framework for the design.

Deductive research typically involves quantitative designs and begins by deriving testable ideas from theories (**Case Example 5-2**). Reports of deductive research describe the theoretical assumptions used to guide the study in the introduction section. Reports also include a critical review of previous research that both supports and refutes aspects of the theory. Because theories are abstract in nature, there is a language of research that corresponds to the language of theory. Unlike terms associated with theory, the language of research refers to the empirical, or that which can be observed.

Researchers cannot measure concepts; however, they can measure variables. A variable is an observation that can be measured by assigning a number to each dimension. For example, a researcher may choose to study the abstract concept of health by measuring the empirical variable of number of acquired upper respiratory infections per year. A hypothesis is a special type of proposition that can be tested empirically. There should be a theoretical basis for

CASE EXAMPLE 5-2

Nightingale's Work to Reduce Death Rates During War: An Example of Theory and Deductive Research

Nightingale theorized that five factors were essential for promoting health: pure or fresh air, pure water, efficient drainage, cleanliness, and light—especially direct sunlight (Nightingale, 1859/1969). Through the application of her theory about what was required for the sick to recover, the death rate at Barrack Hospital during the Crimean War dropped from 42% to 2.2% in the first 6 months after her arrival. Nightingale was able to document this through the use of statistics (Strachey, 1918). Through careful collection and tracking of data, she was able to confirm that nursing interventions based on her theory were effective. Nightingale remains the first known quantitative researcher in nursing. Her work is an excellent example of developing theory, applying theory to practice, and finding support and validation through systematic research.

hypotheses. For example, to test Nightingale's (1859/1969) observations, a nurse may wish to test the relationship between exposure to sunlight and number of acquired upper respiratory infections per year in people receiving nursing care. The stated hypothesis could be that there is a relationship between exposure to sunlight and the number of acquired upper respiratory infections per year. The researcher would statistically test the null hypothesis that exposure to sunlight does not affect the acquisition of upper respiratory infections.

Statistical methods are such that a hypothesis, and by extension, a theory, is never proved. Hypotheses can only be supported. A theory holds only until evidence comes forward to refute it (Johnson, 1983). This is a hard concept for students to grasp because the logic of building knowledge by rejecting opposite ideas seems backward. This is one reason why research can be slow and painstaking.

Using deduction, researchers formulate hypotheses based on clear definitions of concepts and variables. Often, formulating hypotheses coincides with stating definitions. There are two kinds of definitions: conceptual and operational. *Conceptual definitions* are the definitions of concepts contained in the theory that is being used. These definitions sound like those found in dictionaries. *Operational definitions* are definitions that explicitly state how the variable will be measured or operationalized. For example, using Nightingale's theory (1859/1969), the conceptual definition of health would be the absence of disease. A researcher could operationalize health as the number of self-reported upper respiratory infections per year. Environment was defined as everything outside the person (Nightingale, 1859/1969); this is the conceptual definition. The number of hours a person is in the light of

KEY TERMS**conceptual definitions:**

Definitions of concepts contained in a theory that sound like dictionary definitions

operational definitions:

Definitions that explicitly state how the variable will be measured or operationalized; empirical definitions

the sun is an operational definition of environment. Defining concepts and variables allows researchers to collect quantitative data and apply statistics to learn about the phenomenon of interest.

Operational definitions can vary across studies because there are many different ways to measure any given concept. In the example, exposure to sunlight could also be measured using an instrument that would provide a value for the intensity of sunlight over a period of time. The researcher would need to decide whether exposure to sunlight through a glass window is appropriate or whether exposure needs to be unobstructed by glass. The instruments used to measure the amount of time exposed to sunlight and the method of recording the number of self-reported acquired upper respiratory infections would be considered the *empirical indicators* of the variables being studied.

When researchers formulate their plans of research, they use theories to create *theoretical frameworks*. A theoretical framework provides the structure for the study by linking the abstract to the empirical. Sometimes researchers depict their frameworks using a *model*, which is essentially a pictorial representation of the concepts and their interrelationships.

Inductive research is used to develop theory and is usually qualitative. Researchers typically begin data collection before reading the literature to avoid biasing the data collection process. When reporting inductive research, authors use quotations to highlight key points of the theory that has emerged. An example of how a theory can be developed inductively using one particular qualitative method follows (*Case Example 5-3*).

KEY TERMS

empirical indicators: Measures of the variables being studied

theoretical framework: The structure of a study that links the theory concepts to the study variables; a section of a research article that describes the theory used

model: Pictorial representation of concepts and their interrelationships

CASE EXAMPLE 5-3

Understanding and Helping Depressed Women: An Example of Theory and Inductive Research

Schreiber, a clinical nurse specialist, noticed that twice as many women as men suffered from depression. She found little in the way of nursing research that could help her care for these women. In order to better understand the recovery process for these women, she used a grounded theory approach (Glaser & Strauss, 1969) to guide her work (Schreiber, 1996). A sample of 21 women who had recovered from depression was interviewed for the study. Schreiber identified that women need to tell their story, and “seek understanding,” in order to proceed to the stage of “cluing in,” which is a stage of recovery. By identifying stages of recovery and formulating a theory about the process of recovery, specific nursing interventions were able to be identified. For example, implications for nursing practice include recognizing the importance of facilitating women telling their stories.

There are also researchers who use both qualitative and quantitative methods in the same study. Studies can also have both deductive and inductive elements. The development of the transitional discharge model in mental health is an example of this mixing of methods and approaches (Forchuk & Brown, 1989; Forchuk, Chan, et al., 1998; Forchuk, Jewell, Schofield, Sircelj, & Valledor, 1998; Forchuk, Martin, Chan, & Jensen, 2005).

Case Example 5-4 illustrates how researchers might use multiple approaches when addressing clinical questions. It also demonstrates that it takes more than one study to build knowledge. Work replicated in Scotland with similar positive results (Reynolds et al., 2004) lends further support to the transitional discharge model for mental health.

CASE EXAMPLE 5-4

A Transitional Discharge Model for Mental Health: An Example of Theory and Research Using Mixed Methods

As an advanced practice nurse in a tertiary care mental health setting, Forchuk noted that more clients left the unit because of death than by discharge. Those who had been discharged were often readmitted within a month of leaving the hospital. Her challenge was to find a way to help discharged clients return to the community and successfully remain there. She worked systematically with staff, clients, family members, and former clients in the community to discover what interventions might be helpful. From these efforts, it became clear that patients were discharged to an environment where all of their relationships were within a community in which they felt alone and isolated. This conclusion was reached inductively.

Because no nursing theory could be found to effectively explain the observations, Forchuk began developing a model to explain successful discharge of mental health clients. The model combined continuing staff support from professionals who had established therapeutic relationships with the clients with peer support from former users of mental health services who had successfully transitioned to the community. Professionals continued interactions with clients until the clients established a working relationship with the community. The model was piloted and the results were impressive (Forchuk & Brown, 1989). All nine clients discharged during the study year were successful in their return to the community, reducing the cost of their care (Forchuk, Chan, et al., 1998; Forchuk, Jewell, et al., 1998; Schofield et al., 1997). Both quantitative and qualitative measures were used to collect data. As a result of the pilot, funding for a large clinical trial to test the model in an experimental study was obtained (Forchuk et al., 2005).

Theory in Practice

The American Nurses Association (ANA) has defined the practice of nursing as the “protection, promotion, and optimization of health and abilities, prevention of illness, injury, alleviation of suffering through the diagnosis and



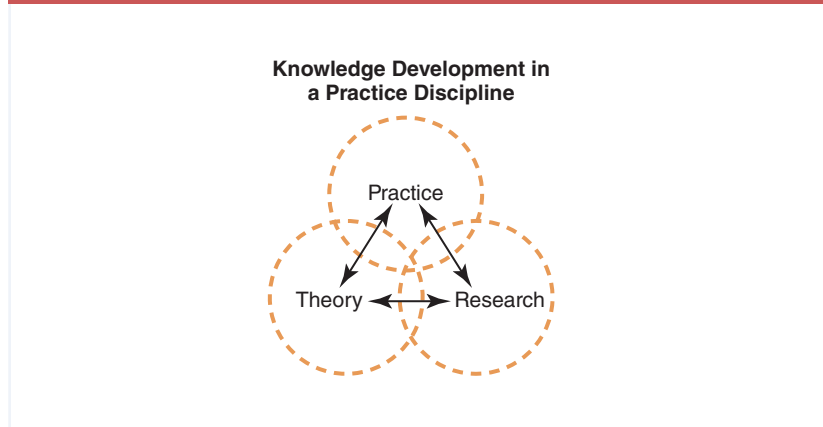
CRITICAL THINKING EXERCISE 5-2

A nurse on a surgical floor observes that several new approaches are being used to dress wounds. She observes that some methods appear to promote healing faster than others do. While reviewing the research literature, she is unable to locate any research about the dressings she is using. How might she go about testing her theory that some methods are better than others? Can this be done deductively, inductively, or using mixed methods? Are any theories presently available related to wound healing, and if so, where might she locate these? What concepts might be important in forming the question?

treatment of human response, and advocacy in the care of individuals, families, communities, and populations” (ANA, 2003, p. 6). From the early days of the profession, students have been taught that a scientific attitude and method of work combined with “experience, trained senses, a mind trained to think, and the necessary characteristics of patience, accuracy, open-mindedness, truthfulness, persistence, and industry” (Harmer, 1933, p. 47) are essential components of good practice. Harmer goes on to say, “Each time this habit of looking, listening, feeling, or thinking is repeated it is strengthened until the habit of observation is firmly established” (p. 47). This still holds true today. Benner (1984) studied nurses in practice and concluded that to become an expert nurse one has to practice nursing a minimum of 5 years. There are no shortcuts to becoming an expert in one’s field. The development of knowledge and skill takes time and work. As nurses encounter new situations, learning takes place. Nursing knowledge develops and is refined as nurses practice (Waterman, Webb, & Williams, 1995). In this way, nurses adapt theories to fit their practices. Unfortunately, much that is learned about theory during practice remains with the nurse because nurses rarely share their practice expertise through conference presentations and publications. The discipline will be enriched when nurses engage more formally in disseminating their knowledge about theory in practice.

The Relationships Among Theory, Research, and Practice

Practice relies on research and theory and also provides the questions that require more work by theorists and researchers. Each informs and supports the other in the application and development of nursing knowledge. When the relationships among theory, research, and practice are in harmony, the discipline is best served, ultimately resulting in better patient outcomes (Maas, 2006). The relationships are dynamic and flow in all directions.

FIGURE 5-1 The Relationships of Theory, Research, and Practice

Practice informs and is informed by theory development as well as research. Research and theory development inform and are informed by each other (see **Figure 5-1**). Inclusion of practitioner perspectives, experiences, and insights in education helps students to understand how theory and research are applied to practice and informed by it (Chan, Chan, & Liu, 2012).

The literature continues to reflect that in the nursing profession there is tension about the relationships among theory, research, and practice (McCrae, 2012). Too often theorists, researchers, and nurses work in isolation from each other. Some see research as serving to develop theory that should then drive practice (Mitchell, 1997), while others see theory as driving research that should then drive practice (Billings & Kowalski, 2006). Still others see practice as informing and being informed by research and theory (Schmelzer, 2006). As Butcher (2006) pointed out, practicing nurses focus on unique individuals, researchers focus on systematically collecting knowledge about samples and populations, and theorists focus on abstract and general concepts and their interrelationships. Understanding the different perspectives of each of these groups in knowledge building shows their activities to be complementary.

At a micro level, each nurse engages in research and theory development. For example, each patient encounter can be considered a study with one subject. Assessment can serve as data collection involving both quantitative and qualitative data, and the plan of care emerges from the analysis. The result is a theory of what will work for this person. The theory is tested as care is delivered, and if positive outcomes are achieved, the theory is validated.



CRITICAL THINKING EXERCISE 5-3

Reflect on your most recent patient encounter. When you assessed your patient, what theoretical assumptions guided your data collection? Were there questions you had about nursing needs or health circumstance that puzzled you? How did you go about addressing these questions? How might you go about that in the future? Who might you involve in addressing questions? What did you do that worked when providing care for this patient? Would you use the approach with another patient? Why or why not?

If outcomes are not positive, the theory is refuted and a new theory is created, resulting in a revised plan of care. Learning from each patient encounter is applied to new encounters. Case by case, the nurse learns about both the unique and universal characteristics of individuals.

Researchers engage in a similar process, but from a different perspective. Nursing researchers systematically study individuals in groups, or in samples representing larger populations, to uncover knowledge about universal characteristics of individuals as these apply to people's health. Knowledge from research assists nurses to choose interventions that have a known probability of success. Although research findings help nurses predict what will be successful for the majority of individuals, outcomes cannot be predicted for an individual. When an individual does not respond like the majority of people does, a nurse will rely more on clinical judgment and patient preferences.

Like researchers, theorists also work at a macro level building knowledge that can be universally applied. Theory provides understanding and guidance to the practice of nursing. It also provides language for describing nursing's work.

It is clear from the debate in the literature that nurses, researchers, and theorists can work more closely together and that such partnerships will be very fruitful for the development of nursing knowledge. Schmelzer (2006) encouraged nurses to collaborate with researchers to find answers for practice problems. Waterman and associates (1995) also supported closer working relationships among nurses, researchers, and theorists. It is quite reasonable for nurses to be members of formal research teams as content experts. Another way to increase collaboration is for more researchers and theorists to engage in practice.

TEST YOUR KNOWLEDGE 5-1**Fill in the blanks:**

1. A concept at the abstract level is comparable to a _____ at the operational level.
2. A _____ at the abstract level is comparable to a hypothesis at the operational level.
3. Quantitative research typically _____ theory, whereas qualitative research typically _____ theory.

True/False

4. Theory, research, and practice should be developed in isolation.
5. Nurses are encouraged to collaborate with researchers and theorists to expand nursing knowledge.
6. Concepts of the metaparadigm of nursing include nursing, health, disease, social interaction, and persons.

How did you do? 1. variable; 2. proposition; 3. tests, builds; 4. F; 5. T; 6. F

5.2 Keeping It Ethical

At the end of this section, you will be able to:

- < Discuss how honoring prior work ethically builds nursing knowledge

FYI

Credit must be given for ideas built on earlier work as well as for new ideas generated by challenging old ideas.

Students of any discipline are taught the body of knowledge that has been built over time, including the origins of the ideas that comprise that body of knowledge. As individuals contribute to the body of knowledge, credit should be given to those on whose work they are building.

Knowledge in a discipline is built in small steps that in time mark a long and fruitful journey of discovery. When reading the works of nurses, researchers, and theorists, students of the discipline should be able to trace the evolution of ideas. Credit must be given for ideas built on earlier work as well as for new ideas generated by challenging old ideas. This trail can be followed by examining references and reading the work of those who

made earlier contributions. Sadly, nurses have been poor at leaving such a trail. Few theorists cite the nurses who influenced their thinking. For example, Peplau (1952) gives credit to Adler, a psychologist, for influencing her thinking, but she makes no mention of nurses who may have influenced her despite the fact that she published for nurses practicing in mental health areas. Likewise, Rogers (1970) does not credit the sources of her nursing knowledge even though she published a model for nurses in all settings. In other cases, an author may state that an idea came from another individual but does not provide a reference, or an author may use a secondary source for a quotation when a primary source is available. Failure to honor the work of others creates problems for nurses trying to understand the evolution of nursing knowledge and practice.

Here is a very good example of how the knowledge train can get derailed. McCrae (2012) credited Virginia Henderson as publishing the first definition of nursing as “to attend to the functional needs of patients.” McCrae cited the 1955 version of the text Henderson coauthored with Bertha Harmer. However, the credit for this definition really should go to Harmer. Harmer had first published this definition as a sole author in 1925 and had clearly linked her work to Nightingale’s work.

Nursing is rooted in the needs of humanity and is founded on the ideal of service. Its object is not only to cure the sick and heal the wounded but to bring health and ease, rest and comfort to mind and body, to shelter, nourish, and protect and to minister to all those who are helpless or handicapped, young, aged or immature. Its object is to prevent disease and to preserve health. (Harmer, 1925, p. 3)

Not until 1942 when Harmer brought in Henderson to take over her work was Henderson associated with this definition (Harmer & Henderson, 1942). A much later edition by these two authors from 1955 is where McCrae in 2012 obtained her citation. This example shows the importance of following the knowledge trail with curiosity and diligence in order to truly understand the foundations of current nursing knowledge. Honoring the work of earlier nurses honors the profession itself, and all who are part of it.

When studying the writings of nurses who are contributors to disciplinary knowledge, it is important to look for the foundation of their ideas. Where information about these ideas is lacking, nurses should critically appraise claims that the work is a legitimate part of the disciplinary knowledge of nursing. To write as a contributor to the disciplinary body of knowledge without giving proper credit to those who provided the basis for the ideas is not just poor or dishonest practice but is unethical and, in fact, plagiarism.

FYI

To write as a contributor to the disciplinary body of knowledge without giving credit to those who provided the basis for the ideas is not just poor practice but is unethical and, in fact, plagiarism.

TEST YOUR KNOWLEDGE 5-2**True/False**

1. In the discipline of nursing, it is easy to follow how knowledge has developed because theorists have carefully provided citations for their ideas.
2. Giving credit to those who provide the basis for ideas is ethical practice.

How did you do? 1. F; 2. T

RAPID REVIEW //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////

- » Theories are sets of concepts linked by propositions that explain phenomena. They provide a belief system to guide practice.
- » Concepts are words or phrases conveying unique ideas or mental images. They are the building blocks of theories.
- » The metaparadigm of nursing has four concepts: person, health, environment, and nursing.
- » Propositions are statements describing relationships between two or more concepts.
- » Constructs are properties that are inferred because they cannot be directly observed.
- » Variables describe how concepts will be measured at the empirical level, and hypotheses are propositions that can be tested empirically.
- » Concepts, propositions, variables, and hypotheses form theoretical frameworks that provide structure for research studies. Models are pictorial representations of theoretical frameworks.
- » Conceptual definitions are like definitions found in dictionaries and are abstract in nature. Operational definitions specify how variables will be measured. Empirical indicators are the instruments used to measure variables.
- » Deductive quantitative research is typically used to test theory, whereas inductive qualitative research can be used to build theory. Mixed methods can also contribute to the development of theory.

- » In practice, nursing knowledge is developed and refined through patient encounters.
- » The relationships of theory, research, and practice are dynamic and complementary.
- » In practice, nurses learn about unique and universal characteristics of individuals. Researchers use systematic study to discover knowledge about universal characteristics of people. Theorists build knowledge that can be universally applied.
- » The ethical practice of honoring the work of others creates a trail whereby nurses can follow the building of nursing knowledge.



APPLY WHAT YOU HAVE LEARNED

An evidence-based practice committee member tells you she has found an article (Rich, 2005) that uses a theoretical framework. She is excited about this and would like the committee to consider how this model might be useful to its work. As the chairperson, you are responsible for facilitating discussion. To prepare, you read the article and consider how this model could be used as a framework for designing interventions that reduce medication errors. Be sure to enter information about this article into the first and second columns of your grid within this text's digital resources.

REFERENCES

- American Nurses Association. (2003). *Nursing's social policy statement* (2nd ed.). Washington, DC: Author.
- Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Menlo Park, CA: Addison-Wesley.
- Billings, D. M., & Kowalski, K. (2006). Bridging the theory–practice gap with evidence-based practice. *Journal of Continuing Education in Nursing*, 37, 248–249.
- Butcher, H. (2006). Integrating nursing theory, nursing research, and nursing practice. In P. S. Cowen & S. Moorhead (Eds.), *Current issues in nursing* (pp. 112–122). St. Louis, MO: Mosby.
- Chan, E. A., Chan, K., & Liu, Y. W. J. (2012). A triadic interplay between academics, practitioners and students in the nursing theory and practice dialectic. *Journal of Advanced Nursing*, 68(5), 1038–1049.

- Daunton, C., Kothari, S., Smith, L., & Steele, D. (2012). A history of materials and practices for wound management. *Wound Practice and Research, 20*(4), 174–186.
- Fawcett, J. (1984). The metaparadigm of nursing: Current status and future refinements. *Image: Journal of Nursing Scholarship, 16*, 84–87.
- Fawcett, J., & Downs, F. S. (1992). *The relationship of theory and research* (2nd ed.). Philadelphia, PA: Davis.
- Forchuk, C., & Brown, B. (1989). Establishing a nurse–client relationship. *Journal of Psychosocial Nursing, 27*(2), 30–34.
- Forchuk, C., Chan, L., Schofield, R., Sircelj, M., Woodcox, V., Jewell, J., ... Overby, B. (1998). Bridging the discharge process. *Canadian Nurse, 94*(3), 22–26.
- Forchuk, C., Jewell, J., Schofield, R., Sircelj, M., & Valledor, T. (1998). From hospital to community: Bridging therapeutic relationships. *Journal of Psychiatric and Mental Health Nursing, 5*, 197–202.
- Forchuk, C., Martin, M. L., Chan, Y. L., & Jensen, E. (2005). Therapeutic relationships: From psychiatric hospital to community. *Journal of Psychiatric and Mental Health Nursing, 12*, 556–564.
- Glaser, B., & Strauss, A. (1969). *The discovery of grounded theory*. Chicago, IL: Aldine.
- Goodnow, M. (1919). *First-year nursing* (2nd ed.). Philadelphia, PA: Saunders.
- Graham, I. W. (2003). The relationship of nursing theory to practice and research within the British context: Identifying a way forward. *Nursing Science Quarterly, 16*, 346–350.
- Harmer, B. (1925). *Text-book of the principles and practice of nursing*. New York, NY: Macmillan.
- Harmer, B. (1933). *Textbook of the principles and practice of nursing* (2nd ed.). New York, NY: Macmillan.
- Harmer, B., & Henderson, V. (1942). *Textbook of the principles and practice of nursing* (4th ed.). New York, NY: Macmillan.
- Johnson, M. (1983). Some aspects of the relation between theory and research in nursing. *Journal of Advanced Nursing, 8*(1), 21–28.
- Kohr, R. (2001). Moist healing versus wet-to-dry [Standard protocol for chronic wounds]. *Canadian Nurse, 97*(1), 17–19.
- Maas, M. L. (2006). What is nursing, and why do we ask? In P. S. Cowen & S. Moorhead (Eds.), *Current issues in nursing* (pp. 5–10). St. Louis, MO: Mosby.
- McCrae, N. (2012). Whither nursing models? The value of nursing theory in the context of evidence-based practice and multidisciplinary health care. *Journal of Advanced Nursing, 68*(1), 222–229.
- Mitchell, G. J. (1997). Questioning evidence-based practice for nursing. *Nursing Science Quarterly, 10*, 154–155.

- Nightingale, F. (1969). *Notes on nursing: What it is, and what it is not*. New York, NY: Dover. (Original work published 1859)
- Parse, R. R. (2006). Research findings evince benefits of nursing theory-guided practice. *Nursing Science Quarterly*, 19, 87.
- Peplau, H. E. (1952). *Interpersonal relations in nursing: A conceptual frame of reference for psychodynamic nursing*. New York, NY: Putnam.
- Reynolds, W., Lauder, W., Sharkey, S., MacIver, S., Veitch, T., & Cameron, D. (2004). The effect of transitional discharge model for psychiatric patients. *Journal of Psychiatric and Mental Health Nursing*, 11, 82–88.
- Rich, V. L. (2005). How we think about medication errors: A model and a charge for nurses. *American Journal of Nursing*, 105(3 Suppl.), 10–11.
- Rogers, M. E. (1970). *An introduction to the theoretical basis of nursing*. Philadelphia, PA: Davis.
- Schmelzer, M. (2006). Personal reflections about the theory–research–practice connection. *Gastroenterology Nursing*, 29, 489–491.
- Schofield, R., Valledor, T., Sircelj, M., Forchuk, C., Jewell, J., & Woodcox, V. (1997). Evaluation of bridging institution and housing—a joint consumer care provider initiative. *Journal of Psychosocial Nursing*, 35, 9–14.
- Schreiber, R. (1996). Understanding and helping depressed women. *Archives of Psychiatric Nursing*, 10, 165–175.
- Strachey, L. (1918). *Eminent Victorians*. New York, NY: Garden City.
- Waterman, H., Webb, C., & Williams, A. (1995). Parallels and contradictions in the theory and practice of action research and nursing. *Journal of Advanced Nursing*, 22, 779–784.

