Conceptualizations of self-care: Toward health-oriented models

Several conceptual orientations have been proposed for understanding self-care, but their impact on the self-care research literature has been limited. Empirical work about self-care reflects several perspectives of health: clinical, role performance, adaptive and eudaemonistic. These perspectives of health have shaped the research methods and our knowledge about self-care. Linking self-care explicitly to a perspective of health can help delineate more clearly the nature of self-care, its consequences, and areas deserving further study.

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SELF-CARE seems, upon first consideration, to be a straightforward and simple topic. After all, self-care has been a part of family life since the earliest documented civilizations. People have always assumed responsibility for their personal safety and for the well-being of the group or family within which they lived. Moreover, they have taken measures, however primitive they might seem to us, to deal with illness. And yet serious attention has been devoted to the topic of self-care by people from many disciplines.

The purposes of this article are to analyze the major conceptual orientations underlying empirical work published on self-care since 1980; to link the conceptual orientations to health underlying the self-care literature to research approaches and the nature of research findings; and to suggest how contemporary conceptualizations of self-care may facilitate or limit understanding of the relationship of self-care to health. For the purposes of this discussion, a broad

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definition of self-care has been adopted, which includes a person's attempts to promote optimal health, prevent illness, detect symptoms at an early date, and manage chronic illness. Self-care may also include processes of self-monitoring and assessment; symptom perception and labelling; evaluation of severity; and evaluation and selection of treatment alternatives, such as self-help, lay helping resources, or formal health services.

MAJOR CONCEPTUALIZATIONS OF SELF-CARE

Nursing perspectives

Although research about self-care in the health sciences began proliferating during the 1970s and persists throughout the 1980s, many earlier works address the subject. For example, self-care has a long tradition in the nursing literature. Florence Nightingale[1] wrote *Notes on Nursing: What It Is and What It Is Not* as a manual for teaching nurses how to nurse as well as a vehicle with which to help millions of women to think about how to nurse their families. Her observations of bedside care of the sick as well as her thoughts about the care of the well began with the intent of giving suggestions for thought to women who were charged with the health of others.[1] Nightingale believed that "Every woman, or at least almost every woman, in England has, at one time or another of her life, charge of the personal health of somebody, whether child or invalid, in other words, every woman is a nurse."[1(p3)] Nightingale believed that nursing ought to signify "the proper use of fresh air, light, warmth, cleanliness, quiet, and the proper selection and administration of diet—all at the least expense of vital power to the patient."[1(p8)] Moreover, she asserted that the elements of good nursing for the well were similar to those for the sick. "The same laws of health or of nursing, for they are in reality the same, obtain among the well as among the sick. The breaking of them produces only a less violent consequence among the former than among the latter—and this sometimes, not always."[1(p9)] Nightingale outlined guidelines of nursing care and women's caretaking for their families that reflected the sanitary conditions prevalent in Victorian England: adequate ventilation and warming, hygiene of houses, petty (household) management, noise control, variety of stimulation, nutrition, care of bed and bedding, control of light, cleanliness of rooms and walls, personal cleanliness, interpersonal interaction with the sick (avoiding "chattering hopes and advices"), and observation of the sick. Despite Nightingale's early work, little reference to the concept of self-care appeared in the nursing literature again until the 1960s.

Over the last two decades Dorothea Orem[2-4] has proposed a theory of nursing that, like Nightingale's, differentiated the professional and lay roles in self-care. Indeed, Orem defined self-care as the "practice of activities that individuals personally initiate and perform on their own behalf in maintaining life, health and well-being."[2(p13)] She extended her focus to others as well, saying that "care of others is a contribution to the health and well-being of dependent members of the adult's social group," but labelled this activity as dependent care. Orem[3] proposed that human

beings require three types of self-care: universal, developmental, and health-deviation self-care. Universal self-care, which is common to all human beings during all stages of life, is associated with life processes and with maintenance of the integrity of human structures, functions, and general well-being. Universal self-care requisites include maintenance of a sufficient intake of air, water, and food; maintenance of elimination; a balance between rest and activity and between solitude and social interaction; avoidance of hazards to life, functioning, and well-being; and promotion of human functioning and development within social groups. Developmental self-care requisites are associated with human developmental processes and conditions and events that occur during various stages of the life cycle, including those that can adversely affect development. Developmental self-care includes bringing about and maintaining living conditions that support life processes and promote processes of development. It also includes provision of care to prevent the occurrence of deleterious effects of conditions affecting human development or to mitigate or overcome the effects of such conditions as educational deprivation or oppressive living conditions.[4] The need for health-deviation self-care arises from genetic and constitutional defects and human structural and functional deviations and their effects, as well as from associated medical diagnostic and treatment measures. Health-deviation self-care requisites include:

- seeking and securing appropriate medical assistance;
- being aware of and attending to effects of pathologic conditions and states;
- carrying out medically prescribed diagnostic, therapeutic, and rehabilitative measures;
- being aware of and attending to or regulating the uncomfortable or deleterious effects of medical care measures;
- modifying the self-concept (ie, accepting oneself in a particular state of health); and
- learning to accommodate the effects of pathological conditions and of diagnostic and treatment measures within a life style that promotes personal development.[4]

Orem[2] also introduced the concept of self-care agency, which reflects the individual's ability to provide the self-care requisites. Agency includes decisions about self-care as well as the actions required to accomplish self-care. Orem linked self-care requisites, self-care agency, and self-care deficits to three types of nursing systems: those that are wholly compensatory, those that are partly compensatory, and supportive–educative systems. The first and second approaches to nursing replace the individual's self-care agency in whole or in part, whereas the latter approach promotes the exercise and development of self-care agency.[4]

Social and behavioral science perspectives

In addition to nurse scientists, social and behavioral scientists have proposed models that have guided investigations of help seeking for illness, but few have used the term "self-care" in their work. The roots of this tradition can be traced to Mechanic's[5] writings about illness behavior, a concept that Mechanic used to refer to processes employed by people when they experience

symptoms: People perceive, evaluate, and respond to symptoms in ways that reflect sociocultural patterns and the stresses and strains in their own lives. A wide array of possible responses to illness includes discretionary inaction, the use of medications, seeking professional care, and using the lay network. The type of illness behavior demonstrated is influenced by the visibility and importance of the symptoms, by the perceived seriousness of the situation, by the degree of discomfort caused by the symptoms, by the tolerance threshold of the symptomatic individual, by his or her interpretation of the symptoms, and by the availability and accessibility of treatment resources.[6]

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A second model guiding the self-care literature is the health belief model, which focuses on the prevention of disease. The model originally proposed by Hochbaum[7] and Rosenstock[8,9] and later modified by Becker et al[10] links individuals' perceptions about their susceptibility to disease and about the seriousness of the disease to their perception of threat. One's perception of the threat represented by a disease is influenced by cues to action and modifying factors such as age, social class, and knowledge about the disease. Both the perceived threat of the disease and the ratio of perceived benefits of preventive action to perceived barriers to taking action influence the likelihood that one will take recommended preventive action.

Recently Pender[11] proposed a model to explain health-promoting behavior. Whereas the health belief model accounts for taking action to prevent disease, the health promotion model accounts for behavior directed toward increasing the well-being and self-actualization of an individual or group. Pender based the health promotion model on social learning theory, which emphasizes the importance of cognition in the regulation of behavior. She proposed that the likelihood of engaging in health-promoting behavior is influenced by such cognitive–perceptual factors as the perceived importance of health, perceived control of health, perceived self-efficacy, the definition of health, perceived health status, and the perceived benefits of and barriers to health-promoting behaviors, in combination with such modifying factors as demographic characteristics, biologic characteristics, interpersonal influences, situational factors, and behavioral factors.

Despite the rich theoretical heritage contained in the works just cited, none has had a major influence on the development of research on self-care. At best, their influence has been limited to narrow areas of inquiry. Orem's work clarified the types of situations requiring self-care and specified the requisites for universal, developmental, and health-deviation self-care. Those working with her conceptualization of self-care have begun efforts to measure self-care agency among children,[12,13] adolescents,[14] and adults[15,16]; to modify self-care attitudes[17]; to assess self-care patterns in response to health deviations[15,18]; and to promote children's self-care agency.[12,13] To

date, however, Orem's concepts have not been linked to health outcomes in a way that illuminates the processes by which self-care influences health.

The work by Mechanic, Hochbaum, Rosenstock, Becker et al, and Pender has guided investigations about illness behavior, disease prevention, and health promotion actions. Common to each of these perspectives is an orientation toward action: Individuals perceive, evaluate, and respond to symptoms; take preventive action; or adopt health promotion activities. However, these models, like Orem's, stop short of accounting for the effects of self-care activities on health, often due to a focus on behavioral change as an end point. Moreover, these models do not encompass much of the published work on self-care, such as that related to stress management, self-management, and adaptations in activities of daily living to accommodate physical challenges.

TOWARD HEALTH-ORIENTED MODELS OF SELF-CARE

In order to characterize more fully the conceptual orientations in the published self-care literature, it is necessary to introduce the concept of health to the discussion. Smith[19] has identified four models of health: clinical, role performance, adaptation, and eudaemonistic (see Table 1). The eudaemonistic model of health emphasizes exuberant well-being and ability to actualize the self, whereas the adaptation model defines health as flexible adjustment to the environment, including the ability to cope with stressful events. The role performance model emphasizes health as the performance of one's socially defined roles, or the ability to engage in activities of daily living at an expected level. The clinical model emphasizes health as the absence of disease, symptoms, or bad feelings as well as the absence of need for medical care. After each of these visions of health has been examined, a framework intended to account more fully for the existing self-care literature and to identify areas requiring further investigation will be proposed.

Clinical models

Most of the existing self-care literature reflects a clinical view of health, with an emphasis on illness-related behavior, health-deviation self-care requirements, and the prevention and early detection of disease. The purpose is to determine what people do in response to symptoms or illness. Self-care strategies being studied include symptom perception; monitoring, evaluation, and response to symptoms, including use of prescription and nonprescription medications; and the use of lay consultation and formal health services. Typical behaviors of interest are self-diagnosis (eg, the use of self-monitoring technology to complement or substitute for professional diagnosis); symptom monitoring; self-referral; and self-treatment, often with prescription medication. Outcomes in this body of literature include statistics related to mortality, morbidity, health services use, and cost.

Examples of research emphasizing the clinical model of health include studies of how people respond to symptoms.[20–27] From this literature we have learned that people respond to acute and chronic symptoms

Table 1. Relationships among models of health, conceptual orientations, self-care strategies, and outcomes in self-care

Model of health	Conceptual orientations	Self-care strategies	Outcomes
Clinical	Illness behavior Health-deviation self-care requirements Early detection of illness	Symptom perception and monitoring, evaluation, and response, including discretionary nonaction, use of prescription and nonprescription medication, lay consultation, and formal health services	Morbidity Mortality Use of health services Cost of health care
Role performance	Universal self-care requirements Developmental self-care requirements	Normalizing strategies Rehabilitation programs to promote performance of activities of daily living	Role performance Functional capacity in activities of daily living/independence *v* requirement for assistance
Adaptive	Models for coping with stress Self-management	Stress management programs Self-management programs	Behavioral change Stress-related symptoms Self-efficacy
Eudaemonistic	Health promotion models	Health promotion programs	Well-being, harmony, fitness

differently, with care for acute problems depending mostly on the nature of the symptoms and care for chronic symptoms depending on strategies of care that are devised over an extended period of time.[25] Moreover, responses to symptoms are correlated not only with the nature of the symptom[18,25] but with the person's social roles and context.[28] People respond to symptoms with a rich repertoire of nonmedical behaviors, such as relaxation or listening to music.[22] Experts have judged self-care responses to symptoms to be appropriate or harmless in most cases, with the use of leftover prescription medicine being their most frequent cause for concern.[26]

Investigators working in this tradition have also studied the responses of individuals with particular diseases or health problems. For example, researchers have focused on responses to nausea during the first trimester of pregnancy,[24] on behavioral responses to the perception of hypoglycemic symptoms,[27] on the use of symptoms by schizophrenics to monitor and regulate their behavior or seek treatment,[29] and on self-care for symptoms associated with multiple sclerosis.[23] From work such as this we have

learned that responses to symptoms often reflect the individual's experience, as novice or expert, with an illness.

Research oriented toward the clinical model of health has also included efforts to promote self-care. Although some investigators have emphasized adherence to a medical regimen,[30–32] others have emphasized education as a means to promote development of the individual's own unique self-care strategies. Some have evaluated the effects of training elders in clinical medicine, life-style modification, and the use of health services[33]; of providing proactive information on self-care to patients receiving radiation therapy[34]; and of training preschool and school-age children to cope with asthma.[35,36]

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Another rapidly growing research focus is self-diagnosis, stimulated by the increasing transfer of technology from health professionals to the public. Devices designed for self-diagnosis include blood glucose measurement, pregnancy testing, blood pressure monitoring, ovulation detection, and tonometry. Despite the rapid proliferation of these products, researchers have managed to evaluate their accuracy and effectiveness in the hands of the intended users, offering cautions as well as reassurances of the devices' value. Moreover, there remains an interest in self-diagnostic skills such as pregnancy detection[37] and self-examination for early detection of breast cancer.[38,39] Optimal strategies for promoting breast self-examination have not been discovered.[40,41]

Role performance model

The role performance model of health, which is also pervasive in the self-care literature, emphasizes universal and developmental self-care requirements. Self-care strategies include the use of rehabilitation techniques to facilitate independent participation in activities of daily living by persons with long-term health challenges (eg, spinal cord injury) and normalizing strategies for persons with chronic illness. The most common outcomes in this model are a demonstrated need for assistance with activities of daily living and a demonstrated ability to perform one's usual roles. Research in this model has included studies designed to determine the functional independence of persons with various degrees of spinal cord injury, such as quadriplegia,[42] and the self-care ability of patients with Alzheimer's disease.[43,44] Published work has revealed that despite dramatic physical and mental limitations, individuals with quadriplegia and Alzheimer's disease demonstrate a wide range of self-care ability. An investigation of reasons for the decrease in elderly patients' self-care capabilities during hospitalization implicated both the restrictions inherent in the physical structure of the hospital and the ways in which health professionals approached patients.[45] Other investigators have described processes that people use to ensure their role performance despite minor health problems or natural variations in their health. For example, Patterson and Hale[46] described a process that

they labelled "making sure" to characterize women's practices for managing menstrual flow so that it would not interfere with daily living. Finally, role performance investigators have developed several instruments to measure one's capacity for performing activities of daily living. Gulick[15] demonstrated the importance of motor function, intimacy, sensory function and communication, and recreation and socializing to individuals living with multiple sclerosis.

Adaptation model

There is a growing body of literature addressing health as adaptation. Here the focus is determining how people cope and adapt to stressful life situations, including illness. Self-care strategies include stress management and self-management, with related outcomes such as behavioral change, improvement of stress-related symptoms and in other dimensions of health, and self-efficacy. Examples of research in this area include descriptions of self-management strategies for hemodialysis,[47] for pregnancy complicated by a chronic illness,[48] and for job stress.[49] Results of one study indicate that hemodialysis patients use strategies such as equalizing, substituting, withdrawing, and guarding in order to adapt to the challenges of their disease and treatment.[47] Similarly, women adjusting to a pregnancy complicated by chronic illness engage in protective behaviors that include assessing the risk level in response to information about the illness and pregnancy, balancing management options, and controlling the treatment so as to maximize health outcomes for themselves and their unborn infants.[48] Hutchinson[49] found that nurses in stressful work environments managed by acting assertively, cultivating good will, using catharsis, withdrawing, and employing humor.

In addition to describing strategies to manage the stresses of illness or life stress, investigators have also tested approaches designed to foster self-management skills. Kogan and Betrus[50] found that a self-management program produced persistent positive health gains for patients with a variety of stress disorders. Several investigators have tested self-management programs with chronically ill individuals. Maes and Schlosser[51] found that a cognitive–educational intervention program reduced the preoccupation of patients with their asthma, decreased their emotional distress in daily life, and reduced their requirement for corticosteroids. Others have tested programs for adults and children that emphasize acquisition and application of asthma self-management skills and outcomes, such as management of attacks, adherence to medication regimens, and self-efficacy.[52–54] Kirschenbaum et al[54] developed and tested a five-step cognitive–behavioral strategy to improve the degree of self-directed hemodialysis. They found that the program, which consisted of information, decision-making counseling, behavioral contracting, self-monitoring, and staff support for problem solving, rapidly improved self-directedness for elderly patients who remained healthy throughout the study period. Larsson et al[55] found that adolescents with chronic headaches responded as well to a self-help approach as they did to therapist-assisted relaxation training, and that they maintained treatment effects five months later.

Eudaemonistic model

Research that reflects a eudaemonistic model of health focuses on promotion of optimal health, including self-actualization. Self-care strategies include involvement in health promotion or wellness activities. Outcomes include feelings of well-being, harmony, and peace as well as fitness. Research in this area represents the newest work on self-care. Indeed, there is some debate about whether health promotion activities lie in the domain of self-care or in the domain of professional–client relationships. Research in this area of self-care has included an exploration of the effects of health beliefs, values, and demographic characteristics on the health promotion activities of individuals attending a nursing clinic. Muhlenkamp et al[56] found that the value assigned to health had no effect on health promotion activities but that belief in chance was negatively associated with health promotion activities. Moore[13] explored the effects of self-care training on the autonomy of school children. Pender and associates are currently testing a two-stage model for acquisition and maintenance of health promotion behavior with young and middle-aged adults, older adults, ambulatory cancer patients, and cardiac rehabilitation clients. Preliminary findings indicate that all of the cognitive–perceptual factors in the model except "importance of health" contribute to a health-promoting life style, but that significant factors differ across the populations.[11] There may in fact be population-specific models and even health behavior–specific models.

For the most part, the published professional literature has imposed a clinical perspective on self-care as a response to illness or symptoms. The role performance perspective of health has persisted, led largely by researchers in the area of rehabilitation, whose work has demonstrated dramatic variability in people's functional capacities despite serious physical challenges to their role performance. There has been a proliferation of self-care literature reflecting an adaptive view of health: Self-management concepts and techniques have found their way from the behavioral sciences to the self-care literature, thus mirroring the dissemination of this information via the popular press. At this point, however, there is only a slight link between the eudaemonistic view of health and self-care. Although this may reflect the slow growth of health promotion research (compared to the emphasis on disease prevention and cure) in the health sciences literature, it also reflects the current controversy over whether health promotion constitutes self-care or professional care and the difficulty of studying health from a eudaemonistic perspective.

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CONCEPTUALIZATIONS OF HEALTH AND SELF-CARE RESEARCH

Conceptualizations of health have had a profound influence on the research aims and

methods reflected in the professional literature on self-care: They have shaped the concepts studied as well as the methods used to study them. For example, while the clinical-model literature emphasizes concepts such as compliance, adherence, therapeutic alliance, and self-diagnosis, the adaptation-model literature emphasizes self-management and self-efficacy. It is not surprising that the research methods used vary widely. Researchers studying self-care from a clinical perspective use interviews, questionnaires, and health diaries to obtain data about symptom experiences, the use of health services, self-medication, and other approaches to dealing with symptoms. Those studying self-care from a role performance perspective often employ direct assessment of functional capacity in activities of daily living. Investigators who study self-care from an adaptation perspective favor methods that will reflect life-style change or alterations in behavioral patterns, using measurements obtained over time via diaries, questionnaires, or interviews. Finally, those who approach the study of self-care from a eudaemonistic perspective face the challenge of measuring highly abstract outcomes such as well-being and harmony, not merely the adoption of health promotion behaviors. It is noteworthy that methods used in the clinical-model literature tend to emphasize discrete, quantifiable activities, such as the use of a medication or a trip to the physician, whereas methods employed in the adaptation and eudaemonistic models literature emphasize processes that foster health.

A final observation about the self-care research reviewed here is that nearly all of the literature emphasizes the individual as the unit of analysis, despite the importance of the family and community in self-care. The health models that will be proposed to guide future self-care research need not limit the unit of study to the individual, however, but should be applicable to families and communities as well.

FUTURE CHALLENGES: LINKING SELF-CARE TO HEALTH

A final challenge is to explore how the current conceptualizations of health facilitate or limit our understanding of self-care. Although it may seem to be self-evident that self-care is related to health, it is astonishing that none of the models of illness behavior, health behavior, or health promotion has included health as an outcome. Moreover, few of the self-care studies cited earlier contained specific measures of one or more dimensions of health as they were (or were not) affected by the self-care strategy being studied. This lack of attention to health outcomes renders debate about the benefits or hazards of self-care moot. Until we have some evidence linking self-care practices to health, we cannot assume that helping oneself is beneficial (apart from such issues as reduced health services use and cost savings). At the same time, there is little if any evidence to suggest that medication overuse, misuse of drugs and devices, and neglect of serious symptoms are occurring. What is missing is evidence that self-care practices have any effect on health at all. Obtaining such evidence should be the highest priority of future work on self-care.

Our future research agenda should also include attention to self-care practices from the perspectives of all health models. Self-

care studies within the clinical model of health can contribute to our understanding of what people can do to help themselves during times of illness and the extent to which their agency complements or necessitates professional support. Limiting consideration of self-care approaches to those that have been in the province of medicine, nursing, or other health professions, however, will add nothing to our understanding of self-help strategies that lie outside the province of traditional healing. Research on self-care from the role perspective has already extended our understanding of the capacity for role performance despite profound limitations imposed by disease or injury. Work in this tradition can enlighten us further about the processes of recovery and about self-care challenges that may be amenable to social and technological innovations. Work being conducted from the adaptation perspective has informed us about ways in which people deal with the challenges of illness or restricted daily living. Further work in this area can expand our understanding of the extent to which humans can apply self-regulation strategies to modify their health status. Research about self-care to promote health within the eudaemonistic model is in its infancy, but this line of work may lead us to a new understanding of the meaning and boundaries of health and self-care. Whereas research shaped by a single model would limit our understanding of the links between self-care and health, a pluralistic view of health and self-care can provide a broader understanding of how humans care for themselves and with what consequences. Finally, as family caregiving becomes more prevalent in our society, it is essential that our understanding of self-care be broadened to include the family and community as agents of self-care, and not merely as the context in which self-care activities are performed.

Although several conceptual orientations have been proposed to facilitate understanding of self-care, their impact on the self-care research literature has been limited. Empirical work related to self-care spans that, reflecting clinical, role performance, adaptive, and eudaemonistic perspectives of health. Self-management and health promotion models complement the models of illness behavior and self-care posited by Mechanic and Orem, respectively. The various conceptualizations of health have shaped research methods and our knowledge about self-care and its consequences for health. Linking self-care explicitly to a model of health provides a unifying framework within which investigators can delineate more clearly the nature of self-care, its consequences, and areas deserving further investigation.

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