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Linking Theory and Gerontological Nursing Practice in Senior Housing

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This article illustrates the use of 2 theoretical models in planning and implementing health programs in senior housing. The Person-Environment Fit Model, developed by Lawton, and the Transitions Theory, developed by Meleis and colleagues, form the basis for understanding the interaction between people and their environments through transitions common in late life. The models and their application to practice are described, with examples at the individual, group, and community levels. Implications and future directions are identified for the use of such models in gerontological nursing practice. (Geriatr Nurs 2006;27:346-354)

Community health nursing in retirement communities and assisted living is a growing area of practice, yet guidelines for this setting are not well established. As a hybrid of health and social services, retirement communities offer a range of programs designed to promote the health, well-being, and social functioning of residents. Nurses in retirement communities typically focus on assessment of prospective residents, health monitoring and maintenance, and health education. As members of diverse teams, including nonclinical and unskilled staff, registered nurses in retirement communities are commonly responsible for interpreting the significance of health and functional status to staff, residents, and families.

Community health nursing in these settings requires a programmatic approach because care often involves multiple levels of service to clients across a range of ability, many of whom are in dynamic change over time with their health-illness trajectories. Services in this setting address both health concerns and issues of daily living, such as meals, activities, social engagement, so models must include all these aspects. There are a wide range of issues related to instrumental and basic daily functioning of community residents with services being designed to augment and support abilities. Community health nurses play several critical roles in retirement communities: advocate (for clients unable or unwilling to self-advocate); educator (to promote self-advocacy); mediator or negotiator (with clients, families, staff, groups, community, and the system); consultant (on identification of issues of concern, setting goals, and developing plans); encourager and promoter (for wellness and health); supervisor (of other caregivers and staff) and case manager.

The majority of staff in retirement communities is unskilled and can benefit from simple, straightforward organizing models for service delivery. Nurses need to be able to interpret, delegate, and work with many paid and unpaid assistive caregivers in such service models. Nurses are in a position to provide critical leadership in the design, management, and evaluation of senior housing health and wellness programs.

An effective community health program has to reflect an understanding of individual experiences as well as recognition of aggregate issues and the role of the environment (physical, social, financial) in supporting healthy aging. This article describes a systematic, programmatic, and novel approach to integrating theory in senior housing through community health nursing practice. Two theories informed the practice model: Person-Environment Fit, adapted from the work of Lawton and Transitions theory, developed by Meleis and colleagues. These models were used as the organizing framework for program design and clinical practice and provided a readily understood approach to providing services at the individual, group, and community levels. The first model, Person-Environment Fit, focuses on the relationship of the person to the environment, providing insight into person and environmental factors that influence health outcomes. The second model,
Transitions Theory, focuses on the ways individuals understand and react to transitions in their lives. These 2 models were selected to be used in combination to capture both the relationship of the person to the environment and to acknowledge and address intrapersonal processes of adjusting to transitions in late life.

The Models

The Person-Environment Fit Model

Lawton\(^4\) developed an interactionist behavioral model of adaptation, Person-Environment Fit, hereafter referred to as the P-E Fit Model. In this model, behavior is considered a function of personal competence, environmental press, and the product of these 2 terms. Figure 1 provides a graphic depiction of this model. Personal competence includes biological health, sensory perceptual capacity, motor skills, cognitive capacity, and ego strength. The environment is conceptualized normatively at 4 levels: personal (close social ties), suprapersonal (modal characteristics of people in the environment), social (e.g., values, norms, culture), and physical. Both the objective demands/resources of the environment and the subjective evaluation of environmental demands/resources are included in this model of adaptation. Moreover, the model assumes that adaptation can originate in either the person or the environment.

Figure 1 depicts P-E Fit as a band in which personal competence and environmental demands intersect. Persons with lower personal competence are best matched with environments that place fewer demands on them and provide more support, such as a skilled nursing environment. In contrast, individuals with high personal competence seek and flourish in environments that pose demands and provide more opportunities, such as living independently in one’s home in the community.

Adaptation level is the state of balance between the level of external stimulation (press) and the sensitivity of the person’s sensory, perceptual, and cognitive state (competence). Fit, or positive adaptation, is defined as the optimal balance between personal competence and environmental press. The lower the competence, the lower the press must be to maintain a steady state. Although mild deviations are affectively pleasing, extremes in environmental demands/resources or in personal competence can result in negative affect and maladaptive behavior. The behavioral responses in turn affect health and well-being.

Previous Use of the Person-Environment Fit Model. The P-E Fit Model was first developed in gerontological research exploring responses of individuals in congregate housing.\(^10,11\) Positive adaptation was defined as the optimal fit between the competence of the individual and the demands and opportunities of the environment. Research using the model demonstrated that congregate environments can promote better function by providing appropriate social and instrumental supports to older adults. Lawton’s work in environmental gerontology using the Ecological Theory of Aging (on which the P-E Fit Model is based) has been applied in a variety of disciplines.\(^11\) Scheidt and Norris-Baker\(^12\) reviewed the theory as both a theoretical and practical tool, contributing to understanding multiple meanings of communities at physical, personal, and social environmental levels as contexts for successful aging. Calkins\(^10\) summarized research that supports Lawton’s conception that environmental support and optimization benefit vulnerable older adults. Several European studies have examined the relationships among functional ability, aspects of the physical environment, and accessibility, using the Lawton model as a theoretical framework.\(^13-15\) Iwarsson and colleagues\(^15\) have developed instruments measuring P-E fit in the
context of physical housing and conducted longitudinal studies examining the dynamics of change over time in both personal competence and features of the home environment.

Transition Theory

A transition has occurred when assumptions about oneself or the world are challenged and established behavior patterns are no longer adequate for the demands of the situation. A key feature of Schlossberg’s definition of transition is the subjective recognition of change; that is, a transition is in process when the person’s perception is that of change. A variety of experiences, of both intrapersonal and environmental origin, can precipitate a transition. Common transitions in late life include relocation, changes in health or function, loss of relationships, and role changes. Any of these transitions can precipitate or trigger additional transitions. For example, a change in ability to care for self can lead to relocation, or relocation can lead to disorientation and changes in cognition.

Chick and Meleis suggested that the concept of transition elucidates the person-environment interaction, and as such is of potential use to nursing practice and research. As both humans and contexts evolve, there is an ongoing process of adaptation to personal and environmental change. It is possible for a given transition to comprise both situational and developmental change. For example, elements of situational change are possible in relocation to senior housing because of new social norms and expected behaviors and alterations in relationships with others due to physical distance or social barriers. At the same time, relocation can be thought of as a catalyst for personal development or as a normative expectation of late life. “A transition is precipitated by a significant marker event or turning point that requires new patterns of response” (p. 2). Transition Theory incorporates the complexity of personal and contextual aspects of transition, including the nature of transitions, conditions that facilitate or inhibit, and patterns of response to transitions.

Previous Use of Transition Theory. The power of Transition Theory in understanding and intervening among older adults is illustrated by Schumacher, Jones, and Meleis in a description of the application of this theory to the older population. In this application, Transition Theory provides a framework for nursing practice and research in aging, a process with a sense of flow over time. Characteristics and process indicators of healthy transitions were identified, including defining meaning, modifying expectations, restructuring life routines, developing new knowledge and skills, maintaining continuity, creating new choices, and finding opportunities for growth. Nursing therapeutics that facilitate smooth transitions for older adults were suggested; these include reminiscence, role supplementation, creation of healthy environments, and mobilization of resources. The theory reflects the values of continuity, resident and family centeredness, holism and wellness; provides direction for nursing assessment and nursing therapeutics in practice; and suggests interesting avenues for nursing research such as exploring relationships between patterns of transitions and effective nursing interventions.

The Setting

Development of a theory-based community health practice occurred within a collaboration between a school of nursing and a local senior housing company, designed to promote healthy aging and to foster excellence in gerontological practice, education, and research. In this setting, university faculty designed the health programs and incorporated students at all levels, ranging from baccalaureate to postdoctoral fellows, for organizational and clinical experiences. The 6 retirement communities included both independent and assisted living programs and served older adults ranging in age from 75 to 105, with a mean age of 84.3 years.

Independent living was offered in apartments with full kitchens and bathrooms. Services for independent living residents included 24-hour front desk reception/emergency call, some meals, group transportation, social and recreational activities, weekly housekeeping, and access to the wellness clinic. Assisted living was offered in individual apartments with kitchenettes. In addition to these services, 3 meals per day, assistance with personal care (basic activities of daily living [ADLs]), and medication supervision were also available. The wellness clinics provided health education, health promotion activities, case management, and direct services (e.g., nursing clinic hours, foot care, podiatry,
massage therapy, and vision and hearing screening).

The range of resident ability included both healthy and active older adults and frail older adults with complex health problems. This retirement community population illustrated the heterogeneity of aging and often challenged assumptions about both the strengths and frailties of many older adults.

Application of the Models to the Setting

Table 1 provides a summary of the essential elements of the P-E Fit and Transition models, with a description of how these elements were translated into practice, for assessment, interventions, and evaluation.

Assessment

Personal competence was assessed using a standard assessment guide, incorporating functional ability, cognitive status, and a screen for problem behaviors, availability of social support, and a health screen (health conditions and treatments, risk factors, health behaviors and practices, and nutritional preferences). During the initial assessment interview, preferences, health goals, and potential risk were discussed. Assessment of environmental press included evaluating physical characteristics of the environment (layout, functional space, security, level of stimulation), structure and routine, activity level, social support, availability of assistance, access to health care and services, and finances. Residents were followed for changes in competence or fit with available services and the environment on an ongoing basis. Nurses focused on monitoring the adequacy of the environment and services to meet needs and coordinated referrals or additional services as needed.

Assessment of the transition experience began at the initial preadmission interview and continued after the person moved into the setting. Early questions included what led up to the decision to move, how the decision was made, how the transition was going, what were personal and family expectations for the move, and how the logistics of the moving process were being managed. Nurses explored these questions to identify areas of ambivalence or concern and to provide support and encouragement as residents negotiated this life change. After the move was complete, nurses assessed adjustment to the new situation as indicated by the establishment of a routine, settling in to the new environment, the ability of the person to begin to form relationships, and their self-reported impressions of how the transition was going.

Interventions

The P-E Fit and Transition models were useful in developing interventions. With the emphasis on both personal and environmental strengths, interventions could target the individual or the environment, or both. Addressing individual and environmental factors are within the repertoire of community health nursing practice, which includes mobilizing appropriate resources to promote independence and optimal health. Resident health promotion programs focused on enhancing personal competence, optimizing environmental opportunities, or assisting with transitions.

Individual Interventions. Case management in senior housing, provided by the nurses in the wellness clinic, involved assessing and facilitating individual P-E fit and transition issues.19 The goals of case management were to identify health needs over time, support transitions, increase self-care abilities, enhance quality of life and adjustment, minimize inappropriate use of health care resources, and decrease fragmentation across health care settings. Framed within the P-E Fit and Transition models, outcomes of case management were achieving the optimal balance between personal competence and environmental demands and opportunities as strengths and needs changed and residents experienced transitions common to late life.

Individual interventions to enhance physical competence included a variety of physical activity programs to improve strength, balance, and endurance; fall prevention training; and rehabilitation and therapy. Examples of interventions to enhance psychosocial competence included personal growth activities, enhancement of healthy behaviors, computer classes, medication self-management, coaching for managing chronic conditions, and counseling to assist with grief and loss. For a given level of competence, a relatively small relief of stress or addition of support could bring behavior and affect back into balance.

Environmental Interventions. The programs of the senior housing communities were con-
<table>
<thead>
<tr>
<th>Essential Elements of Theory</th>
<th>Major Concepts</th>
<th>Assessment/Planning</th>
<th>Therapeutics</th>
<th>Evaluation/Outcomes</th>
</tr>
</thead>
</table>
| **Person-Environment Fit Model** | • Personal competence  
  • Environmental press  
  • Fit between personal competence and environmental press | • Personal Competence  
  • Cognitive  
  • Behavioral  
  • Physical mobility  
  • Functional  
  • Sensory  
  • Emotional/social  
  • Health  
  • Environmental press  
  • Physical layout, functional space, cues  
  • Security and safety  
  • Structure/routine  
  • Activity level  
  • Social resources  
  • Finances  
  • Availability of assistance/support | • Enhance personal competence  
  • Mobilize environmental resources  
  • Minimize environmental stresses | • Congruence between needs/resources of individual and challenges/resources of the environment  
  • Adjustment and adaptation  
  • Satisfaction  
  • Well-being  
  • Quality of life |
| **Transition Theory** | • Nature of transitions  
  • Transition conditions  
  • Nursing therapeutics  
  • Patterns of response | • Nature of the transition  
  • Types  
  • Patterns  
  • Properties  
  • Transition conditions  
  • Facilitators and inhibitors at personal, community and societal level  
  • Transition processes  
  • Redefining meanings  
  • Modifying expectations  
  • Restructuring life routines  
  • Developing knowledge and skills  
  • Maintaining continuity  
  • Creating new choices  
  • Finding opportunities for growth | • Reminiscence  
  • Role supplementation  
  • Creation of healthy environments  
  • Mobilization of resources | • Patterns of response  
  • Symptoms  
  • Functional status  
  • Connectedness  
  • Sense of empowerment  
  • Sense of integrity |

*Data from Lawton, 1982<sup>4</sup> and Lawton and Nahemow, 1973<sup>5</sup>*
ceptualized along the continuum of environmental opportunity, conceptualized as environmental interventions. Independent living programs were designed to provide instrumental support, privacy, social interaction, low-level health monitoring, and security. Assisted living programs were designed to provide increased environmental support, with the addition of personal care staff to provide assistance with ADLs, a smaller and simpler physical environment, more signage for cuing, visible staff, more structured social activities, and a higher level of health monitoring than was available in independent living.

In addition to the formal programs, environmental interventions took the form of enhancing the social environment, removal or amelioration of social constraints, enhancement of social supports, widening of opportunities, environmental redesign, and modification of programs. Environmental interventions targeted safety training and modification of physical attributes (e.g., signage, ergonomic furniture), creating a sense of community, and enhancing family caregiving skills. Several programs specifically focused on transitions, including the ambassador’s club that paired existing residents with newcomers, a grief support group for newly bereaved residents, and a caregiver support group for residents caring for friends or family with dementia.

The concept of personal competence was also applied to groups of residents for the purpose of program design and evaluation. Aggregate assessment data generated a profile of residents with similar health concerns and strengths, and appropriate group activities were designed targeting special needs. For example, a bereavement support group was offered during a period when a number of residents were recently widowed and desirous of this type of intervention. A safety class was offered to residents who had recently begun to use motorized carts for personal mobility to enhance their driving skills and promote the safety of nearby pedestrians.

Finally, principles of the P-E Fit model were applied at the community level, considering the strengths and needs of the entire community of residents and the environmental and programmatic opportunities and demands. In these retirement communities, the resident councils were active and adept at identifying community priorities and strengths and their desires for improvements in the environment. For example, disaster planning involved detailed assessment of resident mobility and competence for evacuation and mobilizing the environmental supports of staffing, equipment, and logistics to ensure safety in an emergency. The model also was useful in addressing the social and cultural environment, particularly when issues of prejudice or discrimination developed. For example, in 2 communities, independent living residents complained about the physical and cognitive decline of fellow residents and requested that staff evict those whose function had changed. Using a disability awareness approach and an explicit discussion of community values for inclusion and aging in place, community health nurses were able to shift the cultural environment and minimize negative behaviors.

**Changes in Resident Capacity or Environmental Demands.** Changes in fit between personal competence and environmental demands may indicate the need for more services or additional support. An excerpt from a quality assurance report illustrates this:

> When staff responded to a fire alarm, Mrs. X stated that the alarm was not caused by her and that there was nothing to see in her apartment. The apartment was full of smoke and there was a pan of burned boiled eggs, still on high heat on stove. The eggs had exploded all over the range. She said that she didn’t realize that there was smoke and she said she forgot all about the eggs she was cooking.

In this example, the resident in independent living was preparing a meal and had a cooking emergency. There were indications of cognitive impairment as she forgot about her eggs and did not recognize the smoke in her apartment as a problem. Her ability to live in independent living warranted further assessment, with consideration of assisted living, with prepared meals and available staff, as a more appropriate level of environmental support given her lessened cognitive competence.

The following excerpt illustrates a developing mismatch between the personal competence of an assisted living resident and the environment:

> Mr. Y is having trouble sleeping, and awakens at night believing that there are people outside his apartment trying to come in (there is a painting of a group of sailors in the hall). He is incontinent and unaware of the function of his bathroom.
The nurse following up on this incident performed a cognitive assessment to determine change in memory and behaviors and a health screen to identify contributing factors. In discussing the situation with the resident, family, and primary health care provider, the nurse provided information about the resident’s condition and behaviors as well as information about the resources of the environment to manage the situation. By introducing the element of the environment, the focus became broader and inclusive of potential solutions to provide better support for Mr. Y as his condition progressed.

Use of the Models with Unlicensed Staff

All direct care staff were exposed to the Transition and P-E Fit models during the initial orientation period. During service planning and discussions about resident issues, the nurses talked about individual strengths and environmental resources and provided concrete examples to staff about ways they could support individual competence and modify the environment to provide optimal support. By framing the possibilities for intervention at both the individual and environmental levels, it opened up more opportunities for staff to be effective in working with residents. In addition, an understanding of transitions helped the staff to be more sensitive to the changes that residents were experiencing.

Use of the Models in Outcomes Evaluation

Evaluation of resident outcomes occurred in a variety of ways. Overall resident satisfaction with programs was evaluated annually using an anonymous survey. Effectiveness of internal transitions were evaluated by tracking movement from one level of care to another and by the success of the transitions (e.g., a resident was discharged from the skilled nursing facility to assisted living in a timely fashion and was able to continue living at that level with expected supports). In addition, individual resident care and service plans included expected outcomes reflecting optimal fit, such as satisfaction, well-being, functional ability, and social engagement. Staff effectiveness was evaluated in light of the use of interventions reflecting the models. For example, assisted living staff were expected to check the personal refrigerators of assisted living residents for outdated food items as an environmental approach to optimizing food safety.

Discussion

The P-E Fit and Transition models were excellent tools for explaining both the population and the programs to staff and framing their roles as supporting personal competence and adjustment as well as creating a supportive environment for residents. These models incorporate concepts of personal characteristics, environmental resources, and adaptation, including the dynamic nature of “fit” as conditions and resources change. Using these models, community health actions may include supporting and facilitating residents’ life transitions, optimizing resident P-E fit, and promoting resident and community wellness and health.

This article has described the application of 2 theoretical models to community health practice in a senior housing setting. In early deliberations about the programmatic direction, it was apparent that either model alone did not capture the entire practice demand to deal with individuals and groups over time and through varied trajectories. Using both the P-E Fit and Transition models captured the cross-sectional situation and dynamic unfolding over time. Another strength of these models in combination is the inclusion of multidisciplinary perspectives, illuminating issues of late life, taking into account health and illness concerns within the context of the total life experience, with its developmental, social, and physical dimensions. Framing practice from a multidisciplinary perspective creates new opportunities for theory to inform nursing practice.

It was critically important that the theories were applicable and operationalizable but also readily understandable by direct care workers, whose literacy is often below high school level. The theories presented provided a common language that enabled staff to consider the residents as persons interacting with the environment while experiencing life changes. It enabled staff to visualize these dynamics in their own lives, and to imagine three major ways to assist residents, by improving personal competence, bolstering the environment, supporting transitions, or a combination of these.

These models also ensured explicit sensitivity to personal competence and strengths, as well
as environmental assessment and intervention. The focus on competence and strengths ensured that individual potential was appreciated, rather than the traditional emphasis on deficits or weaknesses. Furthermore, attention to the environment heightened awareness of social networks, perceptions of support, environmental demands, social engagement, barriers and supports in the physical environment, and financial resources. This philosophical position expands the range of potential areas for intervention beyond individual responsibility or action.

The existing models could be developed further in a variety of potential directions. Although approximately 30% of residents were partnered, they were assessed and interventions were designed at the individual level. It would be of great interest to explore ways to apply the P-E Fit and Transition models at the family (or dyad) level, accounting for both individual and collective competence and environmental interpretations. These models have demonstrated utility in retirement communities and assisted living; it would be of interest to evaluate their effectiveness and the necessary modifications for use in other settings where older adults live and receive care, such as in the home, adult day care, or senior centers. To accomplish this goal, the environmental assessment would require further expansion to incorporate diverse settings and their resources. These models were applied by nurses with BSN, MN, and PhD preparation and deployed within a nonprofessional staff. Ongoing implementation and evaluation of these practices would be enhanced by further development of competencies and required preparation for all levels of staff, from direct care workers to registered nurses to nurses in advanced roles.

In conclusion, 2 theories provided an organizing framework to assess, plan, implement, and evaluate care for senior housing residents. These models incorporated principles of personal competence, the influence of the environment, and the intrapersonal experience of transitions, providing a multidimensional picture of the older person’s total health. Theory provided a common language for providers and clients to discuss health issues, and a wide range of potential avenues for intervention, demonstrating the usefulness of theory at a practical and day-to-day level for a specific population of older adults.

References


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