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# Imogene M. King: Conceptual System and Theory of Goal Attainment

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Imogene M. King, EdD, RN, FAAN† (1923–2007)

*"Theory is an abstraction that implies prediction based in research. Theory without research and research without some theoretical basis will not build scientific knowledge for a discipline."*
***(King, 1977, p. 23)***

## CREDENTIALS AND BACKGROUND OF THE THEORIST

### The Nightingale Tribute to Imogene King

Imogene M. King was born on January 30, 1923, in West Point, Iowa. She died on December 24, 2007, in St. Petersburg, Florida, and is buried in Fort Madison, Iowa. In 1945, King received a diploma in nursing from St. John's Hospital School of Nursing in St. Louis, Missouri. While working in a variety of staff nurse roles, King began course work toward a bachelor of science in nursing education, which she received from St. Louis University in 1948. In 1957, she received a master of science in nursing from St. Louis University. From 1947 to 1958, King worked as an instructor in medical-surgical nursing and was an assistant director at St. John's Hospital School of Nursing. King went on to study with Mildred Montag as her dissertation chair at Teachers College, Columbia University, New York, and received her EdD in 1961.

From 1961 to 1966 at Loyola University in Chicago, King developed a master's degree program in nursing based on a nursing conceptual framework. Her first theory article appeared in 1964 in the journal *Nursing Science,* which nurse theorist Martha Rogers edited.

Between 1966 and 1968, King served under Jessie Scott as Assistant Chief of Research Grants Branch, Division of Nursing at the U.S. Department of Health, Education, and Welfare. While King was in Washington, DC, her article "A conceptual frame of reference for nursing" was published in *Nursing Research* (1968).

From 1968 to 1972, King was the director of the School of Nursing at Ohio State University in Columbus. While at Ohio State, her book *Toward a Theory for Nursing: General Concepts of Human Behavior* (1971) was published. In this early work, King concluded, "a systematic representation of nursing is required ultimately for developing a science to accompany a century or more of art in the everyday world of nursing" (1971, p. 129). Her book received the *American Journal of Nursing* Book of the Year Award in 1973 (King, 1995a).

King then returned to Chicago in 1972 as a professor in the Loyola University graduate program. From 1972 to 1975, King was a member of the Defense Advisory Committee on Women in the Services for the U.S. Department of Defense. She also was elected alderman for a 4-year term (1975–1979) in Ward 2 of Wood Dale, Illinois. She also served from 1978 to 1980 as Coordinator of Research in Clinical Nursing at the Loyola Medical Center Department of Nursing. In 1980, King was awarded an honorary PhD from Southern Illinois University (Messmer, 2000). In May 1998, she received an honorary doctorate from Loyola

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†Photo courtesy of Patricia R. Messmer, PhD, RN-BC, FAAN.

University, where her "Nursing Collection" is housed. Another nursing collection is at the Eleanor Crowder Bjoring Center for Nursing Historical Inquiry at the University of Virginia (UVA, 2020).

In 1980, King was appointed professor at the University of South Florida College of Nursing in Tampa (Houser & Player, 2007). In 1981, her second book, *A Theory for Nursing: Systems, Concepts, Process,* was published. In addition to her first two books, she authored multiple book chapters and articles in professional journals, and a third book, *Curriculum and Instruction in Nursing: Concepts and Process*, was published in 1986. King retired in 1990 and was named professor emeritus at the University of South Florida.

King continued to provide community service and helped plan care through her conceptual system and theory at various health care organizations, including Tampa General Hospital (Messmer, 1995). King never really retired; she was always there for students, faculty, and colleagues who were using her theory and even went "round the clock" to implement her theory at Tampa General Hospital. She also served on the nursing advisory board and guest lectured at the University of Tampa.

King was a long-time member of the American Nurses Association (ANA), first with the Missouri Nurses Association; she was also active in Illinois and Ohio. Upon her move to Tampa, Florida, she became a member in the Florida Nurses Association (FNA) and FNA District 4, Tampa. King held offices such as president of the Florida Nurses Foundation, served on the FNA and the FNA District 4 boards, and was a delegate from the FNA to the ANA House of Delegates. In 1997, King received a gold medallion from Governor Chiles for advancing the nursing profession in the state of Florida. She was inducted into the FNA Hall of Fame and the ANA Hall of Fame in 2004. In 1994, King was inducted as a fellow in the American Academy of Nursing (AAN) and served on the AAN Theory Expert Panel. In 2005, she was named an AAN Living Legend. In 1996, King received the ANA Jessie M. Scott Award and was thrilled that Jessie Scott was present to hear her presentation. King was in the ANA House of Delegates to hear President Bill Clinton's congratulations on the ANA's 100th anniversary and his admiration of his mother as a nurse anesthetist.

In 2000, King was keynote speaker for the 37th Annual Isabel Maitland Stewart Conference in Research in Nursing at Teachers College, Columbia University (Messmer & Fawcett, 2008) and was pleased that Mildred Montag was present. In 1999, King was inducted into the Teachers College, Columbia University of Hall of Fame. The King International Nursing Group (KING) was created to facilitate the dissemination, using King's conceptual system, the theory of goal attainment, and related theories. King consulted with members of the organization on an individual basis regarding her theory.

King was one of the original Sigma Theta Tau International (STTI) Virginia Henderson Fellows, receiving the STTI Elizabeth Russell Belford Founders Award for Excellence in Education in 1989 (Messmer, 2007; Messmer & Palmer, 2008). King was keynote speaker at two STTI theory conferences in 1992 and presented application of her theory at multiple regional, national, and international STTI conferences. King communicated regularly with faculty, students, and nurse clinicians who were learning about theories within her conceptual system.

King (1971, 1981) was recognized as one of the early nurse theorists through her publications, which were translated into Japanese, Spanish, and German. She authored numerous articles and served on the editorial board of *Nursing Science Quarterly.* King authored chapters in several books, including Frey and Sieloff's *Advancing King's Systems Framework and Theory of Nursing* (1995) and Sieloff and Frey's *Middle Range Theories for Nursing Practice Using King's Conceptual System* (2007), which highlighted King's studies by other authors.

## THEORETICAL SOURCES FOR THEORY DEVELOPMENT

King described the purpose of her first book as follows:

> *"[P]ropos[ing] a conceptual frame of reference for nursing … intended to be utilized specifically by students and teachers, and also by researchers and practitioners, to identify and analyze events in specific nursing situations. The conceptual system suggests that the essential characteristics of nursing are those properties that have persisted in spite of environmental changes."*
>
> ***(1971, p. ix)***

> *"It is a way of thinking about the real world of nursing … an approach for selecting concepts perceived to be fundamental for the practice of professional nursing; [and] shows a process for developing concepts that symbolize experiences within the physical, psychological, and social environment in nursing."*
>
> ***(1971, p. 125)***

## USE OF EMPIRICAL EVIDENCE

King (1971) spoke of concepts as "abstract ideas that give meaning to our sense perceptions, permit generalizations, and tend to be stored in our memory for recall and use at a later time in new and different situations" (pp. 11–12). King (1984) defined theory as "a set of concepts, that, when defined, are interrelated and observable in the world of nursing practice" (p. 11). Theory serves to build "scientific knowledge for nursing" (King, 1995b, p. 24).

King (1975b) identified two methods for developing theory: (1) a theory can be developed and then tested in research, and (2) research provides data from which theory may be developed. King (1978) believed that building knowledge for a complex profession such as nursing required these two strategies.

King cited research studies in her 1981 book, *A Theory for Nursing: Systems, Concepts, Process.* Within the personal system, King examined studies related to perception by Allport (1955), Kelley and Hammond (1964), Ittleson and Cantril (1954), and others. For her definition of *space,* King cited studies from Sommer (1969), Ardrey (1966), and Minckley (1968). For the concept of time, she acknowledged Orme's (1969) work.

Within the interpersonal system, King cited the studies of Watzlawick and colleagues (1967) and Krieger (1975). She examined studies by Whiting (1955), Orlando (1961), and Diers and Schmidt (1977) for interaction. King noted Dewey and Bentley's (1949) theory of knowledge, which addressed self-action, interaction, and transaction, in *Knowing and the Known,* and Kuhn's (1975) work on transactions.

Commenting on research existing at that time, particularly operations research regarding patient care, King (1975a) noted that "most studies have centered on technical aspects of patient care and of the health care systems rather than on patient aspects directly. ... Few problems have been stated that begin with what the patient's condition demands or what the patient wants" (p. 9). King (1981) noted "several theoretical formulations about interpersonal relations and nursing process have been described in nursing situations" (pp. 151–152) and cited Peplau (1952), Orlando (1961), Paterson and Zderad (1976), and Yura and Walsh (1978) supporting the transactional process in her theory of goal attainment.

King posed the following questions in preparation for her 1971 book, *Toward a Theory for Nursing: General Concepts of Human Behavior,* as she began developing her **Conceptual System:**

- What is the goal of nursing?
- What are the functions of nurses?
- How can nurses continue to expand their knowledge to provide quality care? (pp. 30, 39)

Fig. 15.1 demonstrates the conceptual system that provided "one approach to studying systems as a whole rather than as isolated parts of a system" (King, 1995a, p. 18) and was "designed to explain (the) organized wholes within which nurses are expected to function" (1995b, p. 23).

King (1981) used a systems approach in the development of her conceptual systems and her theory of goal attainment. King noted that "some scientists who have been studying systems have noted that the only way to study human beings interacting with the environment is to design a conceptual framework of interdependent variables and interrelated concepts" (King, 1981, p. 10). King (1995a) believed that her "framework differs from other conceptual schema in that it is concerned not with fragmenting human beings and the environment but with human transactions in different kinds of environments" (p. 21).

"An awareness of the complex dynamics of human behavior in nursing situations prompted [King's] formulation of a conceptual framework that represented personal, interpersonal, and social systems as the domain of nursing"

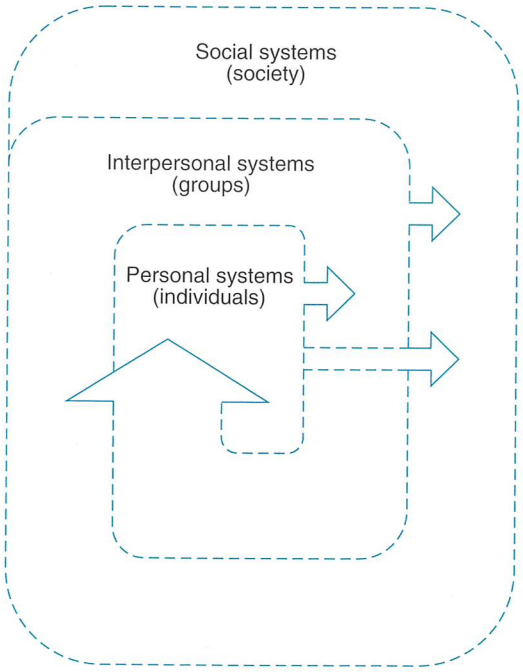


**Fig. 15.1** Dynamic conceptual systems. (From King, I. [1981]. *A theory for nursing: Systems, concepts, process* [p. 11]. New York: Delmar. Used with permission from I. King.)

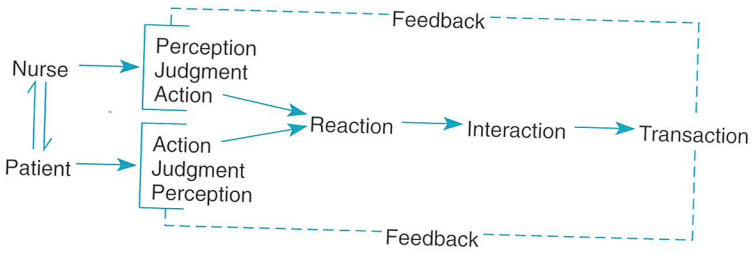


**Fig. 15.2** A process of human interactions that lead to transactions: a model of transaction. (From King, I. [1981]. *A theory for nursing: Systems, concepts, process* [p. 61]. New York: Delmar. Used with permission.)

(King, 1981, p. 130). Each system identifies human beings as the basic element in the system, thus "the unit of analysis in [the] framework [was] human behavior in a variety of social environments" (King, 1995a, p. 18). King designated an example of a personal system as a patient or a nurse. King specified the concepts of body image, growth and development, perception, self, space, and time to comprehend human beings as persons.

Interpersonal systems form when two or more individuals interact, forming dyads (two people) or triads (three people). The dyad of a nurse and a patient is one type of interpersonal system. Families, when acting as small groups, also can be considered interpersonal systems. Understanding the interpersonal system requires the concepts of communication, interaction, role, stress, and transaction.

A more comprehensive interacting system consists of groups that make up society, referred to as the social system. Religious, educational, and health care systems are examples of social systems. The influential behavior of an extended family on an individual's growth and development is another social system example. Within a social system, the concepts of authority, decision-making, organization, power, and status guide system understanding. Thus, concepts in the framework are organizing dimensions and represent knowledge to understand interactions among the three systems (King, 1995a).

In 1981, King derived her **theory of goal attainment** from her conceptual system. The question that motivated King to develop this theory was, "What is the nature of nursing?" (King, 1995b, p. 25). She noted the answer to be: "the way in which nurses, in their role, do with and for individuals that differentiates nursing from other health professionals" (King, 1995b, p. 26). This thinking guided her development of the theory of goal attainment using the following theory development process:

- What are the philosophical assumptions?
- Are the concepts clearly identified and defined?
- Are the concepts related in propositional statements or models?
- Does the theory generate questions to be answered or hypotheses to be tested in research to generate knowledge and affirm the theory?

"The human process of interactions formed the basis for designing a model of transactions that depicted theoretical knowledge used by nurses to help individuals and groups attain goals" (King, 1995b, p. 27) (Fig. 15.2).

King stated the following:

> *"Mutual goal setting [between a nurse and a client] is based on (a) nurses' assessment of a client's concerns, problems, and disturbances in health; (b) nurses' and clients' perceptions of the interference; and (c) their sharing of information whereby each functions to help the client attain the goals identified. In addition, nurses interact with family members when clients cannot verbally participate in the goal setting."*
>
> ***(1995b, p. 28)***

To test her theory, King (1981) conducted research, identifying that her study varied from previous studies in that it "described the nurse-patient interaction process that leads to goal attainment" (p. 153) and determines whether nurses made transactions. King used a method of nonparticipant observation to collect information about nurse-patient interactions on a patient care unit in a hospital setting with patients and nurses volunteering to participate in the study. King trained graduate students in nonparticipant observation technique to collect data. She examined multiple interactions and recorded verbal and nonverbal behavior data. King further tested her criterion-reference measure of goal attainment tool, a measure of functional abilities and goal attainment in the University of Maryland Measurement of Nursing Outcomes project. She reported the instrument to have a content validity index (CVI) of 0.88 and reliability of 0.99 for assessing functional abilities of patients in making decisions about goal setting with and for patients to measure goal attainment (King, 1988, 2003).

## MAJOR CONCEPTS & DEFINITIONS

"Concepts give meaning to our sense perceptions and permit generalizations about persons, objects, and things" (King, 1995a, p. 16). A limited number of definitions based on the systems framework are listed here, and additional definitions can be found in King's 1981 book, *A Theory for Nursing: Systems, Concepts, Process.*

### Health

"Health is defined as dynamic life experiences of a human being, which implies continuous adjustment to stressors in the internal and external environment through optimum use of one's resources to achieve maximum potential for daily living" (King, 1981, p. 5).

### Nursing

"Nursing is defined as a process of action, reaction, and interaction whereby nurse and client share information about their perceptions in the nursing situation" (King, 1981, p. 2).

### Self

"The self is a composite of thoughts and feelings which constitute a person's awareness of his [or her] individual existence, his [or her] conception of who and what he [or she] is. A person's self is the sum total of all he [or she] can call his [or hers]. The self includes, among other things, a system of ideas, attitudes, values, and commitments. The self is a person's total subjective environment. It is a distinctive center of experience and significance. The self constitutes a person's inner world as distinguished from the outer world consisting of all other people and things. The self is the individual as known to the individual. It is that to which we refer when we say, 'I'" (Jersild, 1952, p. 10).

## MAJOR ASSUMPTIONS

King's personal philosophy about human beings and life influenced her assumptions related to environment, health, nursing, individuals, and nurse-patient interactions. King's conceptual system and theory of goal attainment were "based on an overall assumption that the focus of nursing is human beings interacting with their environment, leading to a state of health for individuals, which is an ability to function in social roles" (King, 1981, p. 143).

### Nursing

"Nursing is an observable behavior found in the health care systems in society" (King, 1971, p. 125). The goal of nursing "is to help individuals maintain their health so they can function in their roles" (King, 1981, pp. 3–4). Nursing is an interpersonal process of action, reaction, interaction, and transaction. Perceptions of a nurse and a patient influence the interpersonal process.

### Person

King detailed specific assumptions related to persons in 1981 and in subsequent works:

- Individuals are spiritual beings (I. King, personal communication, July 11, 1996).
- Individuals have the ability through their language and other symbols to record their history and preserve their culture (King, 1986).
- Individuals are unique and holistic, of intrinsic worth, and capable of rational thinking and decision-making in most situations (King, 1995b).
- Individuals differ in their needs, wants, and goals (King, 1995b).

### Health

Health is a dynamic state in the life cycle, whereas illness interferes with that process. Health "implies continuous adjustment to stress in the internal and external environment through the optimum use of one's resources to achieve the maximum potential for daily living" (King, 1981, p. 5).

### Environment

King (1981) believed that "an understanding of the ways that human beings interact with their environment to maintain health was essential for nurses" (p. 2). Open systems imply that interactions occur constantly between the system and the system's environment. Furthermore, "adjustments to life and health are influenced by [an] individual's interaction with environment. ... Each human being perceives the world as a total person in making transactions with individuals and things in the environment" (King, 1981, p. 141).

## THEORETICAL ASSERTIONS

King's theory of goal attainment (1981) focuses on the interpersonal system and the interactions that take place between individuals, specifically in the nurse-patient relationship. In the nursing process, each member of the dyad perceives the other, makes judgments, and takes actions. Together, these activities culminate in reaction. Interactions

**BOX 15.1 Propositions Within King's Theory of Goal Attainment**

1. If perceptual congruence (PC) is present in nurse-client interactions (I), transactions (T) will occur.
   $PC(I) \xrightarrow{+} T$
2. If nurse and client make transactions (T), goals will be attained (GA).
   $T \xrightarrow{+} GA$
3. If goals are attained (GA), satisfaction (S) will occur.
   $GA \xrightarrow{+} S$
4. If goals are attained (GA), effective nursing care (NCe) will occur.
   $GA \xrightarrow{+} NC_e$
5. If transactions (T) are made in nurse-client interactions (I), growth and development (GD) will be enhanced.
   $(I)T \xrightarrow{+} GD$
6. If role expectations and role performance as perceived by nurse and client are congruent (RCN), transactions (T) will occur.
   $RCN \xrightarrow{+} T$
7. If role conflict (RC) is experienced by nurse or client or both, stress (ST) in nurse-client interactions (I) will occur.
   $RC(I) \xrightarrow{+} ST$
8. If nurses with special knowledge and skills communicate (CM) appropriate information to clients, mutual goal setting (T) and goal attainment (GA) will occur. (Mutual goal setting is a step-in transaction and thus has been diagrammed as a transaction.)
   $CM \xrightarrow{+} T \xrightarrow{+} GA$

From Austin, J. K., & Champion, V. L. (1983). King's theory of nursing: Explication and evaluation. In P. L. Chinn (Ed.), *Advances in nursing theory development* (p. 55). Rockville, MD: Aspen.

result and, if perceptual congruence exists and disturbances are conquered, transactions will occur. The system is open to permit feedback because each phase of the activity potentially influences perception.

King (1981) developed eight propositions in her theory of goal attainment that describe the relationships among the concepts detailed in Box 15.1. Diagrams follow each proposition. When the propositions were analyzed, 23 relationships were not specified, 22 relationships were positive, and no relationship was negative (Austin & Champion, 1983) (Fig. 15.3). King (1981, p. 156) derived seven hypotheses from the theory of goal attainment listed in Box 15.2.

## LOGICAL FORM

In her 1968 article, King set forth her first conceptual frame of reference with four concepts that center on human beings:

1. Health
2. Interpersonal relationships
3. Perceptions
4. Social systems

Although King's original framework was abstract and dealt with "only a few elements of concrete situations" (King, 1981, p. 128), King maintained that her four "universal ideas (social systems, health, perception, and interpersonal relations) were relevant in every nursing situation" (King, 1981, p. 128). King (1981) began further development of her conceptual system and proposed her theory of goal attainment to describe "the nature of nurse-client interactions that lead to achievement of goals" (p. 142) as follows:

> *"Nurses purposely interact with clients to mutually establish goals, and to explore and agree on means to achieve goals. Mutual goal setting is based on nurses' assessment of clients' concerns, problems, and disturbances in health, their perceptions of problems, and their sharing information to move toward goal attainment."*
>
> ***(1981, pp. 142–143)***

A logical progression of development occurred in the conceptual system from 1971 to 1981, with King deriving her theory of goal attainment from her own conceptual system. The theory of goal attainment "organize[s] elements in the process of nurse-client interactions that result in outcomes, that is, goals attained" (King, 1981, p. 143).

King initially had stated the following:

> *"[I]f nurses are to assume the roles and responsibilities expected of them, … the discovery of knowledge must be disseminated in such a way that they are able to use it in their practice. … Descriptive data collected systematically provide cues for generating hypotheses for research in human behavior in nursing situations."*
>
> ***(1971, p. 128)***

| | PC | T | GA | S | $NC_e$ | GD | RCN | RC | ST | CM |
|---|---|---|---|---|---|---|---|---|---|---|
| PC | | + | + | + | + | + | ? | ? | ? | ? |
| T | | | + | + | + | + | + | ? | ? | ? |
| GA | | | | + | + | + | + | ? | ? | + |
| S | | | | | ? | ? | + | ? | ? | + |
| $NC_e$ | | | | | | ? | + | ? | ? | + |
| GD | | | | | | | + | ? | ? | + |
| RCN | | | | | | | | ? | ? | ? |
| RC | | | | | | | | | + | ? |
| ST | | | | | | | | | | ? |
| CM | | | | | | | | | | |

**Fig. 15.3** Relationship table. *CM,* Communicate; *GA,* goals attained; *GD,* growth and development; *$NC_e$,* effective nursing care; *PC,* perceptional congruence; *RC,* role conflict; *RCN,* role congruency; *S,* satisfactions; *ST,* stress; *T,* transactions. (From Austin, J. K., & Champion, V. L. [1983]. King's theory for nursing: Explication and evaluation. In P. L. Chinn [Ed.], *Advances in theory development* [p. 58]. Rockville, MD: Aspen.)

### BOX 15.2 Hypotheses From the Theory of Goal Attainment

1. Perceptual accuracy in nurse-patient interactions increases mutual goal setting.
2. Communication increases mutual goal setting between nurses and patients and leads to satisfaction.
3. Satisfactions in nurses and patients increase goal attainments.
4. Goal attainment decreases stress and anxiety in nursing situations.
5. Goal attainment increases patient learning and coping ability in nursing situations.
6. Role conflict experienced by patients, nurses, or both decreases transactions in nurse-patient interactions.
7. Congruence in role expectations and role performance increases transactions in nurse-patient interactions.

From King, I. M. (1981). *A theory for nursing: Systems, concepts, process.* New York: Wiley.

In 1981, King spoke of fewer dichotomies between health and illness, referring to illness as interference in the life cycle. Through reformulation, King provided a more open system relationship between person and environment. King also revised her terminology, using **adjustment** instead of *adaptation,* and **person, human being,** and **individual** rather than *man.*

## ACCEPTANCE BY THE NURSING COMMUNITY

### Practice

King's (1971) early publication led to nursing curriculum development and practice application at Ohio State University and other universities. Professionals in most nursing specialty areas have used the concepts of King's (1981) theory of goal attainment in nursing practice. Its relationship to practice is obvious, because nurses do function primarily through interactions with individuals and groups within the environment. King (1984) proposed "nurses, who have knowledge of the concepts of this Theory of Goal Attainment, are able to perceive what is happening to patients and family members and are able to suggest approaches for coping with the situations" (p. 12).

King developed a documentation system, the goal-oriented nursing record (GONR), to accompany her theory of goal attainment and to record goals and outcomes. The

GONR was a method of collecting data, identifying problems, and implementing and evaluating care found to be effective with patients. Nurses can use the GONR approach to document the effectiveness of nursing care. "The major elements in this record system are: (a) data base, (b) nursing diagnosis, (c) goal list, (d) nursing orders, (e) flow sheets, (f) progress notes, and (g) discharge summary" (King, 1995b, pp. 30–31).

Health care professionals have implemented King's (1981) conceptual system and theory of goal attainment in various national and international practice settings (King, 2006, 2007). This section identifies some settings and references additional settings. King's conceptual system and framework has been used to support nurses and clients engaging in telehealth and virtual care practices (Carroll, 2018, 2020; Clouse et al., 2017; Frazier-Warmack, 2017; Fronczek, 2019; Fronczek & Cowen, 2019; Fronczek & Rouhana, 2018). Improved documentation in electronic health records is also a practice application supported by King's work (Stalians, 2018).

Medication stewardship and medication compliance applications are also found (Carroll, 2019; Chaaban et al., 2019; Panozzo, 2018). Leon-Demare and colleagues (2015) used King's concepts to study the interactions between patients and nurse practitioners in a qualitative study (Leon-Demare et al., 2015). Interestingly, King's transaction process has been used and reported to improve pharmacist-client communication and satisfaction (Wang et al., 2019).

King's framework and theoretical concepts have been applied to caring for clients with chronic conditions that include diabetes (Araújo et al., 2018; Gao et al., 2016; Karota et al., 2020), heart failure (Zhang & Li, 2015), and obesity (Nho & Hwang Eun, 2019; Sapp, 2016).

Batson and Yoder (2012) used the conceptual systems framework and the theory of goal attainment to conduct a concept analysis of managerial coaching within health care organizations to determine what skills and attributes were necessary to establish effective managerial coaching relationships with staff nurses. Ketcham (2013) and Sullivan (2013) applied King's work in emergency nursing. Chaves and colleagues (2007) clarified the use of social system in Brazil. Abraham (2009) explored planned teaching programs in environmental health. D'Souza and colleagues (2011) examined "determinants of reproductive health and related quality of life among Indian women in mining communities" (p. 1963).

Khowaja (2006) described the use of King's conceptual system and theory of goal attainment in the development of a clinical pathway. Lane-Tillerson (2007) emphasized that "the idea of continuous advancement is central to Imogene King's (1981) conceptual framework" (p. 141), imagining nursing practice in 2050. Killeen and King (2007) provided additional support and addressed the use of King's conceptual system with nursing informatics and nursing classification systems for global communications. Clarke and colleagues (2009) described King's influence on nursing science. Bond and colleagues (2011) analyzed the use of King's theory of goal attainment over 5 years of publications. Messmer and Cooper (2011) described the application of King's theory of goal attainment for understanding a pediatric fall prevention and fall injury risk program.

## Education

Nursing faculty at several universities used King's concepts to design nursing curricula, such as Daubenmire and King (1973) at Ohio State University; Gold and colleagues (2000) at Loyola University in Chicago; and Gulitz and King (1988) at the University of South Florida. In 1980, Brown and Lee reported that King's concepts were useful in developing a framework for "use in nursing education, nursing practice, and for generating hypotheses for research … [They] provide a systematic means of viewing the nursing profession, organizing a body of knowledge for nursing, and clarifying nursing as a discipline" (p. 468). Other authors report the use of King's conceptual system to improve educational, simulation, and mentoring strategies in nursing programs and clinical settings (Carmouche, 2017; Fronczek et al., 2017; Gerdes, 2018; Jackson, 2018; McQueen et al., 2017; Smith, 2017; Yancey, 2017, 2018). King's conceptual system and theory have nursing applications internationally described by Rooke (1995b) for Swedish education, Bello (2000) for research with Portuguese undergraduate students, Costa and colleagues (2007) for a model of care for families at risk, and Bist and Tomar (2015) for evaluation of the "effectiveness of self-instructional guidelines on child trafficking in … selected rural schools of Bisrakh, Greater Noida" (p. 34).

## Research

Many researchers have used King's work as a theoretical basis. Nho and Hwang Eun (2019) used King's theory of goal attainment to provide theoretical support for development of a lifestyle modification program focused on interactions and transactions for overweight middle-aged women in Korea. In Bangalore, researchers studied the effectiveness of laugh therapy versus meditation on stress and anxiety of nursing students in a college setting using King's framework as a conceptual model (Devi & Mangaiyarkkarasi, 2019). Heo and Oh (2019) used King's theory to

rent participation in clinical activities in a neo-
sive care unit in South Korea. Perceptions of
by nurses and nursing assistants were studied
ing lens and respect, leadership, and communi-
ween nurse and nursing assistant differed sig-
Enzinger, 2017).

d (2008) incorporated the concept of transac-
search with "nurse practitioners and weight loss
dolescents." Bezerra et al. (2010) used personal
ersonal concepts for research with patients expe-
ypertension. Joseph and colleagues (2011) used
ive phenomenology, with an interview protocol,
e the adoption and movement toward a culture
erson care (WPC). Leon-Demare and colleagues
ed King's theory of goal attainment to describe
ctions between nurse practitioners and patients
mary care setting.

have used King's (1981) conceptual system in
ntitative or qualitative research:

aja (2006) used King's conceptual system and
of goal attainment to develop a clinical pathway.
and colleagues (2009) qualitatively explored "stu-
community health service delivery through the
iences of the involved parties" (p. 33).

e and colleagues (2011) examined the view of
g held by consumers, surgeons, and nurses.

stra and colleagues (2012) qualitatively explored
nts' perceptions of their roles in goal setting in
al cord injury regional rehabilitation program"
2).

a and Connolly (2013) linked emotional intelli-
and nursing practice using King's conceptual
ms model.

archers have developed many middle-range the-
ing King's conceptual system (King, 1978; Sieloff
2007). These theories include Frey's (1995) the-
families, children, and chronic illness; Killeen's
theory of patient satisfaction with professional
care; Sieloff's theory of work team/group power
erment within organizations (2010; Sieloff &
k, 2011; Sieloff & Dunn, 2008); Wicks' theory of
health (Wicks et al., 2007), Doornbos' (2007)
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## FURTHER DEVELOPMENT

Over the years, King consistently demonstrated her belief in the need for further testing of the theory of goal attainment. "Any profession that has as its primary mission the delivery of social services requires continuous research to discover new knowledge that can be applied to improve practice" (King, 1971, p. 112).

In 1995, Fawcett and Whall identified five major areas in which further development of King's work would be helpful. Recent research in these areas is identified here:

1. The concept of environment would benefit from additional definition and clarification (work is progressing as a result of the 2015 KING conference).
2. King's views of illness, health, and wellness would benefit from additional clarification and discussion (Caceres, 2015).
3. Future linkages between King's (1981) conceptual system and other existing middle-range theories should continue in a manner that ensures congruency between the conceptual system and the specific middle-range theory.
4. Empirical testing should continue for the theory of goal attainment (King, 1981) and other middle-range theories developed within King's conceptual system (Fawcett & Whall, 1995) (e.g., Sieloff & Bularzik, 2011; Sieloff & Dunn, 2008).
5. Middle-range theories that are implied rather than explicit, such as those of Rooke (1995b), would benefit from development into formal theories (e.g., Nwinee, 2011).

In 2007, Sieloff and Frey reported the status of middle-range theory development from within King's conceptual system. Fawcett (2007) again examined the development of middle-range theories from within King's conceptual system, and made recommendations. Recent research is again identified in relation to each recommendation:

1. The credibility of King's conceptual system could be further supported through "a meta-analysis or other integrative review of the results obtained from empirical tests of … the middle range theory propositions" (Fawcett, 2007, p. 301).
2. "Additional metatheoretical research is needed to specify the relations between the concepts within the personal, interpersonal, and social systems" (Fawcett, 2007, p. 301).

promote parent participation in clinical activities in a neonatal intensive care unit in South Korea. Perceptions of teamwork by nurses and nursing assistants were studied through a King lens and respect, leadership, and communications between nurse and nursing assistant differed significantly (Enzinger, 2017).

Langford (2008) incorporated the concept of transactions in research with "nurse practitioners and weight loss in obese adolescents." Bezerra et al. (2010) used personal and interpersonal concepts for research with patients experiencing hypertension. Joseph and colleagues (2011) used interpretative phenomenology, with an interview protocol, to examine the adoption and movement toward a culture of whole-person care (WPC). Leon-Demare and colleagues (2015) used King's theory of goal attainment to describe the interactions between nurse practitioners and patients in the primary care setting.

Others have used King's (1981) conceptual system in either quantitative or qualitative research:

- Khowaja (2006) used King's conceptual system and theory of goal attainment to develop a clinical pathway.
- Greeff and colleagues (2009) qualitatively explored "students' community health service delivery through the experiences of the involved parties" (p. 33).
- George and colleagues (2011) examined the view of nursing held by consumers, surgeons, and nurses.
- Draaistra and colleagues (2012) qualitatively explored "patients' perceptions of their roles in goal setting in a spinal cord injury regional rehabilitation program" (p. 22).
- Shanta and Connolly (2013) linked emotional intelligence and nursing practice using King's conceptual systems model.

Researchers have developed many middle-range theories using King's conceptual system (King, 1978; Sieloff & Frey, 2007). These theories include Frey's (1995) theory of families, children, and chronic illness; Killeen's (2007) theory of patient satisfaction with professional nursing care; Sieloff's theory of work team/group power empowerment within organizations (2010; Sieloff & Bularzik, 2011; Sieloff & Dunn, 2008); Wicks' theory of family health (Wicks et al., 2007), Doornbos' (2007) theory of family health; and the advance directive decision-making model of Goodwin and colleagues (2002). Fairfax (2007) derived a theory of quality of life of stroke survivors. Nwinee (2011) used King's work to develop the Nwinee sociobehavioral self-care management nurse model.

Alligood (2010) examined exemplars of King-based research in family health care. Bond and colleagues (2011) conducted a "univariate descriptive analysis of five years' research articles" (p. 404). Caceres (2015) explored the concept of functional health status. Huan and Cao (2012) applied King's theory of goal attainment to care in China.

## FURTHER DEVELOPMENT

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2. "Additional metatheoretical research is needed to specify the relations between the concepts within the personal, interpersonal, and social systems" (Fawcett, 2007, p. 301).

3. Continued empirical testing of all middle-range theories is needed.
4. Additional research instruments need to be developed to measure middle-range theory concepts. The utility of those instruments then needs to be evaluated in terms of their utility for practice (Fawcett, 2007).

Since the previous edition of this text, graduate students continue to use King's conceptual system and theory of goal attainment for their research (Ashgar, 2019; Layton, 2019; Loos, 2019; Moore, 2019; Platt, 2019; Taylor, 2019; Thakral, 2015).

## CRITIQUE

### Clarity

A major strong point of King's conceptual system and theory of goal attainment is the ease with which it can be understood by nurses. Concepts are concretely defined and illustrated.

### Simplicity

King's definitions are clear and conceptually derived from research literature. King's (1978) theory of goal attainment presents 10 major concepts that are easily understood and derived from research literature.

### Generality

King's (1981) theory of goal attainment has been criticized for having limited application in areas of nursing in which patients are unable to interact competently with the nurse. King maintained the broad use of the theory in most nursing situations. In support of King's perspective, health care professionals have documented examples of the application of the theory of goal attainment with patients with diabetes (Maloni, 2007) and surgical patients (Bruns et al., 2009). Wang and Yang (2006) applied King's theory to the care of patients with psychosis. Kameoka and colleagues (2007) tested a proposition of the theory and explored "the characteristics of nurses whose degree of goal attainment and satisfactions in interactions with patients were both high" (p. 261). D'Alessandro (2012) explored the use of a low-dose medication to manage disruptive behaviors with children experiencing autism spectrum disorders. Houston (2015) explored the use of multisensory stimulation environments to reduce negative behaviors in patients experiencing dementia. Thakral (2015) studied pain sensation and persistence in the elderly.

### Accessibility

King gathered empirical data on nurse-patient interaction that led to goal attainment. A descriptive study identified characteristics of transaction as nurses made transactions with patients. King (1981) believed that if nursing students were taught the transactional process in the theory of goal attainment and used it in nursing practice, goal attainment could be measured and evidence of the effectiveness of nursing care demonstrated.

The theory of goal attainment guided Karlin's (2011) intrapartum nurses' perspective of King's theory of goal attainment. Draaistra and colleagues (2012) used King's theory to examine *Patients' perceptions of their roles in goal setting in a spinal cord injury regional rehabilitation program.* Cho's (2013) research focused on the effects of health contracts on patient outcomes with patients experiencing renal dialysis in Korea.

### Importance

King's (1981) theory of goal attainment focused on all aspects of the nursing process: assessment, planning, goal setting, implementation, and evaluation. The body of literature clearly establishes King's work as important for knowledge building in the discipline of nursing.

In the United States and Canada and in many countries of the world, health care professionals continue to use King's conceptual system and theory of goal attainment. Theory-based practice is reported in Asia (Chugh, 2005; Li et al., 2010), Australia (Khowaja, 2006), Brazil (Marziale & de Jesus, 2008), China (Huan & Cao, 2012), India (Abraham, 2009; George et al., 2011), Japan (Kameoka et al., 2007), Korea (Cho, 2013), Portugal (Chaves et al., 2007; Costa et al., 2007; Slovenia (Harih & Pajnkihar, 2009), Sweden (Rooke, 1995a, 1995b), and West Africa (Nwinee, 2011).

## SUMMARY

Imogene King contributed to the advancement of nursing knowledge through the development of her conceptual system and theory of goal attainment. By focusing on the attainment of goals, or outcomes, in nurse-patient partnerships, King provided a conceptual system and theory that has demonstrated its usefulness to nurses. Nurses working with patients around the world continue to use King's work to improve the quality of patient care.

## E STUDY

arner, RN, a community-based organization nurse, fol-lients in the recovery phase of treatment for substance sorders in rural areas. Nurse Warner's new client is Pa-O'Hara, who was recently discharged from an in-pa-reatment facility. Ms. O'Hara had multiple in-patient nent admissions in the past 2 years. Ms. O'Hara lives ery rural area of New York where follow-up care is not accessed due to travel and lack of providers. Ms. a repeatedly misses or a no-show for appointments. discharge plan, Ms. O'Hara was connected to Nurse er who is able to conduct remote follow-up visits us-deo visits and telehealth. Ms. O'Hara consented to ing care through telehealth, asserting that she has le access to the Internet.

ng their first encounter, Nurse Warner asks Ms. a of first days since discharge from the facility and ptions on current situation. Ms. O'Hara expressed rns about previous discharges and feelings of stigma ntered with most health care providers. Nurse War-lt as though they were predicting Ms. O'Hara would relapse, so she did. Ms. O'Hara feels embarrassed and ashamed of herself when experiencing a relapse. Nurse Warner provides nonjudgmental "listening ears," thinking about his own preconceived notions and biases toward Ms. O'Hara's story, recognizing his own perceptions.

Nurse Warner asks Ms. O'Hara about goals for this time in recovery. Ms. O'Hara is unsure of what to expect this time, but discussed two goals. The first goal was to maintain, keeping a relationship with a health care provider. Ms. O'Hara believes using video conferencing and telehealth will help keep appointments; no need to access transportation getting to and from appointments. Nurse Warner and Ms. O'Hara negotiate the follow-up appointment times, discussing options for transportation if needed to attend in-person follow-up appointments. The second goal for Ms. O'Hara is to learn how to manage feelings when facing stigma by family. Nurse Warner will provide strategies at follow-up appointments, reaffirming Ms. O'Hara can call Nurse Warner any time should a need arise.

## RITICAL THINKING ACTIVITIES

lyze an interaction you recently had with a patient. Was nsaction achieved? If so, identify why you were success-if not, consider what you might have done differently.

s your health care agency's philosophy encourage lvement of patients in their care? If so, does mutual l setting occur?

3. Use King's theory of goal attainment to illustrate how and why you involve patients in their care.
4. Analyze the action, reaction, and interaction in the goal-setting process in your own practice.

## OINTS FOR FURTHER STUDY

### tions

ather, M. (2014). King's conceptual system and ry of goal attainment in nursing practice. In M. R. good (Ed.), *Nursing theory: Utilization & application* ed., pp. 160–180). St. Louis: Mosby-Elsevier.

g, I. M. (1996). The theory of goal attainment in research practice. *Nursing Science Quarterly, 9*(2), 61–66.

g, I. M. (1997). King's theory of goal attainment in ctice. *Nursing Science Quarterly, 70*(4), 180–185.

g, I. M. (1999). A theory of goal attainment: Philo-hical and ethical implications. *Nursing Science Quar-y, 12*(4), 292–296.

### es

ogene King at http://nursing-theory.org/nursing eorists/Imogene-King.php

- Imogene King's Theory of Goal Attainment at http://currentnursing.com/nursing_theory/goal_attainment_theory.html
- King's Conceptual System at https://nursology.net/nurse-theorists-and-their-work/kings-conceptual-system/
- King International Nursing Group at http://king.clubex-press.com

### Videos

- *Imogene King Nursing Theorist: Portraits of Excellence.* Fitne, Inc., Athens, OH.

## CASE STUDY

Jay Warner, RN, a community-based organization nurse, follows clients in the recovery phase of treatment for substance use disorders in rural areas. Nurse Warner's new client is Patricia O'Hara, who was recently discharged from an in-patient treatment facility. Ms. O'Hara had multiple in-patient treatment admissions in the past 2 years. Ms. O'Hara lives in a very rural area of New York where follow-up care is not easily accessed due to travel and lack of providers. Ms. O'Hara repeatedly misses or a no-show for appointments. In the discharge plan, Ms. O'Hara was connected to Nurse Warner who is able to conduct remote follow-up visits using video visits and telehealth. Ms. O'Hara consented to receiving care through telehealth, asserting that she has reliable access to the Internet.

During their first encounter, Nurse Warner asks Ms. O'Hara of first days since discharge from the facility and perceptions on current situation. Ms. O'Hara expressed concerns about previous discharges and feelings of stigma encountered with most health care providers. Nurse Warner felt as though they were predicting Ms. O'Hara would relapse, so she did. Ms. O'Hara feels embarrassed and ashamed of herself when experiencing a relapse. Nurse Warner provides nonjudgmental "listening ears," thinking about his own preconceived notions and biases toward Ms. O'Hara's story, recognizing his own perceptions.

Nurse Warner asks Ms. O'Hara about goals for this time in recovery. Ms. O'Hara is unsure of what to expect this time, but discussed two goals. The first goal was to maintain, keeping a relationship with a health care provider. Ms. O'Hara believes using video conferencing and telehealth will help keep appointments; no need to access transportation getting to and from appointments. Nurse Warner and Ms. O'Hara negotiate the follow-up appointment times, discussing options for transportation if needed to attend in-person follow-up appointments. The second goal for Ms. O'Hara is to learn how to manage feelings when facing stigma by family. Nurse Warner will provide strategies at follow-up appointments, reaffirming Ms. O'Hara can call Nurse Warner any time should a need arise.

## CRITICAL THINKING ACTIVITIES

1. Analyze an interaction you recently had with a patient. Was a transaction achieved? If so, identify why you were successful; if not, consider what you might have done differently.
2. Does your health care agency's philosophy encourage involvement of patients in their care? If so, does mutual goal setting occur?
3. Use King's theory of goal attainment to illustrate how and why you involve patients in their care.
4. Analyze the action, reaction, and interaction in the goal-setting process in your own practice.

## POINTS FOR FURTHER STUDY

### Publications

- Gunther, M. (2014). King's conceptual system and theory of goal attainment in nursing practice. In M. R. Alligood (Ed.), *Nursing theory: Utilization & application* (5th ed., pp. 160–180). St. Louis: Mosby-Elsevier.
- King, I. M. (1996). The theory of goal attainment in research and practice. *Nursing Science Quarterly, 9*(2), 61–66.
- King, I. M. (1997). King's theory of goal attainment in practice. *Nursing Science Quarterly, 70*(4), 180–185.
- King, I. M. (1999). A theory of goal attainment: Philosophical and ethical implications. *Nursing Science Quarterly, 12*(4), 292–296.

### Websites

- Imogene King at http://nursing-theory.org/nursing-theorists/Imogene-King.php
- Imogene King's Theory of Goal Attainment at http://currentnursing.com/nursing_theory/goal_attainment_theory.html
- King's Conceptual System at https://nursology.net/nurse-theorists-and-their-work/kings-conceptual-system/
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