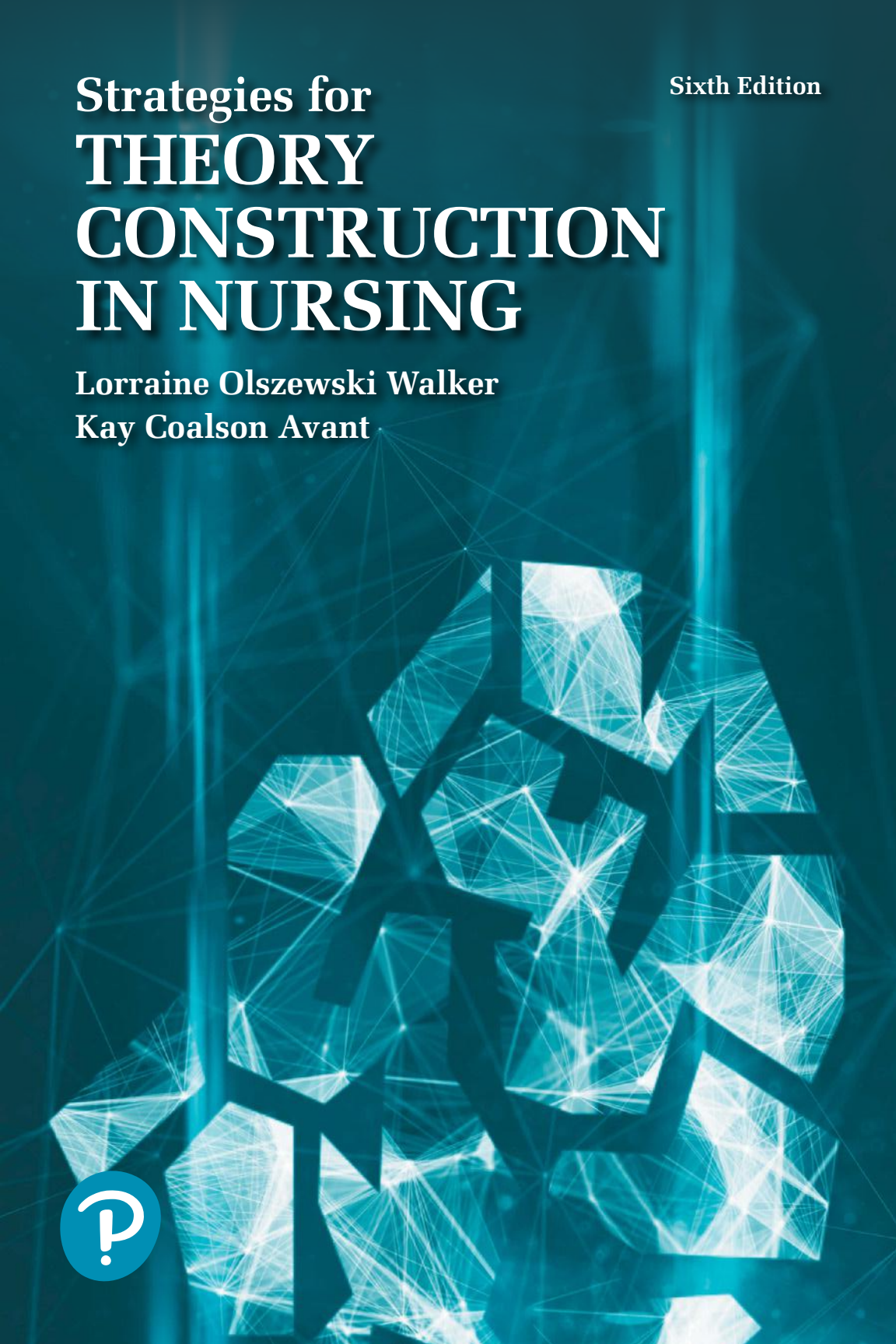
Sixth Edition

Strategies for THEORY CONSTRUCTION IN NURSING

Lorraine Olszewski Walker
Kay Coalson Avant



BRIEF CONTENTS

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CONTENTS

PREFACE

The aim of this book remains the same as at its inception: to provide readers with a resource on theory development written from a nursing point of view. In particular, we have tried to consider the needs of the students beginning their study of theory development. Stepping into the complex philosophical and metatheoretical works on this topic can be confusing to those who have had no prior exposure to the subject matter. In addition, those works have become vastly more complex and numerous since the first edition of this book. Interest in theory development for nursing also now reaches around the globe. There is also an impatience among nurses to see the relevance of theory to practice. Students in nursing programs are also increasingly diverse in their educational backgrounds, and programs mirror that diversity by designing new educational pathways into nursing and advanced study in nursing.

In recognition of these many changing factors, we have updated chapter materials so that readers may see advances in both the context of theory development in Chapters 1, 2, and 13 and the strategies for concept, statement, and theory development (Chapters 3 to 12).

Chapter 1 provides a historical context to theory development in nursing, as well as new trends affecting theory in nursing, and global perspectives on nursing theory development and material on population- and domain-focused theories. A brief glossary and several reflective activities are provided in this chapter as well. Chapter 2 considers nursing knowledge and theory in its dynamic relationship to practice. After illustrating how theory of a phenomenon may guide nursing assessment and intervention, we cover a range of topics related to knowledge development in nursing, including evidence-based practice, practice-based evidence, and informatics and its linkages to practice and nursing theory. After considering the strategies for concept, statement, and theory development that follow, Chapter 13 covers validation and testing of concepts, statements, and theories. A new section on the central concerns in nursing knowledge has been added to this chapter as nursing advances in its 7th decade of modern knowledge development—launched in *Nursing Research* in 1952.

As in past editions, Chapter 3 provides the framework for selection of theory construction strategies. Following this, Part 2 covers the derivation strategies related to concepts, statements, and theories in Chapters 4, 5, and 6, respectively. Similarly, Part 3 presents the synthesis strategies and Part 4 presents the analysis strategies related to concepts, statements, and theories. Although some readers will still wish to focus on an isolated strategy, such as concept analysis, in general it is our view that use of a given strategy is strengthened by familiarity with its application from concept to statement to theory. We have provided updated listings and examples of use of the various strategies where these are available. Still, lesser-used strategies require use of classic examples.

NEW TO THIS EDITION

- Questions to Consider appear at the chapter opening to help link the chapter content to students' needs and interests.

- A new framework for differentiating theory derivation, theory adaptation, and theory substruction aids students in learning about new theoretical developments for each strategy.
- New discussion in Chapter 3 on the role of concepts in the advancement of nursing as a practice discipline expands the students' understanding of concept development in nursing, especially in the face of confusion about this topic in the literature stemming from philosophers of (basic) science.
- New examples of theoretical works related to derivation, synthesis, and analysis strategies aid students in learning about new theoretical developments for each strategy.

We collectively thank colleagues, former students, and our families who have contributed in numerous ways to this and to prior editions. Of course, Maggie Hank and Charles Bollinger, senior nursing editor for Appleton-Century-Crofts, made all this possible. As always and wherever you are, thanks, Charlie. We miss you.

Finally, for this edition we give special thanks to Pearson Education staff who made this edition possible: Barbara Price, Ashley Dodge, Pamela Fuller, and Zoya Zaman for supporting this sixth edition. We are also especially grateful to U.S. and international external reviewers who took the time to give advice and challenge us to make this edition even better than our vision for it.

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PART

1

Overview of Theory and Theory Development

In Part 1, the three chapters contain a background to the history, issues, and language of theory development in nursing; its links to practice; and an overview of strategies for theory development. Using a historical lens, Chapter 1 provides an overview of major aspects of the field of nursing theory. Four levels of nursing theory development (metatheory, grand theory, middle-range theory, and practice theory) are proposed. Theoretical contributions and issues at each level are summarized. Population- and domain-focused theories and models are examined. Global efforts related to theory development in nursing are briefly reviewed. Additional reviews and summaries of substantive theories (or conceptual models) that have been important landmarks in nursing thought may be found in Fawcett (1993, 1995), Fawcett and DeSanto-Madeya (2013), Riehl and Roy (1980), and Fitzpatrick and Whall (2005) among others.

The focus of Chapter 2 is the use of knowledge and theory in nursing to inform nursing practice. We begin this chapter by showing in a simplified form how theory of a phenomenon may be used at various points to guide nursing assessment and nursing intervention. From this, we build to a fuller view of knowledge development in nursing as a tool in evidence-based practice and practice-based evidence. Advances in informatics as they relate to nursing practice are introduced. Finally, nursing practice research and theory development are considered.

In Chapter 3, the basic vocabulary used in this book is presented and defined. The elements of theorizing (concepts, statements, and theories) are examined in terms of their definitions and relationships to each other and ultimately nursing science. The basic approaches to theory construction (derivation, synthesis, and analysis) are also introduced in Chapter 3. In combining the three approaches of theorizing with the three elements, nine distinct strategies for theory development result: concept derivation, statement derivation, theory derivation, concept synthesis, statement synthesis, theory synthesis, concept analysis, statement analysis, and theory analysis. These form the substance of Parts 2, 3, and 4 of this book.

By carefully reading Chapter 3, readers should be able to make a preliminary decision about the strategy or strategies of theory development that are most relevant to their needs and interests. Although readers may be interested in only a specific development strategy, they are strongly encouraged to read the related strategies chapters. For example, a fuller understanding of theory analysis is achieved by carefully reading the chapter on statement analysis. Depending on their purposes, others may wish to read all the chapters on a given element, such as all the chapters on concept strategies. Last, some readers may simply prefer to read the parts that provide the larger context for theory development, such as Parts 1 and 5.

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1

Theory in Nursing: Where Have We Been? Where Are We Going?

Questions to consider before you get started reading this chapter:

- Have you struggled to express what is the essence of nursing's contribution to health care in an interdisciplinary context?
- Have you wondered why theory has been emphasized so much in nursing?
- Have you wondered whether theory has helped or hindered the development of the nursing profession and nursing education?
- Have you wondered how nursing theory enhances practice and research?

Introductory Note: These questions have been turned over in the minds of many graduate nursing students. For some, the question forms a challenge for more than superfluous jargon that will be used rarely outside the classroom. For others, the question is a thoughtful query about new and richer ways of viewing clinical experiences that are deeply familiar. For still others, the question conveys an undertone of anxiety about subject matter that looms as daunting and out of reach. In truth, most queries about why the need to study theory development in nursing are an amalgam of all three vantages. We attempt in this background chapter to briefly sketch the evolution of nursing theory development. We hope that by reading this chapter and the one that follows (Chapter 2, "Using Knowledge Development and Theory to Inform Practice") readers will be able to formulate their own thoughts and conclusions about the "why" of studying nursing theory.

THEORY DEVELOPMENT IN NURSING: A BEGINNER'S GUIDE

Nursing is a practice discipline. Nurses engage in providing complex health care to people at every level of health and illness, at every life stage, and in diverse settings. From acute care hospital units, to public health clinics, to classrooms in schools of

nursing, to nursing research laboratories, nurses deal with knowledge to improve the health and well-being of individuals, families, and communities. How does theory development relate to the complex dimensions of nursing as a practice discipline? Does theory shape practice, or is practice the shaper of nursing theory? Is there such a thing as unique nursing theory? How should nursing theory influence the research process? Are there different kinds of theory? Such questions continue to be asked in nursing.

A simple view of theory development is that it provides a way to identify and express key ideas about the essence of practice. Through theory development that essence may be explored. That exploration may be focused on specific practice settings or populations. For example, the essence of practice may be studied by focusing on specific events that occur in specific contexts: body image perceptions of adolescents with eating disorders, treating persons in rural settings who struggle with drug addiction, health promotion behaviors of persons living with HIV, or services for low-income older adults struggling with maintaining cognitive function. Conversely, descriptions may focus on big picture explanations of person, health, environment, and nursing—the "metaparadigm concepts" that some have argued anchor nursing as a practice discipline (Fawcett, 1984, 1996; Fawcett & DeSanto-Madeya, 2013). Such abstract theory development may address the overall person–environment relationship as it relates to nursing and health. Regardless of how delimited or broad in scope, theory development is aimed at helping the nurse to understand practice in a more complete and insightful way. If it does not, the theory may be poorly articulated, wrong, or have limited relevance to nursing. Subsequent chapters in this book provide detailed guidance on the "how" of theory development, but beginning students should not lose sight of the "why."

Appreciating theory, however, may require some reflection on the part of nurses who have worked in busy practice environments. Often the daily demands of practice preclude asking questions about whether the current way is still the best way. However, the health care space is changing. This has resulted in the need for new and increased nursing knowledge (evidence) to lead in that space. Leadership requires knowledge for practice that is grounded in advances made through research and theory development. Dynamic trends, however, may sway how such knowledge and theory is developed. Examples of trends challenging the boundaries and methods of nursing knowledge development include (Henly et al., 2015; Wyman & Henly, 2015):

- emergence of big data,
- genomics/proteomics,
- new methodologies for developing patient-oriented outcomes,
- advances in quantitative methods,
- translational and team research,
- informatics, and
- health economics.

These emphases encourage nurses' questions about what they are about and invite innovation in the way that research, practice, and theory are viewed in nursing.

At the same time, we are reminded that core disciplinary knowledge of nursing is a critically needed component of the education and practice of nurses (Grace, Willis,

Roy, & Jones, 2016; Thorne, 2014; Villarruel & Fairman, 2015). Questions about the substance and definition of core nursing knowledge underscore the "why" that motivates theory and knowledge development. Without this core, nursing's unique and important contribution to health care of individuals, families, and communities is put at risk. We revisit this concern at the end of Chapter 13.

A HISTORICAL GLIMPSE AT THEORY IN NURSING AS A PROFESSION

From Task-Oriented Occupation to Profession

First, during the mid-twentieth century and the years that followed, nursing leaders in the United States saw theory development as a means of firmly establishing nursing as a profession, and not just a task-oriented occupation with little autonomy. Thus, theory development was inherent in the long-standing interest in defining nursing's body of knowledge. In a landmark paper early in that century, Flexner defined the characteristics of a profession. Included among Flexner's characteristics were the ideas that professions involve "intellectual operations" and "derive their raw material from science and learning" (quoted in Roberts, 1961, p. 101). Subsequent evaluations of nursing as a profession (Bixler & Bixler, 1945, 1959) specifically examined the extent to which nursing utilized and enlarged a "body of knowledge" for its practice. Indeed, Bixler and Bixler (1945, p. 730) used the term "nursing science" for this knowledge.

Interest in the body of knowledge stemmed in part from the credibility that such a body of knowledge gave to nursing as an aspiring profession. As Donaldson and Crowley forcefully stated, "the very survival of the profession may be at risk unless the discipline is defined" (1978, p. 114). However, Dickson (1993) argued subsequently that "following the male professional model" also had unintended consequences for nurses. Among these was "reluctance in the workplace to assert and trust nurses' feminine values and views of caring" (p. 80). Nonetheless, developing nursing's distinct knowledge base through theory development, research, and reflective practice was foundational to move nursing from an occupation subservient to medicine to present-day partnership among the health professions.

Second, interest in theory development was motivated by the direction and guidance that theory gave to practice. Simply stated, theory may help nurses grow and enrich their understanding of what practice is and what it can be. This intrinsic value of theory development was reflected in Bixler and Bixler's (1945) first criterion for a profession:

> A profession utilizes in its practice a well-defined and well-organized body of specialized knowledge which is on the intellectual level of . . . higher learning. (p. 730)

As the integration of professional knowledge, theory provides a more complete picture for practice than factual knowledge alone. Thus, a commitment to practice based on sound, reliable knowledge is intrinsic to the idea of a profession and practice discipline.

Theories that serve as broad conceptual frameworks for practice may also articulate the goals of a profession and its core values. Such frameworks (sometimes called *grand theories*) have aided in differentiating nursing as a distinct profession with its own goals from a mere extension of the medical profession. Consequently, many of the early grand theories (see section "Grand Nursing Theories") flowed from attempts to articulate a view of what nursing could be that extended beyond tasks and procedures.

Finally, theories that are well developed not only organize existing knowledge but also aid in making new and important innovations to advance practice. For example, Lydia Hall's theoretical work led to many of the nursing practice innovations associated with the Loeb Center for Nursing in New York (Hale & George, 1980).

Progress in Delineating Nursing's Body of Knowledge

Systematic reviews of the status of theory development in nursing have demonstrated that nursing has made substantial progress in delineating its theoretical base. Fawcett (1983), for example, cited four hallmarks of success in nursing theory development: "a metaparadigm for nursing, conceptual models for nursing, unique nursing theories, and nursing theories shared with other disciplines" (pp. 3–4). In systematically reviewing nursing research articles from 1952 to 1980, Brown, Tanner, and Padrick (1984) noted a trend for authors "to lay explicit claim to a conceptual perspective" (pp. 28–29). Indeed, over half the studies they reviewed were judged to contain explicit "conceptual perspectives" (p. 28).

Similarly, in a review of nursing research from 1977 to 1986, Moody et al. (1988) found that approximately half of the articles they analyzed contained a "theoretical perspective." Of those, however, non-nursing theories predominated. Several sources also have analyzed advances in nursing theory development. In 1988, Walker and Avant proposed four conceptual foci of nursing research phenomena: (1) health behavior and health status, (2) stress and coping, (3) developmental and health-related transitions, and (4) person–environment interactions. Subsequently, Walker (1992) identified and summarized theoretical orientations guiding parent–infant nursing science. In turn, Fawcett (1993) analyzed and evaluated nursing theories that dealt with matters, such as deliberative nursing process and human caring. More recently, nursing knowledge that is theory related has been pulled together in Fawcett's comprehensive volumes (Fawcett, 2005; Fawcett & DeSanto-Madeya, 2013).

Despite the theoretical accomplishments noted above that remain important to the progress of nursing as a practice discipline, much new and continuing work needs to be done. Nurses throughout the world face many questions about nursing and its place in the twenty-first century. Health care access and financing, need for an adequate workforce of nurses, growth of informatics and technology, and changing health care priorities confront us. An example of theory developed by nurses that is responsive to the changing health care landscape is LaCoursiere's (2001) theory of online social support and Covell's (2008) theory of nursing intellectual capital.

Nurses also confront populations of increasingly diverse clients: victims of violence and terrorism, an underclass of poor families struggling to sustain themselves, and a burgeoning population of older adults, to mention only a few. These clients come from many different ethnic backgrounds, speak many different languages, and bring new and unexpected health care needs. (See section "Population- and Domain-Focused Theories and Models" later in this chapter.) As members of the largest health profession, nurses have the potential to play leading roles in health care. It is important that they also be clear about nurses' contributions to knowledge development. Thus, although much has been achieved in nursing's theoretical development, the challenge to develop relevant and useful theories to meet the knowledge needs of nurses in the twenty-first century remains with us.

In the next sections, we first trace the evolution in nursing theory development primarily in the United States, looking at levels of theory development, and then emerging population- and domain-focused theories and models. After this we consider nursing theory development from a global (previously called *international*) perspective. (Readers interested in the history of nursing knowledge development may wish to also read Gortner's [2000] article.)

EVOLUTION OF THEORY DEVELOPMENT: METATHEORY TO PRACTICE THEORY

Overview

During the latter half of the twentieth century, the desire to develop nursing's theory base launched four levels of theory development literature. Much of this early work was launched in the United States. (*Note*: Work related to theory development in nursing globally is addressed later in this chapter.) The first of these, metatheory, focused on philosophical and methodological questions related to the development of a theory base for nursing. The second, grand nursing theories, consisted of conceptual frameworks defining broad perspectives for practice and ways of looking at nursing phenomena based on these perspectives. Third, a less abstract level of theory, middle-range theory, emerged to fill the gaps between grand nursing theories and nursing practice. Fourth, a practice-oriented level of theory, practice theory, was also advocated. In this fourth level of theory, prescriptions, or, more broadly, modalities for practice, were to be delineated. We next sketch progress made on each of these four fronts. We conclude the summary of the levels of theory development in nursing by proposing a model that depicts how levels of theory development articulate with each other. A few terms that may not be intuitively understood by readers are presented in Box 1–1. Others are explained in the text as they are presented.

Metatheory

Early Debates About Theory and Science in Nursing

Metatheory focuses on broad issues related to theory in nursing and does not generally produce any grand, middle-range, or practice theories. Issues debated at the level of metatheory include but are not limited to (1) analyzing the purpose and kind of theory

BOX 1–1 A Short Glossary

Note: Many of the terms defined below are understood and interpreted quite differently by various writers. Because language evolves, meanings can rarely be legislated. The definitions presented below should be viewed only as a guide. Other authors may pose definitions that differ substantially from these. In this book, terms are generally defined or described as they arise in text.

Discipline—"A defined field of knowledge marked by a community of scholars who are experts in the subject matter and methods of a field, a body of knowledge which may include one or more paradigms guiding scholarly work, and standards which guide the conduct of scholarly inquiry in a field" (Walker, 1992, p. 5).

Paradigm—"A family of related theories which share similar concepts and structural features rooted in a relatively shared set of starting theoretical assumptions (e.g., that the conscious mind exists; that humans are in constant interaction with their environment) as well as similar criteria of evidence" (Walker, 1992, p. 5). Other meanings include a broad philosophical approach to research and science, such as feminist paradigm or postmodern paradigm (e.g., Weaver & Olson, 2006), or a conceptual model (e.g., Fawcett, 1995).

Metaparadigm—"Global concepts [and relationships among them] that identify the phenomena of interest to a discipline" (Fawcett, 1995, p. 5). In nursing, the metaparadigm may include the core concepts of person, health, environment, and nursing as well as other considerations related to the discipline (Fawcett, 1996). The metaparadigm is generally seen as transcending paradigms.

Theory—an internally consistent group of relational statements that presents a systematic view about a phenomenon and that is useful for description, explanation, prediction, and prescription or control.

Metatheory—literally, theory about theory; not a theory in itself, but concerns related to the nature and assumptions of nursing theory.

needed in nursing, (2) proposing and critiquing sources and methods of theory development in nursing, and (3) proposing the criteria most suited for evaluating theory in nursing. Threaded throughout the metatheoretical literature are examinations of the meaning of nursing as a "practice discipline," that is, nursing as both science and profession. An inspection of Table 1–1 shows that metatheory has received extensive attention in nursing. Although some metatheory is accompanied by companion efforts at the grand, middle-range, or practice levels, it has been largely a separate enterprise from these other levels of theory development. Because metatheory represents many points of view about theory in nursing, it has not been consolidated into one unanimously accepted set of beliefs.

Some of the major issues debated in early nursing metatheory were the type of theory suited to nursing, how it should be developed, and the relationship of nursing theory to basic science theories (e.g., Dickoff et al., 1968a, 1968b; Wooldridge et al., 1968). Much of the early understanding of theory development in nursing drew on views of established sciences such as sociology.

TABLE 1–1 Listing of Selected Metatheoretical Papers in Nursing

Metatheoretical Papers	Sources
Towards Development of Nursing Practice Theory	Wald and Leonard (1964)
The Process of Theory Development in Nursing	McKay (1965)
Symposium: Research—How Will Nursing Define It?	"Research—How Will Nursing Define It?" (1967)
Behavioral Science, Social Practice, and the Nursing Profession	Wooldridge, Skipper, and Leonard (1968)
Conference: The Nature of Science and Nursing	"The Nature of Science and Nursing" (1968)
Theory in a Practice Discipline	Dickoff, James, and Wiedenbach (1968a, 1968b)
Symposium: Theory Development in Nursing	"Theory Development in Nursing" (1968)
Proceedings of the First Nursing Theory Conference	Norris (1969)
Conference: The Nature of Science in Nursing	"The Nature of Science in Nursing" (1969)
Proceedings of the Second Nursing Theory Conference	Norris (1970)
Proceedings of the Third Nursing Theory Conference	Norris (1971)
Nursing as a Discipline	Walker (1971a)
Three-part series based on: Toward a Clearer Understanding of the Concept of Nursing Theory	Walker (1971b, 1972); Ellis (1971); Wooldridge (1971); Folta (1971); Dickoff and James (1971)
Symposium: Approaches to the Study of Nursing Questions and the Development of Nursing Science	"Approaches to the Study of Nursing Questions and the Development of Nursing Science" (1972)
Practice Oriented Theory	"Practice Oriented Theory" (1978)
Critique: Practice Theory	Beckstrand (1978a, 1978b)
Theory Development: What, Why, How?	National League for Nursing (1978)
Fundamental Patterns of Knowing in Nursing	Carper (1978)
The Discipline of Nursing	Donaldson and Crawley (1978)
Nursing Theory and the Ghost of the Received View	Webster, Jacox, and Baldwin (1981)
The Nature of Theoretical Thinking in Nursing	Kim (1983)
Toward a New View of Science	Tinkle and Beaton (1983)
An Analysis of Changing Trends in Philosophies of Science in Nursing Theory Development and Testing	Silva and Rothbart (1984)
In Defense of Empiricism	Norbeck (1987)
Voices and Paradigms: Perspectives on Critical and Feminist Theory in Nursing	Campbell and Bunting (1991)

TABLE 1–1 Continued

Metatheoretical Papers	Sources
The Focus of the Discipline of Nursing	Newman, Sime, and Corcoran-Perry (1991)
(Mis)conceptions and Reconceptions About Traditional Science	Schumacher and Gortner (1992)
Nursing Knowledge and Human Science: Ontological and Epistemological Considerations	Mitchell and Cody (1992)
Postmodernism and Knowledge Development in Nursing	Watson (1995)
A Treatise on Nursing Knowledge Development for the 21st Century: Beyond Postmodernism	Reed (1995)
A Case for the "Middle Ground": Exploring the Tensions of Postmodern Thought in Nursing	Stajduhar, Balneaves, and Thorne (2001)
Nursing Research and the Human Sciences	Malinski (2002)
A New Foundation for Methodological Triangulation	Risjord, Dunbar, and Moloney (2002)
Understanding Paradigms Used for Nursing Research	Weaver and Olson (2006)
What Constitutes Core Disciplinary Knowledge	Thorne (2014)
Profession at the Crossroads: A Dialog Concerning the Preparation of Nursing Scholars and Leaders	Grace, Willis, Roy, and Jones (2016)

Critique and Expansion of Views of Science and Theory

Following this early period, recognition of changes in the philosophy of science itself subsequently influenced nursing metatheory. In a critical analysis of the philosophy of science embraced by nursing, Webster et al. (1981) called for "exorcising the ghost of the Received View from nursing" (p. 26). They argued that nurses had uncritically accepted a number of doctrines about the nature of science that were prominent in the 1930s. Based on assumptions of logical positivism, the received view doctrines included beliefs such as "theories are either true or false," "science has nothing to say about values," and "there is a single scientific method" (pp. 29–30). Jacox and Webster (1986) noted the emergence of alternate philosophies of science, including historicism. They suggested that expanding the philosophical positions adopted in nursing enriched both nursing theories and research.

In a related criticism, Silva and Rothbart (1984) distinguished between two major schools of philosophy of science, logical empiricism and historicism. They asserted that these two schools differed in several fundamental ways, including the underlying conception of science. Logical empiricists, they asserted, emphasize understanding science as a product; historicists understand science from the

standpoint of process (pp. 3–5). Similarly, they proposed that logical empiricists and historicists differ in their ideas about the goals of philosophy of science and the components of science. Finally, Silva and Rothbart claimed that logical empiricists assess scientific progress in terms of acceptance or rejection of theories, whereas historicists emphasize the number of scientific problems solved. While noting a stable commitment among nurses to logical empiricism, they acknowledged an emerging diversity in conceptual frameworks and research methods congruent with historicist perspectives.

As nurses reconsidered the metatheoretical assumptions of the discipline, their interest in alternate methodologies for nursing theory and research was spawned (e.g., Chinn, 1985; Gorenberg, 1983). Research methodologists increasingly acknowledged distinct quantitative (Atwood, 1984) and qualitative (Benoliel, 1984) approaches. There are many ways to differentiate these two approaches. One of the most apparent differences is the use of statistical tests in drawing inferences within quantitative approaches and the use of text analysis to portray experiences of participants in qualitative approaches. Another way is by reference to the underlying philosophical foundations of the two approaches, such as an empiricist versus phenomenological or other philosophical stance (Monti & Tingen, 1999; Weaver & Olson, 2006). Some authors proposed integrating both methods within research studies (Goodwin & Goodwin, 1984). The philosophical ferment about the nature and method of science not only was a major focus of nursing metatheory but also enlarged the approaches advocated for nursing research.

Furthermore, challenges to traditional science by researchers espousing qualitative methods led to clarification of traditional science as understood in nursing. For example, Schumacher and Gortner (1992) corrected common misinterpretations in nursing about traditional science, such as warrants for knowledge claims and universality of laws. Readers who wish more detailed information about philosophy of science and nursing metatheory will find classic reviews in Stevenson and Woods (1986), Suppe and Jacox (1985), and Newman (1992).

Two additional philosophical perspectives introduced into debates about nursing science, theory, and ethics are critical theory and feminism (e.g., Allen, 1985; Campbell & Bunting, 1991; Holter, 1988; Liaschenko, 1993). Both approaches share a common goal of addressing power imbalances inherent in existing social structures that shape the conduct and goals of science as well as human communication.

Critical theory, as applied to nursing (Allen, 1985; Holter, 1988), builds on the philosophical writings of theorists such as Habermas (1971). According to Campbell and Bunting (1991), "In keeping with its Marxist roots, the critical theory epistemology from its inception dictated that knowledge should be used for emancipatory political aims" (p. 4). Critical theory moves beyond existing empirical and interpretive sciences. Through analysis, critical theory reveals ideological positions inherent but unrecognized in existing social structures and scientific methods. For example, qualitative research approaches that stress personal meaning have shortcomings from the perspective of critical theory. "For the critical theorist, personal meanings are shaped by societal structures and communication processes and are therefore all too often ideologic, historically bound, and distorted" (p. 5).

Similarly, *feminist* approaches aim at realigning social and scientific enterprises in ways that free women from the domination of prevailing, entrenched male structures. As a philosophical approach, feminism is focused at exposing ideology and social conventions that favor men as a group and constrain women as a group. According to Campbell and Bunting (1991), feminist approaches emphasize "unity and relatedness," "contextual orientation," "the subjective," and the "centrality of gender and idealism" (pp. 6–7). Thus, Allen (1985) points out the need to recognize that "one's [scientific] framework is not arbitrary or free of value interests" (p. 64). Finally, Im and Meleis (2001) have explicated six facets of gender-sensitive theories, such as voice and perspective.

Indeed, feminism is part of a broader *postmodern* philosophical movement challenging modern philosophy and science, including the modern metatheory of nursing. Postmodernism is defined more by rejecting tenets of modern philosophy than by "any agreement on substantive doctrines or philosophical questions" (Audi, 1995). Because postmodernism undercuts most knowledge derived from traditional scientific methods and rejects "grand narratives," some nursing scholars have called for cautious and thoughtful application of postmodern positions in nursing (Reed, 1995; Stajduhar et al., 2001). For a historical review of postmodernism and the issues and opportunities it poses for education, practice, and research, see Whall and Hicks (2002) and Kermode and Brown (1996).

Efforts to Find a Middle Way

Still, a number of factors continue to drive efforts to find new ways to bridge perceived methodological and philosophical barriers to integrative approaches to nursing science and theory:

- the growing complexity and discontinuity of health care,
- concerns about continuing health disparities,
- a funding emphasis on biobehavioral research, and
- inputs from many health-related disciplines into the body of health research.

Examples of such efforts include Risjord, Dunbar, and Moloney's idea of a "blending" metaphor for "integration of qualitative and quantitative research into a holistic, dynamic model for nursing inquiry" (2002, p. 275). Johnston (2005), another example, proposed "communicative understanding" to promote respect and receptivity in conversations between researchers using qualitative and quantitative methods. Others have turned to neopragmatism or other alternative philosophical approaches to overcome barriers to communication and knowledge integration rooted in existing methodological and philosophical stances (Isaacs, Ploeg, & Tompkins, 2009; Warms & Schroeder, 1999; Weaver & Olson, 2006). Such efforts acknowledge the pluralistic nature of nursing theory and research but recognize that the ultimate goal is to provide an integrative basis for the care that nurses provide. (For further readings in the philosophy of science, see the list of "Additional Readings" at the end of this chapter.) Box 1–2 presents an exercise on philosophical foundations of nursing knowledge development.

BOX 1–2 Philosophical Foundations/Paradigms of Nursing Knowledge Development: One or Multiple?

Many authors have struggled to resolve this question. It lies at the heart of a number of issues related to development of nursing scholarship and theory development. To guide you in forming your view on this issue, consider your area of practice or research interest.

Reflection: How would you describe it? Is it one spanning biological and psychosocial aspects of nursing? Are community factors also important? Is understanding of the patient or client as person central to this area? Read one or both of the following articles to help you form your view. (*Note*: Many authors use the term *paradigm* to refer to what we have called *philosophical foundations*.) Consider how your area of practice or research would be influenced according to whether your approach was based on only one or multiple philosophical views/paradigms.

Your View: If you think that one philosophical view (such an empiricism or post-positivism) is needed in your area, which view is it? If you think that multiple philosophical views are needed in your area, which ones are these? Write out your rationale.

Suggested readings:

Monti EJ, Tingen MS. Multiple paradigms of nursing science. *J Adv Nurs*. 1999;21(4):64–80.
Weaver K, Olson JK. Understanding paradigms used for nursing research. *J Adv Nurs*. 2006;53:459–469.

Grand Nursing Theories

Grand theories are abstract and give a broad perspective to the goals and structure of nursing practice. Not all grand theories are at the same level of abstraction or have exactly the same scope. On the whole, however, they have as their goal explicating a worldview useful in understanding key concepts and principles within a nursing perspective, yet they are not limited enough to be classified as middle-range theories. In a similar vein, Fawcett (1989) used the term "conceptual models" for those "global ideas about the individuals, groups, situations, and events of interest to a discipline" (p. 2).

Grand theories have made an important contribution in conceptually sorting out nursing from the practice of medicine by demonstrating the presence of distinct nursing perspectives. Although there may be some disagreement on what works constitute grand theories, Table 1–2 shows a representative listing of writings that figured in the historical development of nursing theory during the twentieth century. A number of these theories also have associated websites. Because websites may change, we encourage readers who may wish to locate such sites to simply type the words *nursing theory* into the search box of their Internet browser.

TABLE 1–2 Representative Grand Nursing Theories

Author(s)	Date	Publication
Peplau	1952	*Interpersonal Relations in Nursing*
Orlando	1961	*The Dynamic Nurse–Patient Relationship*
Wiedenbach	1964	*Clinical Nursing: A Helping Art*
Henderson	1966	*The Nature of Nursing*
Levine	1967	*The Four Conservation Principles of Nursing*
Ujhely	1968	*Determinants of the Nurse–Patient Relationship*
Rogers	1970	*An Introduction to the Theoretical Basis of Nursing*
King	1971	*Toward a Theory of Nursing*
Orem	1971	*Nursing: Concepts of Practice*
Travelbee	1971	*Interpersonal Aspects of Nursing*
Neuman	1974	The Betty Neuman Health-Care Systems Model
Roy	1976	*Introduction to Nursing: An Adaptation Model*
Newman	1979	Toward a Theory of Health
Johnson	1980	The Behavioral System Model for Nursing
Parse	1981	*Man-Living-Health*
Erickson, Tomlin, and Swain	1983	*Modeling and Role Modeling*
Leininger	1985	Transcultural Care Diversity and Universality
Watson	1985	*Nursing: Human Science and Human Care*
Roper, Logan, and Tierney	1985	*The Elements of Nursing*
Newman	1986	*Health as Expanding Consciousness*
Boykin and Schoenhofer	1993	*Nursing as Caring*

Most grand theories were developed from the early 1960s through the 1980s. Peplau's (1952) exposition of nursing and its educative function with patients was an early example of grand nursing theory. Grand theories in the 1960s, such as Orlando's *The Dynamic Nurse–Patient Relationship* (1961) and Wiedenbach's *Clinical Nursing: A Helping Art* (1964), focused on defining concepts centered in the nurse–patient relationship. For example, Wiedenbach emphasized the patient's "need-for-help" as distinct from nurse-defined patient needs. Orlando differentiated deliberative and automatic nursing actions. These two theorists' work helped nurses clarify and respond to patients' needs and behaviors with the benefit of a theoretical perspective.

Subsequent grand theories shifted from a focus on the nurse–patient relationship to more expansive concepts. For example, Rogers (1970) stressed a holistic perspective on the life process of man. A multilevel systems model developed by King (1971) included the major concepts of perception, interpersonal relations, social systems, and health. Johnson (1980) constructed a model of the client as a behavioral system composed of seven subsystems. Johnson's thinking was further reflected in Auger's (1976) behavioral systems model, which includes eight subsystems: the affiliative, dependency, ingestive, achievement, aggressive, eliminative, sexual, and restorative.

Whereas nurses might deal with medical and physiological data in the Johnson and Auger grand theories, the approach to these is distinctively a behavioral one.

Later grand theories attempted to capture the phenomenological aspects of nursing. For example, Watson adopted a "phenomenological-existential" orientation in her theory of human care (1985, p. *x*). Others, such as Leininger's (1985) transcultural care theory, paved the way for nursing's response to more culturally diverse client groups. Development of grand theories also expanded to outside the United States, for example, the Roper–Logan–Tierney theory in the United Kingdom (Roper et al., 1985). (Readers interested in brief biographies of nurse theorists and their nursing theories, including ones developed outside the United States, may find Johnson and Webber's [2015] chapter on nursing theory and nursing theorists of interest, as well as Parker and Smith's [2010] edited volume.)

Although the grand nursing theories provide global perspectives for nursing practice, education, and research, many have limitations. By virtue of their generality and abstractness, many grand nursing theories are untestable in their present form (see Chapter 13 on theory testing). They offer general perspectives for practice or curriculum organization in nursing, but by their very nature and purpose, most would require major revision and expansion before testing would be possible. In revising and refining grand nursing theories, (1) vague terminology would need to be clarified and (2) interrelationships between concepts in the theories would need to be delineated with sufficient precision so that predictions can be made. Several theorists published revisions of their works in an effort to clarify and further elaborate them (e.g., see King, 1981; Orem, 1995; Roy & Andrews, 1991, 1999; Roy & Roberts, 1981).

Nevertheless, many grand theories pose formidable problems for those wishing to test them. These problems relate to still another problem in grand theories: absent or weak linkages between terminology in the theories and their observational indicators. This is the point on which Suppe and Jacox (1985) critique the tests of the grand theory of Rogers: Such tests are contingent on "auxiliary claims that provide most of the testable content" (p. 249). Fawcett and Downs (1986) are even more forceful as they assert, "a conceptual model [and/or grand theory] cannot be tested directly. Rather, the propositions of a conceptual model are tested indirectly through the empirical testing of theories that are derived or linked with the model. If the findings of theory-testing research support the theory, then it is likely that the conceptual model is credible" (p. 89).

Thus, it would appear that a layer of theory is needed between grand theories and their empirical dimensions. This layer is congruent with the idea of middle-range theory as proposed here. McQuiston and Campbell (1997), for example, have illustrated the process (substruction) whereby an intermediate layer of theory was applied to Orem's (1995) theory to enhance its testability. For detailed analysis and evaluation of the status (including theory testing) of grand theories such as those of Johnson, King, Levine, Neuman, Orem, Rogers, and Roy, see Fawcett (1989, 1995, 2005) and Fawcett and DeSanto-Madeya (2013). An extensive review of research guided by the Roy model may be found in the work of the Boston Based Adaptation Research in Nursing Society (1999). Reviews of research based on Orem's model may be found in Taylor, Geden, Isaramalai, and Wongvatunyu (2000) and Biggs (2008).

Although some nurses have focused their work on the problems of testing grand theories, others have directed their attention to areas of commonality among grand theories

(Flaskerud & Halloran, 1980). Fawcett concluded, "A review of the literature on theory development in nursing reveals a consensus about the central concepts of the discipline—person, environment, health, and nursing" (1984, p. 84). As the broadest area of consensus within the nursing discipline, these concepts constitute its metaparadigm (Fawcett, 1989). In a related vein, Meleis (1985) identified the following as "domain concepts": nursing client, transitions, interaction, nursing process, environment, nursing therapeutics, and health (p. 184). Fuller elaboration of some of the metaparadigm concepts was provided by Smith's (1981) analysis of health's four models and Kleffel's (1991) exploration of the environmental domain. Others, such as Newman et al. (1991), however, have put forth alternative versions of the nursing defining foci, with the concepts of health and caring. Reed (2000), however, critiqued "caring" as overly focused on nurses' practice and proposed "embodiment" as "a core concept in understanding" patients' experiences of health and illness (p. 131). New and revised proposals for the core concepts defining nursing include concepts such as "humanization" and "choice" (Willis, Grace, & Roy, 2008) and "mutual process" and "consciousness" (Newman, Smith, Pharris, & Jones, 2008).

Finally, a series of changes in the late twentieth century conspired to put grand theories somewhat out of vogue. Perhaps because of difficulties in theory testing (see above), several authors have suggested that a gradual, and perhaps undeserved, devaluation of grand theories occurred in nursing (Barnett, 2002; DeKeyser & Medoff-Cooper, 2001; Silva, 1999; Tierney, 1998). On another front, the liberalization of nursing program accreditation criteria pertaining to conceptual frameworks may have contributed to de-emphasizing the role of grand theories in nursing education. Finally, growth of postmodern thinking in certain quarters of nursing has led to the discounting of grand theory as a suitable level of discourse for nursing. Nevertheless, some nurses have argued that grand theories, despite their limitations, continue to have merit in the development of the nursing discipline (Barnett, 2002; Reed, 1995; Silva, 1999), and arguments continue in favor of or in opposition to the role of nursing grand theories in nursing scholarly development (Parse, 2008). (See Box 1–3 for a reflection on the disparagement of nurse theorists.)

BOX 1–3 The Disparagement of Twentieth-Century Nurse Theorists

In stopping to chat several years ago with a historically important nursing theorist at a meeting I (LOW) was attending, she conveyed the following to me, "Nursing theory has become a dirty word. I'm often confronted by nurses who say to me: 'Oh, you're the one!'" She continued her account of personal verbal abuses she had experienced from nurses because of her theoretical work.

> **Reflection:** Why is this happening? Is there something amiss about the way nurse theorists' work is being used in nursing education? Are nurses sensitive to the difference between challenging a set of ideas versus the writer of the ideas? What are the past and present contributions and limitations of nurse theorists' works to the development of the nursing discipline?
>
> **Reading and Discussion:** Read the following article and then consider the scenario and reflection above:

Nelson S, Gordon S. The rhetoric of rupture: Nursing as a practice with a history? *Nurs Outlook*. 2004:52;255–261.

Middle-Range Theories

In view of difficulties inherent in testing grand theories, a more workable level of theory development was proposed (Jacox, 1974; See, 1981; Liehr & Smith, 1999) and utilized in nursing: middle-range theories. Theories of this level contain a limited number of concepts and are limited in scope as well. Because of these characteristics, middle-range theories are testable, yet sufficiently general to still be scientifically interesting. Thus, middle-range theories not only share some of the conceptual economy of grand theories but also provide the specificity needed for usefulness in research and practice. Consequently, middle-range theories have gained increasing appeal in nursing (Lenz, 1998; Peterson & Bredow, 2017; Smith & Liehr, 2014). Although middle-range theories from other disciplines are used in nursing science and research (Fawcett, 1999, 2006; Lenz, 1998), nursing-based middle-range theories are increasingly evident.

An early example of middle-range theory developed in nursing is Mishel's (1988) uncertainty theory developed to explain "how patients cognitively process illness-related stimuli and construct meaning in these events" (p. 225). Uncertainty influences patients' appraisal, coping, and adaptation. Uncertainty itself is influenced by stimuli frame and structure providers. Under certain conditions of continual uncertainty, Mishel (1990) proposes that factors such as social resources aid people to view uncertainty as a "natural" condition. In such a view, "instability and fluctuation are natural and increase the person's range of possibilities" (p. 261).

Two examples of more recently developed middle-range theories in nursing include Covell's (2008) organizational model of nursing intellectual capital (NIC) and Butterfield, Postma, and ERRNIE research team's (2009) TERRA (translational environmental research in rural areas) framework. In Covell's (2008) model of nursing intellectual capital, nursing human capital and nursing structural capital are two interrelated concepts that are at the core of the theory. Nursing human capital is defined as "the knowledge, skills and experience of nurses," whereas nursing structural capital is defined as "nursing knowledge converted into information that exists within practice guidelines" (Covell, 2008, p. 97). Nursing human capital is influenced by nurse staffing and employer support of nurse development. In turn, nursing human capital influences both patient outcomes and organizational outcomes; nursing structural capital also contributes to patient outcomes. In contrast, Butterfield et al. (2009) focused their TERRA framework on environmental health, which is rooted in concerns about environmental and social justice. This framework places environmental risk reduction interventions within the larger context of environmental health inequities, which in turn are influenced by macrodeterminants. For other examples of middle-range theories developed in nursing, see Table 1–3. (*Note*: Readers who are interested in reading further about middle-range theories are referred to "Additional Readings" at the end of the chapter, including the works of Peterson and Bredow [2017] and Smith and Liehr [2014].)

In addition to middle-range theories, two related yet narrower scope theories are microtheory (Higgins & Moore, 2000) and situation-specific theory (Im, 2005; Im & Meleis, 1999a). These were introduced into nursing to bring theoretical understanding of delimited clinical situations. Davis and Simms (1992), for example, proposed that microtheory was suitable for procedures involving intravenous therapy and injection administration. Im and Meleis (1999a) illustrated the use of situation-specific theory

TABLE 1–3 Examples of Middle-Range Theories Developed In Nursing

Theory	Source
Interaction model of client health behavior	Cox (1982)
Theory of smoking relapse	Wewers and Lenz (1987)
Uncertainty theory	Mishel (1988, 1990)
Theory of caring	Swanson (1991)
Theory of mastery	Younger (1991)
Symptom management model	University of California, San Francisco School of Nursing Symptom Management Faculty Group (1994)
Theory of culture brokering	Jezewski (1995)
Theory of unpleasant symptoms	Lenz, Suppe, Gift, Pugh, and Milligan (1995); Lenz, Pugh, Milligan, Gift, and Suppe (1997)
Health promotion model (revised)	Pender (1996)
Theory of nurse-expressed empathy and patient outcomes	Olson and Hanchett (1997)
Theory of chronotherapeutic intervention for pain	Auvil-Novak (1997)
Theory of chronic sorrow	Eakes, Burke, and Hainsworth (1998)
Self-regulation theory	Johnson (1999)
Theory of transitions	Meleis, Sawyer, Im, Messias, and Schumacher (2000)
Theory of comfort	Kolcaba (2001)
Theory of adapting to diabetes mellitus	Whittemore and Roy (2002)
Theory of caregiver stress	Tsai (2003)
Theory of adaptation to chronic pain	Dunn (2004)
Theory of health promotion for preterm infants	Mefford (2004)
Theory of patient advocacy	Bu and Jezewski (2007)
Theory of nursing intellectual capital	Covell (2008)
Individual and family self-management theory	Ryan and Sawin (2009)
Theory of music and its effects on physical activity and health	Murrock and Higgins (2009)
TERRA (translational environmental research in rural areas) framework	Butterfield et al. (2009)
Theory of spiritual well-being in illness	O'Brien (2014)
Theory of parental end-of-life decision making (after child's bone-marrow transplant)	Rishel (2014)
Transcendent pluralism (nonviolent social transformation)	Perry (2015)

in depicting the experiences of menopause among Korean immigrant women (Im & Meleis, 1999b). As these examples show, the focus and range of abstraction of middle-range theories and related theories are likely to widen as emerging health needs and advances in science and technology are coupled with increasing diversity of clients served by nurses.

Practice Theory

One outgrowth of nursing metatheory has been the idea of a distinct type of theory for nursing as a practice discipline (Dickoff et al., 1968a; Jacox, 1974; Wald & Leonard, 1964; Walker, 1971a, 1971b; Wooldridge et al., 1968). Wald and Leonard (1964) were early proponents of nursing practice theory, a form of theory that was causal in nature and included variables that could be modified by nurses. The essence of practice theory was a desired goal and prescriptions for action to achieve the goal. Jacox (1974), in proposing her idea of practice theory, provided the following succinct description:

> It is theory that says given this nursing goal (producing some desired change or effect in the patient's condition), these are the actions the nurse must take to meet the goal (produce the change). For example, a nursing goal may be to prevent a postoperative patient from becoming hyponatremic. Nursing practice theory states that, to prevent hyponatremia, a particular set of actions must be taken. (p. 10)

Dickoff et al. (1968a) advocated a model of "practice-oriented theory" in which four phases of theorizing were to lead to the theory base for nursing practice. These phases included factor-isolating, factor-relating, situation-relating, and situation-producing or prescriptive theory. These four phases roughly paralleled the acts of description, explanation, prediction, and control. Situation-producing or prescriptive theory comprised three components: goal content (desired situations), prescriptions, and a survey list. An example of the prescription component offered by Dickoff et al. (1968a) was "Registered nurses, let the patient take his own medication as soon as he is able" (p. 424). The survey list was an intricately developed, yet vague component related to activity. Nonetheless, the Dickoff et al. (1968a, 1968b) proposal for practice theory did not provide clear and specific procedures to use in actually constructing a practice theory.

After the ideas of practice theory, situation-producing theory, or prescriptive theory were proposed, they did not lead immediately to development of any actual theories of this type. Some reasons for the slow growth of these types of theories may be that the early expositions used examples that sounded very procedural and consequently inspired little excitement. Another reason may be that formulating theory for practice requires a well-developed body of nursing science on effective nursing interventions.

Subsequently, progress did occur in the knowledge base for nursing practices. For example, in the Conduct and Utilization of Research in Nursing project (Haller, Reynolds, & Horsley, 1979), research-based knowledge was transferred into "protocols for nursing practice" (p. 45). Among the practice protocols studied were (1) sensation information: distress, (2) intravenous cannula change regimen, (3) prevention of decubiti by means of small shifts of body weight, and (4) deliberate nursing: pain

TABLE 1–4 Examples of Practice Theories Developed In Nursing

Theory	Source
Theory of balance between analgesia and side effects	Good and Moore (1996)
Theory of the peaceful end of life	Ruland and Moore (1998)
Theory of acute pain management in infants and children	Huth and Moore (1998)

reduction. Similarly, clinical guideline statements such as those proposed by the Panel for the Prediction and Prevention of Pressure Ulcers in Adults (1992) provided a further example of statements developed to guide care of persons. Further, several books devoted to nursing interventions have expanded the foundations of nursing practices (Bulechek & McCloskey, 1985; McCloskey & Bulechek, 2000; Snyder, 1992), including a taxonomy of nursing interventions (Iowa Intervention Project, 1992). That latter taxonomy continues to be updated (Bulechek, Butcher, Dochterman, & Wagner, 2012).

Of particular interest are efforts to blend middle-range theory with prescriptive theory (Good & Moore, 1996). These hybrid efforts elevate the resulting practice theory above simple dictates or imperatives for practice. Although the relational statements of these theories are stated in predictive versus prescriptive (ought or should) language, they come the closest yet to developing theory that is useful in actual practice. Examples of this emerging version of practice theory are shown in Table 1–4. Box 1–4 presents an exercise for readers.

BOX 1–4 Middle-Range Theory and Practice Theory

Middle-range theories are usually seen as more useful than grand theories because they may serve as the basis for developing nursing practice theories. Consider the description of practice theory as comprising these two components:

1. a nursing goal and
2. a nursing care action to meet the goal (Jacox, 1974).

Activity: Examine a middle-range theory cited in Table 1–3 that is related to your area of practice or research interest. Look for concepts in the middle-range theory that could guide development of a practice theory. Does this middle-range theory have the necessary potential nursing goals and actions to formulate a practice theory statement? Do you need to first modify the middle-range theory before you would be able to formulate the needed goal and action?

Try to develop a practice theory statement from the middle-range theory using this suggested format: to ___[*insert a nursing goal based on the middle-range theory*]__, these actions should be taken: ___[*insert one or more specific nursing actions based on the middle-range theory*]__.

Reflection: How easy or difficult was it to develop the practice theory statement? Were the practice theory goal and actions you were able to extract from the middle-range theory specific enough that these could be considered a guide for practice? If you were unsuccessful in extracting any practice theory statements, what were some of the shortcomings of the middle-range theory that you used?

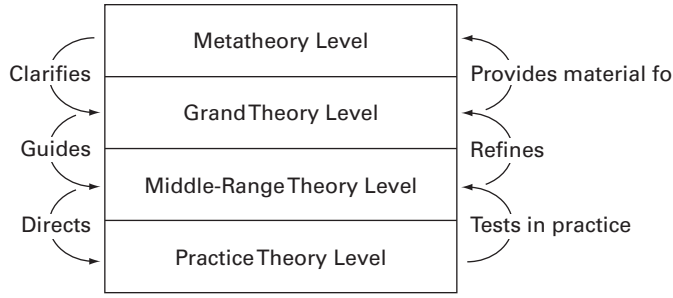

FIGURE 1–1 Linkages among levels of theory development.

Linkages Among Levels of Theory Development

After reading the preceding sections, it should be clear that one cannot reasonably ask at what level nursing theory development should occur: Work has been and is being done at each level. A more fitting question is, how are the levels of theory development related to each other? In Figure 1–1, we propose a model of the linkages between and among the four levels of theory development. Metatheory, through analysis of issues about nursing theory, clarifies the methodology and roles of each level of theory development in a practice discipline. In turn, each level of theory provides material for further analysis and clarification at the level of metatheory. Grand nursing theories by their global perspectives serve as guides and heuristics for the phenomena of special concern at the middle-range level of theory. For example, the Roy adaptation model (Roy, 1976; Roy & Andrews, 1991, 1999; Roy & Roberts, 1981), a grand theory, served as the basis for several middle-range theories: a theory of adapting to diabetes mellitus (Whittemore & Roy, 2002), a theory of caregiver stress (Tsai, 2003), and a theory of adaptation to chronic pain (Dunn, 2004). The Levine (1967) model served as the foundation for a middle-range theory of health promotion for preterm infants developed by Mefford (2004). In yet another example, O'Brien (2014) used the theoretical work of Travelbee (1971) as a point of departure in developing a middle-range theory of spiritual well-being in illness. Furthermore, middle-range theories, as they are tested in reality, become reference points for further refining grand nursing theories to which they may be connected (see an example of this connection in Gill and Atwood [1981]). Middle-range theories also direct the prescriptions of practice theories aimed at concrete goal attainments. Finally, practice theory, which is constructed from scientifically based propositions about reality, tests (if only indirectly) the empirical validity of those propositions as practices are incorporated in patient care. Those propositions most relevant to practice theory are likely to come from middle-range theories because their language is more easily tied to concrete situations. Despite the variety of linkages between the levels of theory development, none of them directly represent actual methods or strategies for theory construction.

POPULATION- AND DOMAIN-FOCUSED THEORIES AND MODELS

Overview

In the preceding section, theories were viewed in relation to levels of abstraction, but usually these were not delimited to a specific population. Within nursing, there has been an increasing interest in population-focused theories and models, often centered

on a defining population characteristic such as age, ethnicity and race, or gender. Because of the limits of what is possible within a single chapter, we have focused here primarily on population-focused theories and models related to racial/ethnic populations. Subsequent to this, we briefly focus on emerging domain-focused (or phenomenon-specific) theories and models. In contrast, rather than emphasizing specific populations, domain-focused theories and models emphasize the central phenomena and problems that make up the world of practice in caring for persons, families, and communities, for example, symptom management.

Population-Focused Theories and Models

Because of the cultural, racial, and ethnic diversity of the United States, our consideration of population-focused knowledge and theory development will be directed primarily at certain theoretical advances in the U.S. context, but may be applicable to similarly diverse countries. Our literature review was based on a combination of computerized and hand searches. The minimal number of sources found through computerized searches may indicate a limitation of descriptors attached to nursing theory-related articles pertaining to ethnic populations. Omission of a work in our review may simply reflect the limits of our search methods and is not a statement of a work's importance.

A key concern expressed within literature focused on ethnic minority populations was potential mismatch between the views and values inherent in extant nursing theories and those held by ethnic minority populations. Orem's (1991) theory was an example of a grand theory analyzed for such potential incongruence. For example, Roberson and Kelley (1996) proposed that Orem's theory reflects Western values such as self-reliance and self-direction that may be incongruent in cultural groups that value interdependence and harmony. They further propose that the biomedical orientation in Orem's theory may be incongruent with traditional health practices. In a review of several international and U.S.-based studies, Roberson and Kelley concluded that the theory insufficiently delineated how culture affects health, thereby limiting "the theory's usefulness for guiding culturally competent nursing care" (p. 27). In an analysis of an inductive study couched in Orem's (1991) theory, Villarruel and Denyes (1997) reported that self-care agency and dependent-care agency (separate terms in Orem's theory) were difficult to differentiate in their study of Mexican Americans. They noted that caring for others was highly valued in this cultural group.

Because of concern about the misfit of theories developed from a dominant culture perspective when applied to ethnic minority groups, efforts have been undertaken to develop frameworks, concepts, and perspectives that are congruent with specific cultural groups. At the concept level, Dancy et al. (2001) explored the concept of empowerment within two urban housing projects. After reviewing the literature on empowerment, they documented the impact of the urban housing project environments on the outreach team members' observations, feelings, and thoughts. Using content analysis, they explored the negative impact of the housing project environment on their own feelings of empowerment. Im and Meleis (1999b) applied the idea of situation-specific theory to investigate the phenomenon of

menopause among Korean immigrants to the United States. Their findings derived from this specific group of women were then used to modify a more general model of transition experiences.

Loxe and Struthers (2001) used focus group data to design a nursing conceptual framework for Native American culture. Examples of key concepts in the conceptual framework were the following: caring, traditions, respect, and holism. In a related work, Jensen-Wunder (2002) developed a nursing practice model from her experiences with a Lakota community. Starting from a commitment to human becoming (Parse, 1995), Jensen-Wunder developed the model, Indian Health Initiatives, using symbols and beliefs derived from Lakota culture. To increase understanding of how to promote health among Chinese immigrants in the United States, Zeng, Sun, Gray, Li, and Liu (2014) developed a conceptual model for this population. Their model development was based on a synthesis of the literature.

Critical scholarship and ways of knowing also have been applied to articulation of frameworks and methodologies for study of cultural groups and cultural-gender groups. Turton (1997), for example, developed the health worldview-orienting framework for ethnographic research on health promotion among the Ojibwe community. Boutain (1999) proposed combining critical social theory and African American studies methods as a more powerful way for nurses to study the health and social context of African Americans. Two other nurses described womanism (Taylor, 1998) and womanist ways of knowing (Banks-Wallace, 2000) as forms of gender-centered thought of value to nursing scholarship focused on the context and health of African American women.

Although race and ethnicity define many of the population-focused theories and models, the scope of such theories and models embraces a variety of populations that may be viewed through the lens of race, ethnicity, socioeconomic status, gender, disability, immigrant status, and sexual minority status. Using the term "vulnerable populations," Flaskerud and Winslow (1998) propose a model of health research in which *relative risk, resource availability*, and *health status* are key concepts that mutually influence each other and are in turn affected by research, practice, and ethical and policy analysis. A related model proposed by Rew, Hoke, Horner, and Walker (2009) focuses on health disparities research. In this second model, *research collaborations* influence *health disparities communities, community-based interventions*, and *health disparities outcomes*. In this model, health disparities communities are viewed as having assets, risk factors, and barriers to services.

In conclusion, important beginning contributions are being made in developing population-focused theories and models in the United States. On a more cautionary note, though, Kikuchi (2005) has warned of culture-specific theories that are founded on moral relativism. This concern is exemplified when such theories are at odds with issues of human rights, such as in the treatment of women and children.

Domain-Focused Theories and Models

Domain-focused theories and models make distinctive contributions to practice by their emphasis on the phenomena and problems encountered in the nursing care of persons, families, and communities. Domain-focused theories or models are likely to

reside at the middle-range level. It is, however, their content focus that is of particular concern because that content addresses central problems of practice. Domain-focused theories and models have high potential for advancing practice if they are clearly articulated, supported by research findings (qualitative, quantitative, or both), and translatable to practice situations. Although there are several contained in Table 1–3, we focus on one domain-focused theory, the symptom management model (SMM) developed by the University of California, San Francisco School of Nursing Symptom Management Faculty Group (1994; Dodd et al., 2001; Humphreys et al., 2014). Because of its emerging application across a variety of symptom-related practice problems delineated by Dodd et al. (2001), it is of particular relevance to practice situations.

As defined in the context of the SMM, a symptom is "a subjective experience reflecting changes in the biopsychosocial functioning, sensations, or cognition of an individual" (Dodd et al., 2001, p. 669). Although a number of terms are contained in the model, at its core are three central and interrelated concepts: *symptom experience*, *symptom management strategies*, and *symptom outcomes.* Each of these is influenced by factors stemming from the *person*, *environment*, and *health and illness*. Of particular interest is the generative nature of the SMM reflected in its application to a number of clinical problems, such as fatigue in care of persons with HIV/AIDS (Voss, Dodd, Portillo, & Holzemer, 2006) and symptom management of diabetes among African Americans (Skelly, Leeman, Carlson, Soward, & Burns, 2008).

In focusing on domain-focused theories here, we are not introducing a new level of theory or a new type of theory. Rather we use this terminology to point to theories and models that have high potential to inform the problems encountered in person-centered nursing practice. Further growth of domain-focused theories and models provides a foundation for nursing assessments, nursing interventions, and nursing outcomes of care. In so doing, domain-focused theories may give rise to the elusive practice theories envisioned in the 1960s.

GLOBAL NURSING THEORY DEVELOPMENT ISSUES AND EFFORTS

Overview

The growth of global nursing knowledge development has been exponential. Besides the presence of numerous journals in national languages, a survey conducted in 2000 by McConnell identified 82 English-language nursing journals published outside the United States and originating from 13 countries. In addition, several leading U.S. nursing journals (*Nursing Science Quarterly* and the *Journal of Nursing Scholarship*) contain sections devoted to global nursing scholarship. These are overt signs of the burgeoning scientific and theoretical growth of global efforts to advance nursing as a scholarly discipline.

Still, reviewing the global literature on nursing theory is difficult because theoretical thinking often grows through personal interactions that are not always fully reflected in published literature. Searches of literature databases may uncover articles of interest in non-English-language journals, but costs of translation may make those sources beyond easy reach. Bearing in mind these challenges, we focused on global theory development and theoretical thinking in articles published in English. Our

coverage, thus, is only a partial consideration of global efforts of nursing theory development. Furthermore, because of the breadth of global theory development literature, our review is necessarily selective and illustrative.

Issues and Global Contributions

As interest in nursing theory development spread globally, the nursing community struggled with a number of issues and concerns: the value and contribution of theory (Allison, McLaughlin, & Walker, 1991; Biley & Biley, 2001; Draper, 1990; Poggenpoel, 1996; Searle, 1988); concern about the uncritical adoption of U.S.-origin nursing theories, values, and knowledge schemes (Draper, 1990; Ketefian & Redman, 1997; Lawler, 1991; Salas, 2005); questioning the need for unique nursing knowledge (Nolan, Lundh, & Tishelman, 1998); disparagement or questioning of grand theories (Daly & Jackson, 1999; Nolan et al., 1998); advocating contextual or delimited scope theories (Daly & Jackson, 1999; Draper, 1990; Nolan et al., 1998); and questioning the effectiveness of imposing theories using a top-down strategy (Kenney, 1993). For example, Nolan et al. (1998) argued that grand nursing theories fail to meet the needs of practice because they are too far removed from reality to be useful to practitioners. (Box 1–5 presents an exercise for readers on whether there can be an international theory of nursing.)

Articulation of these issues by the preceding authors indicated that theoretical work based on the American experience may need to be modified to fit other countries, or may be incompatible with cultural and other considerations for application in some countries (Salas, 2005). Despite this, others have recognized the opportunity for more widespread benefit and enhanced progress by certain cross-national and global knowledge-building efforts. Thus, knowledge that can cross borders prevents the age-old problem of reinventing the wheel. Nursing diagnosis and related nomenclature was one such area of international collaboration (Casey, 2002; Ehnfors, 2002; Goosen, 2002; Ketefian & Redman,

BOX 1–5 "Why There Cannot Be an International Theory of Nursing"

In an article with the above title, Mandelbaum (1991) challenged the idea that nursing theories can be applicable globally. Among her reasons for that belief was that "each region must define the concepts [person, environment, health, and nursing] in the way most readily understood and applicable to the needs of indigenous people" (p. 53).

Read one or both of the following articles for critical views about nursing theory.

Salas AS. Toward a north–south dialogue: Revisiting nursing theory (from the south). *Adv Nurs Sci.* 2005;28(1):17–24.

Gustafson DL. Transcultural nursing theory from a critical cultural perspective. *Adv Nurs Sci.* 2005;28(1):2–16.

Reflection: Based on your readings and your experience, is Mandelbaum's view still applicable today with increased globalization of trade, travel, and electronic communication, such as on the Internet? Are there commonalities, for example, about nursing, health, and illness that transcend cultural beliefs of specific groups? Or, to the contrary, do cultural differences in the way that health and illness are understood make it impossible for theories related to nursing to be applicable globally?

1997). However, the expansion of nursing diagnoses and related systems of classification was not without their detractors (Lawler, 1991; Nolan et al., 1998).

Examples of the range of countries in which nurses have written about the conceptual, metatheoretical, historical, or educational issues and achievements related to developing and applying nursing theory include the following: Sweden (Lutzen & da Silva, 1995; Willman & Stoltz, 2002); United Kingdom (Smith, 1987); Canada (Major, Pepin, & Légault, 2001; Rodgers, 2000); Australia (Daly & Jackson, 1999); Finland (Leino-Kilpi & Suominen, 1998); Japan (Hisama, 2001); Iceland (Jonsdottir, 2001); India (Sirra, 1986); South Africa (Searle, 1988); Slovenia (Starc, 2009); Turkey (Ustun & Gigliotti, 2009), and Iran (Hoseini, Alhani, Khosro-Panah, & Behjatpour, 2013).

Additional examples of metatheoretical and philosophical topics that have been addressed in the global literature related to nursing theory and knowledge development are displayed in Table 1–5. In an early contribution that was unique in the Australian nursing literature, Emden and Young (1987) reported on a Delphi study conducted with nursing experts on issues related to theory development. Expert opinion was sought on seven issues, such as whether nursing theory development was "critical to the advancement of professional nursing" and "nursing should develop its

TABLE 1–5 Examples of Foundational Global Discourse Related to Nursing Theory and Knowledge Development

Author Country or Countries	Author(s)	Topic or Focus
Australia	Emden and Young (1987)	Integrative review of "trends and issues" in nursing theory development; Delphi study
Sweden and Norway	Lundh, Söder, and Waerness (1988)	Critique of nursing process and nursing theories
United Kingdom	Draper (1990)	Contributions of nursing theory and impediments to its development in the United Kingdom
Australia	Holden (1991)	Critical examination of dualism, idealism, and materialism as theories of mind applied in nursing
United Kingdom	Reed and Robbins (1991)	Proposed and illustrated inductive theory "testing"
Australia	Bruni (1991)	Discourse analysis of literature related to nursing as a profession and knowledge development
Sweden	Dahlberg (1994)	Exposition of holistic perspective and gender-related barriers to application in practice
Sweden	Lutzen and da Silva (1995)	Linguistic issues, nursing methodology, concept of care, trends
Australia	Holmes (1996)	Summary of postmodern critiques of traditional science; alternative philosophical stances for nursing summarized

TABLE 1–5 Continued

Author Country or Countries	Author(s)	Topic or Focus
Australia	Kermode and Brown (1996)	Critically examine postmodernism and its potential weaknesses for advancing nursing
United Kingdom	Timpson (1996)	Theory-practice relationship in nursing
Canada	Baker (1997)	Critical analysis of cultural relativism, including its use in nursing theories
United Kingdom and Sweden	Nolan et al. (1998)	Critique grand nursing theory, critique unique nursing knowledge, advocate middle-range theory
Korea	Shin (2001)	Taoism, Buddhism, and Confucianism as related to nursing theory in Korea
United Kingdom	Allmark (2003)	Reconsideration of Popper's philosophy of science in nursing
Chile/Canada	Salas (2005)	Critical review of use of U.S. nursing theories in the Latin American context
Canada	Weaver and Olson (2006)	Paradigms used for nursing research
Canada	Kirkham and Browne (2006)	Social justice in nursing discourse
Canada	Pesut and Johnson (2008)	Philosophical inquiry in relation to other nursing methodologies
New Zealand and Iceland	Litchfield and Jonsdottir (2008)	Participatory paradigm proposed as the basis for nursing as a practice discipline
Norway and Sweden	Fagerstrom and Bergbom (2010)	Application of Hegelian dialectics to nursing

own unique research traditions" (p. 27). Detailed presentation of the expert opinions on issue statements represents one of the few studies of this kind and may be of interest to readers in a number of countries outside Australia. More recently, scholars have made important contributions to philosophical issues related to nursing theory development. Examples include the writings of Falk-Rafael (2005) and Kirkham and Browne (2006) on social justice in nursing discourse and the consideration of neopragmatism (Isaacs et al., 2009) in nursing. Box 1–6 presents a reflective exercise related to social justice and theory in nursing for interested readers.

Theoretical Developments

Another branch of global nursing literature on theory development has focused on theorizing about nursing and nursing care. The foundations for such works lay in the pioneering writing of Florence Nightingale in her 1859 volume, *Notes on Nursing*. Recent examples of conceptual or theoretical works are presented in Table 1–6. Related efforts

BOX 1–6 Is Social Justice a Consideration in Developing Nursing Theory?

Social justice is an ethical concept that is gaining increasing attention among nurses globally (e.g., Kirkham & Browne, 2006). What is social justice and how might it pertain to nursing theory development and nursing practice? If you want to first learn more about the meaning of social justice, place the words *social justice definition health* or *social justice definition nursing* into the search box of your Internet browser and examine the sources you find.

Read one or more of the following articles about social justice and consider what relevance this concept has to theory development in nursing.

Clingerman E, Fowles E. Foundations for social justice-based actions in maternal/infant nursing. *J Obstet Gynecol Neonatal Nurs*. 2010;39:320–327.

Kirkham SR, Browne AJ. Toward a critical theoretical interpretation of social justice discourses in nursing. *Adv Nurs Sci.* 2006;29:324–339.

Schim SM, Benkert R, Bell SE, Walker DS, Danford CA. Social justice: Added metaparadigm concept for urban health nursing. *Public Health Nurs.* 2007;24:73–80.

Reflection: Based on your reading, how do you see social justice influencing theory development in nursing? How do you see social justice-based theories influencing nursing practice? Does that influence differ based on whether you consider nursing in your country or nursing globally?

TABLE 1–6 Examples of Global Theorizing About Nursing and Nursing Care

Author(s)	Nature of work
Roper et al. (1985)	Roper–Logan–Tierney nursing model
Minshull, Ross, and Turner (1986)	Human needs nursing model
Sarvimäki (1988)	Theory of nursing care
Andersen (1991)	Nursing activity model
Chao (1992)	Concept of caring
Eriksson (2002)	Exposition of caring science
Wong, Pang, Wang, and Zhang (2003)	Chinese definition of nursing
Yoshioka-Maeda et al. (2006)	Japanese purpose-focused public health nursing model
Scheel, Pedersen, and Rosenkrands (2008)	Interactional nursing theory
Halldorsdottir (2008)	Theory of the nurse–patient relationship
Starc (2009)	Human capital conversion model
Boggatz and Dassen (2011)	Model of seeking nursing care among older adults
Hoseini, Alhani, Khosro-Panah, and Behjatpour (2013)	Concept of nursing from Islam sources
Forsberg, Lennerling, Fridh, Karlsson, and Nilsson (2015)	Perceived threat of graft rejection risk
Zandi, Vanaki, Shiva, Mohammadi, and Bagheri-Lankarani (2016)	Caring model for women becoming mothers by surrogacy

have focused on critiquing and applying nursing theories. For example, Tierney (1998) examined the contributions and criticisms of the Roper–Logan–Tierney (1985) nursing model. Whall, Shin, and Colling (1999) examined a derivative of Nightingale's thought for suitability to care of cognitively impaired elders in Korea, whereas Clift and Barrett (1998) tested a power framework in three German-speaking countries, and da Nobrega and Coler (1994) used nursing theory as a basis of nursing diagnoses in Brazil. Other global theoretical works focus on specific patient populations, including nurses' practice models for patients with dermatological conditions (Kirkevold, 1993), decision making in adult and gerontology care settings (Lauri et al., 2001), analysis of a pediatric care model (Lee, 1998), and development or application of theory to the care of psychiatric patients (Mavundla, Poggenpoel, & Gmeiner, 2001; Poggenpoel, 1996).

Theories of U.S. origin have also been the subject of global application, as well as critique. The following are a few examples: de Villiers and van der Wal (1995) applied Leininger's (1991) model to curriculum development in South Africa, whereas Bruni (1988) critiqued earlier elements of the theory. Similarly, Morales-Mann and Jiang (1993) critically examined Orem's (1991) theory in light of fit with Chinese culture, whereas Lauder (2001) critiqued the theory in relation to self-neglect. In a related vein, Baker (1997) critically examined the issue of cultural relativism in nursing theory and practice. Examples of still other U.S.-origin nursing theories in global usage include Parse's (1999) theory utilized in Switzerland (Maillard-Struby, 2009) and in a multinational study (Baumann, 2002); application and testing of King's (1981) theory within three countries (Frey, Rooke, Sieloff, Messmer, & Kameoka, 1995); and dissemination of the Roy model to countries in Latin America and Asia (Roy, Whetsell, & Frederickson, 2009).

In conclusion, despite being limited to English-language sources, the global literature related to nursing theory that we reviewed was rich and diverse. The range of theoretical works includes metatheoretical and critical work and covers a variety of needs and contexts. There is no evidence of one predominating theory in the literature that we reviewed. Indeed, there was much skepticism about imposing theories from outside a country (Salas, 2005). (Also see "Additional Readings" at the end of this chapter related to global nursing theory development.)

Summary

In this chapter, we have presented a summary of historical circumstances that spawned theory development in nursing. Next, we provided a compressed history of the many achievements made in developing the theoretical bases for nursing practice and research. In so doing, we have tried to capture the wide-ranging nature of theory development in nursing, including:

- metatheory to practice theory,
- population- and domain-focused theory, and
- global contributions to theory development in nursing.

Still, as noted throughout this chapter, the concerns and phenomena needed in nursing practice and research continue to grow and change. In the next chapter, we look in

more detail at the role of nursing theory and knowledge development in relation to nursing practice. In subsequent chapters, we present strategies to aid in further development of theory in nursing. In the final chapter, we turn to concept, statement, and theory testing, and conclude with a focus on the scope of and central concerns in nursing knowledge.

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