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Nursing home patients' perception of control over their environment

Jean Kohr
San Jose State University

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Kohr, Jean, M.S.

San Jose State University, 1992

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NURSING HOME PATIENTS' PERCEPTION OF
CONTROL OVER THEIR ENVIRONMENT

A Thesis

Presented to

The Faculty of the Department of Nursing
San Jose State University

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

By

Jean Kohr

August, 1992

APPROVED FOR THE DEPARTMENT OF NURSING

Ann Doordan

Ann Doordan, Ph.D., R.N.

Bobbie Gorenberg

Bobbie Gorenberg, D.N.Sc., R.N.

Sharon Wahl

Sharon Wahl, M.S., R.N.

APPROVED FOR THE UNIVERSITY

Serena W. Stanford

ABSTRACT

NURSING HOME PATIENTS' PERCEPTION OF CONTROL OVER THEIR ENVIRONMENT

by Jean Kohr

The purpose of this quasi-experimental study was to compare perception of control over their environment between two Veterans Administration nursing home patient groups. The experimental group ($n=11$) consisted of members of a patient advocacy group and the control group ($n=11$) was composed of non-member nursing home residents. Moos and Lemke's (1984) structured questionnaire, the Sheltered Care Environment Scale (SCES), was administered to each group. Control was measured through the combined SCES dimension scores of independence and resident influence. Other SCES dimension scores measuring resident's perceptions of the social climate were compared between the two groups: cohesion, conflict, self-exploration, organization, and physical comfort. Data were analyzed using the Mann Whitney U statistical test. There were statistically significant differences in control ($p = .0035$), suggesting that the advocacy group members perceived more control over their environment. There were no statistically significant differences between groups on their perceptions of social climate.

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Chapter 1

INTRODUCTION

From the perspective of predicted demographics, geriatric long-term care nursing will face its greatest challenge during the next decade. The 20th century has seen a rapid growth in the percentage of the population aged 65 and older in the United States. People are living longer. Projections indicate the elderly will comprise 12% of the general population by the year 2000 and 17% by 2030 (Huss, Buckwalter, & Stolley, 1988). Rice and Wick (1985) predict that one out of five Americans will be 65 or older by the year 2030.

Veterans Administration (1984) statistics project that the number of veterans aged 65 and over will be 7.2 million in 1990, compared to 2.9 million in 1980. By 1990, more than half of the American men aged 65 and over will be veterans. Between the years 1990 and 2000, the number of veterans over the age of 75 will increase by 157.8%. The Veterans Administration's greatest challenge may be adequately caring for the total veteran population over the age of 75, the group of aged that consumes the greatest amount of resources on a per capita basis.

Concurrently, there has been a dramatic increase in the number of long-term care facilities. While the number

of individuals 65 and older increased 23% between 1960 and 1976, the number of nursing homes increased 140%, and nursing home beds increased 302% during the same period. If current trends continue, in 35 years the older population in nursing homes will double from 1.3 million in 1985 to 2.8 million in 2020. In the United States, approximately 5% of the population over age 65 reside in long-term care facilities at any one time, and one-fifth of all persons over 85 live in nursing homes. Twenty-five to 30% of deaths in individuals 65 and older occur in these facilities (Huss et al., 1988).

Older individuals have more sickness, and their episodes of illness are often complicated by pre-existing chronic conditions or by a slower response to treatment. They also may have a complex of non-medical needs in areas such as housing and income maintenance. As a result, elderly individuals use more services, consuming a substantial proportion of the total resources invested by society in health care and human services (Veterans Administration, 1983, p. 5). Those elderly persons who are unable to manage their mental and physical care needs at home are frequently admitted to nursing homes. Frailty or incapacitation of caregivers or the lack of adequate community in-home support services may also precipitate nursing home admission.

Removal from a home environment with admission to a nursing home can be a major loss for an elderly person. Dignity, control, and self worth may be stripped away. Physical, psychological, and social losses, to which long-term institutional confinement can contribute, may have devastating effects on perception of the elderly person's adult role status. An advocate, either an individual or a group, can intercede on behalf of elderly clients to support them, giving them a feeling of control over their situation.

The goal of high quality nursing home care mandated by the Omnibus Budget Reconciliation Act of 1987 is to help residents "attain or maintain the highest practical physical, mental and psychosocial functioning" (OBRA, 1987, p. 167). Thus, it is imperative that a holistic philosophy meeting the total needs of geriatric patients and families be a hallmark of care. Social and psychological well-being increases the ability to cope with health problems and functional limitations and the ability to maintain autonomy despite increased age (Huss et al, 1988). According to Moos (1981), personal control in institutional settings can be fostered in two major ways: (a) allowing residents to determine their daily routine, and (b) giving them responsibility for some aspects of facility programs and policies.

This research study was conducted to demonstrate that alert nursing home patients have opinions and are capable of making recommendations for environmental change. Alert geriatric patients are interested in the environment they call home. They can identify issues of concern that affect daily living for themselves and can become advocates for others. They are capable of requesting improvements in their environment that improve the quality of life for nursing home patients. Patient group support within a nursing home is a valuable way to facilitate this process of perceived control in the environment (Burnside, 1986).

Statement of the Problem

Patients in nursing homes frequently have minimal control over their environment. In many cases, control is exercised by the providers of health care irrespective of clients' wishes or capabilities (Kohler, 1988). Patients fear that complaining, identifying problems, or requesting changes will have a negative impact on the care they receive. This may affect their sense of independence, self-worth, dignity, and self-satisfaction (Ryden, 1985).

Baltes and Baltes (1986) state that the opportunity to choose appears to benefit the performance of the elderly client and increase the perception of control. The ability to exercise choice is of special significance in environments such as hospitals and nursing homes where the

staff caregiver normally exercises control. Perception of control can possibly decrease morbidity and even sustain life itself.

Challenging programs that capitalize on the strengths of the individual elderly client should be promoted with staff support. Elderly patients need to maintain some sense of control over their daily activities and their environment, especially when energy may be low, physical dependency may be great, and cognitive functioning may be compromised. An organizational environment that may enhance the ability of residents to exercise their rights could contain the following mechanisms: a resident's council, the establishment of a clearly defined grievance process, membership of residents on committees, participation of residents in the publication of a newsletter, and provision for residents to have a voice in care planning and policy decisions (Ryden, 1985).

A resident group is a good place to empower alert elderly patients who are interested in participating in an on-going proactive discussion of issues and concerns. Once members trust the leaders, validate their self importance, and extend trust to other group members, they can start working through conflicting material (Burnside, 1986).

In the nursing home setting selected for this study, a phenomena had been observed with a group of residents who

met weekly. This group, known as the Friendly Social Group, evolved from being just a social group to becoming a patient advocacy group. The group members had the trust and support of the co-leaders and were encouraged to explore any issues of concern that affected their environment. The group process fostered the notion that each member is important, has rights, and can make changes in the nursing home environment that they call home. This advocacy group provided a vehicle to study the perception of personal power within clients of a nursing home.

The problem considered in this research study was that frequently nursing home residents do not perceive that they possess control over their environment. Also, in many cases they do not have control over their environment. This lack of power, perceived or real, results in feelings of powerlessness and frustration. This study compared scores of two nursing home groups' expression of perception of control over their environment.

Objectives

The main objective of this quasi-experimental study was to compare, between members of an advocacy group and an equal number of non-member nursing home residents, the independence and resident influence dimension scores on the evaluation tool called the Sheltered Care Environment Scale

(SCES) which identify patients' perceived control over their environment (Moos & Lemke, 1984).

A second objective was to compare, between these two groups, the concepts dimension scores from the SCES tool that measure resident perceptions of the social climate in their environment: cohesion, conflict, self-exploration, organization, and physical comfort.

Research Questions

The research questions posed in this study were:

1. Does being a member of an autonomous patient advocacy group make a difference in nursing home residents' perception of control over the nursing home care unit (NHCU) environment?
2. Do the members of the autonomous patient advocacy group perceive their environment differently than non-group members as measured by the SCES tool?

Hypothesis

The mean scores on the SCES subscale dimensions of independence and resident influence, measuring perception of control of nursing home residents over their environment, will be greater for the advocacy group members than the non-group members in the nursing homes.

Purpose and Need

The purpose of this study was to assess a nursing home social environment and explore the factors that enhance

patients' perception of control over their environment. Baltes and Baltes (1986) state that research is needed to determine which models of helping are optimally effective for the elderly client. It is necessary to define the elements of optimal help that support patient role competency, responsibility, and control, therefore adding to the well-being of elderly individuals. Research is needed to determine the factors that influence the expectations recipients and helpers have for each other. Research should examine social supports and helping as a process, noting how changes in the assumptions of helpers and recipients over time contribute to the effectiveness of the helping process (Baltes & Baltes, 1986).

Definition of Terms

1. Advocacy is defined by Nathanson (1987) as pleading the cause of another. For this study, the Friendly Social Group pleaded the causes or concerns of other nursing home residents.

2. Alert geriatric nursing home patients are male and female residents aged 64 to 91 years who reside in a nursing home care unit. These patients scored within the normal range on the Mini-Mental State, an exam of cognition (Folstein, Folstein, & McHugh, 1975).

3. Autonomy refers to self determination, independence, liberty of choice and action, and control of decision making (Jameton, 1988).

4. Control is the patient's perception of how independent and influential they are in the facility, including participation in decision making (Lemke & Moos, 1989a).

5. Nursing homes are licensed settings in which 24-hour nursing care and personal care services are available to all residents. Housekeeping, meals, and laundry services are also routinely provided (Lemke & Moos, 1989a).

6. The Friendly Social Group is a 15-member nursing home care unit (NHCU) patient group whose purpose was initially social, but has expanded to include educational advocacy for environmental changes in the nursing home and consciousness raising about nursing home problems, and presenting possible solutions to those problems.

Sample and Setting

This study involved nursing home patients at a Veterans Administration Medical Center Nursing home care unit in an urban area of northern California. Subjects consisted of two groups. The experimental group of 11 residents were members of an advocacy group called the Friendly Social Group. Eleven non-member residents were

selected at random from the same nursing home population. The non-member residents were the control group.

Patients with organic brain syndrome, Alzheimer's disease, or any cerebral disease which impairs judgement and orientation were excluded from the non-member group. All patients in the non-member group scored in the normal range of the Folstein et al. (1975) Mini-Mental State exam. In the Friendly Social Group, two patients had cognitively deteriorated since joining the group. One member scored in the range of moderate intellectual impairment and one member scored in the range of mild intellectual impairment. This level of impairment did not limit their participation in the research study. The 9 remaining group members were in the normal range on the Mini-Mental State exam.

All patients in this study had equal access to professional staff, ancillary services, and physical resources. Nursing care was provided by registered nurses, licensed vocational nurses, and nursing assistants. Nursing home patients were categorized by nursing staff who identified the level of care needed: independent, assist, or total care.

At the time of the study there were 12 members in the Friendly Social Group. Eleven members participated, and 1 new member was not included in this study. Membership was

by group invitation to NHCU patients who were able to comply with the Friendly Social Group policy. The policy stated that members must be interested in and capable of participating in weekly meetings, patient advocacy, and social events. Membership changed as a result of debilitating illness or death. However, it was not group policy to bar an individual from the meetings and social events when his/her level of functioning began to decline. They were welcome for as long as they wished to attend.

The group was initiated for psychosocial purposes, but evolved into a vehicle through which residents solved problems, articulated complaints within group anonymity, made decisions, set goals, and had fun. The group provided social relationships; opportunities to assume responsibility in NHCU projects, programs, and activities; collaboration on issues of concern; and shared input to decision making. The group maintained ongoing communication through weekly meetings.

The research setting was in a veteran's nursing home consisting of three 50-bed long-term care units. Each unit also housed specialty program beds for hospice, respite, or transitional care rehabilitation. The nursing home was located on a 94-acre campus containing acute and long-term psychiatric treatment facilities, geriatric psychiatry, and long-term care units, in addition to administrative offices.

The environment within the nursing home care unit included public areas such as corridors, dining room, nursing stations, recreation room, shower rooms, public bathrooms, patios, and entry ways. It included private areas such as personal space, bedrooms, bathrooms, and equipment utilized for patient care or transportation. It also included the departments within the medical center that impacted the veterans such as nursing, medicine, dietary, physical therapy, occupational therapy, recreational therapy, social service, chaplains, housekeeping, security, maintenance, engineering, clinics, canteen, and post office.

Research Design

The design of this research study was quasi-experimental. The independent variable was participation in the Friendly Social Group. The dependent variables were the seven dimension scores from the Sheltered Care Environment Scale (SCES). This tool was used to collect data to compare the two groups within the nursing home. This study compared the means on the SCES which correlated scores on selected variables and the level of perception of control over the environment of the members of the Friendly Social Group (experimental group) and non-member nursing home residents (control group).

The statistical test used for analysis was the Mann Whitney U test. The Mann Whitney U is a nonparametric procedure for testing the difference between two small independent samples. The test is based upon the assignment of ranks to the two groups of unpaired measures (Orkin & Drogin, 1975).

The demographic data were analyzed to demonstrate similarities between the group and non-group residents in the NHCU. Demographic characteristics included age, sex, diagnoses, level of care needed, physical limitations, mobility, length of stay at NHCU, activities, occupation, and frequency of visitors, outings, and passes. Demographic data were obtained from each subject via interview or NHCU chart. A structured questionnaire and demographics form were used rather than the development of interview questions because of the small group size, the frailty of the population, and in an attempt to decrease bias.

Data Collection

The data collection instrument was the SCES questionnaire developed by Moos and Lemke (1984). The SCES is a 63-item yes/no questionnaire designed to measure three domains of social climate in the NHCU environment: interpersonal relationships, opportunity for personal growth, and the mechanism for system maintenance and

change. The dimensions of the SCES tool that evaluated patient perception of control over their environment were independence and resident influence. The dimensions of the SCES tool that measured rapport were cohesion, conflict, and organization. The two remaining dimensions that measure social climate are self-exploration and physical comfort.

Scope and Limitations

The study included a sample of 22 alert geriatric nursing home patients divided into two groups of 11 each. The nursing home is part of a large Veterans Administration medical center in northern California. This sample cannot be assumed to be representative of all veteran nursing home patients due to small sample size and the limitation to one specific facility. In addition, most community nursing home populations have more women than men. The Veterans Administration NHCU has more men than women.

This nursing home population is a fragile population. Their physical conditions are always in jeopardy of deterioration. Four of the Friendly Social Group members were in the dying process at the time of the research testing or died during the data collection process, decreasing the initial sample size of each group from 15 to 11. This researcher read the questions to many of the

residents because of problems with decreased vision and decreased fine motor movements of their hands.

Another limitation of this study is this investigator is a co-leader of the Friendly Social Group and also keeps the minutes of each meeting. The investigator attempted to control against bias through the use of a structured tool. The investigator administered the tool to both groups.

Chapter 2

CONCEPTUAL FRAMEWORK AND REVIEW OF THE LITERATURE

Conceptual Framework

Increased opportunities for control and a greater sense of personal efficacy can have a positive effect on the physical and psychological status of the institutionalized aged (Rodin, 1986). Staff and residents in a nursing home should be aware of each other and their perspectives. Both should be free to raise issues, problems, and concerns during ongoing discussions. Fuller (1986) asserts these interactions should involve the nursing process of assessing, planning, implementing, and evaluating between resident and staff. Contracts to attain goals should be negotiated between residents and staff. This promotes mutual satisfaction and geriatric advocacy in a nursing home environment. King (1981) encourages staff and patients to work together to maintain an optimum environment.

Theory of Goal Attainment

King (1981) developed a theory of goal attainment. In constructing this theory, she specified that nursing is a process of human interactions between nurse and client whereby each perceives the other and the situation, concern, or problem. The nurse and client, a dyad or

interpersonal system, communicate, mutually set goals, explore alternatives, and agree on means to achieve goals (King, 1981). This action begins the process during which the nurse and patient learn more about themselves, about decision making that affects each of them, and about coping with problem situations. Working together they experience a new kind of relationship in the health care system. Patient participation creates or enhances patient independence, control, and power.

A major thesis of King's conceptual framework is that human beings view the world from the perspective of being a total person in making interactions and transactions with individuals in their environment. Communication is influenced by the interrelationships between a person's goals, needs, and expectations, and is a means of information exchange in one's environment (King, 1981, p. 62). The goal of King's (1981) framework for nursing is helping people, through communication, to attain and maintain their health. King (1981) believes that if health information is to be effective, it must be communicated in such a way as to motivate each person to understand and to use it. Decisions must be based on a plan that combines goals of patients with facts that promote health. This method of providing holistic nursing care emphasizes the nursing process. The focus of nursing practice must also

consider the biological, psychological, and sociological dimension of the human being. According to King, if the nursing process is to be effective, a basic knowledge of human interactions is essential. The way people perceive health will depend on their past experience, the environment in which they live, and their concept of health.

King's conceptual framework consists of three interactive systems. The personal system is comprised of the concepts of perception, self, body image, growth and development, time, and space. The interpersonal system consists of the concepts of interaction, communication, transaction, role, and stress. The social system envelops the concepts of organization, decision-making power, authority, and status. Clients react to their environment, taking into consideration the influence of their past and present situations as well as goals for the future (King, 1981). The concepts within each of these systems offer a framework that allows the nurse to see the client as a total person.

King's (1981) conceptual definitions include perception, communication, interaction, and transaction.

1. Perception is each person's subjective world of experience and representation of reality including an awareness of persons, objects, and events.

2. Communication is the means by which information is shared in specific nursing situations to identify concerns and/or problems. Communication assists individuals in making decisions that lead to goal attainment in the environment.

3. Interaction is a process of perception and communication between person and environment and between person and person, represented by verbal and non-verbal behaviors that are goal directed.

4. Transaction is observable behavior of human beings interacting with their environment which is the valuation component of human interactions. This communication involves bargaining, negotiating, and social exchange. When transactions are made between nurse and client, goals are attained. In Figure 1, King (1981) identifies the major elements in interactions leading to goal attainment as action, reaction, disturbance, mutual goal setting, exploring means, agreement on means to achieve goals, and transactions or achievement.

The patient environment is controlled by several factors, among them are the formal and informal organizations that address the issues of environment. According to King's (1981) discussion of the characteristics of an organization, the nursing home care unit is a formal organization which provides the framework,

Figure 1. Schematic Diagram of Theory of Goal Attainment.

Note. From A Theory for Nursing (p. 157) by I. King, 1981, New York: Wiley. Copyright 1981 by Delmar Publishers Inc. Reprinted by permission.

positions, procedures, and tasks for assigning specific activities to each position with prescribed roles and rules. The Friendly Social Group would satisfy King's (1981) definition of an informal organization: a natural grouping of people in an environment that try to meet individual and group needs not met by the formal organization. King states that an informal group has a common interest, developing their own norms and relations within the formal organization. Most individuals in organizations have demonstrated greater efficiency and satisfaction when they participate in decisions about goals and then agree to the means to achieve personal and organizational goals (King, 1981).

Members of the Friendly Social Group strive for power, which King (1981) identifies as the energy and process whereby one or more persons influence other persons in a situation to achieve goals. Members within the group are free to question, challenge, suggest, request, and possibly change things in their environment in the nursing home. To resolve present and ongoing issues takes commitment, patience, collaboration, and time. Patients should be involved in an ongoing participatory process of making decisions to resolve conflicts between the strictures of the building, the needs of the users, and the goals of the programs (Bakos, Bozic, Chapin, & Neuman, 1980).

The environment needs to be modified to meet the needs of the geriatric population. The nurse must be involved in all aspects of the environment that have an effect on the quality of care: the physical, the organizational, the personal, and the psychosocial milieu. The NHCU is in the business to serve the veteran. All departments should be accountable to the patient and to the nursing staff who deliver patient care and are patient advocates. This accountability develops a sense of self worth and responsibility in patients for health maintenance. As trust is built and or successes in interactions and transactions occur, patients are ready to tackle new problems. Successes increase advocacy for geriatric rights.

As a result of successful environmental changes, involved residents would make significant gains in more functional, adaptive behaviors because they have the responsibility of influencing decisions. Synder (1978) states that the environment can provide continuous, subtle support to the individual compensating for changes associated with aging. To be sensitive to the potential of the environment is to return to older people some control, dignity, self-reliance, and decision making, all of which are necessary for the pursuit of the best in life. King's

(1981) theory of goal attainment is appropriate in the geriatric long term care setting. King (1981) states that:

1. Health professionals have a responsibility to share information that helps individuals make informed decisions about their health care.

2. Individuals have a right to accept or reject health care.

3. Individuals have a right to participate in decisions that affect their life, their health, and community services.

4. Goals of health professionals and goals of recipients may be incongruent (pp. 143-144).

To evaluate perception of control within King's conceptual framework leading to goal attainment in the nursing home environment, an evaluation tool was utilized that measured the facility's social environment including resident's perceptions. This research tool, named the Sheltered Care Environment Scale (SCES), was developed by Moos and Lemke (1984). Moos and Lemke have, like King, recognized and focused on the interface between environmental and personal systems. Environmental programs can be measured by asking participants about the characteristics of their setting and social climate. Minutes of the Friendly Social Group were also evaluated to

identify examples of ongoing interactions and transactions leading to goal attainment.

Related Literature

The related literature has been grouped according to King's (1981) theory of dynamic interacting systems: (a) personal system or individuals, (b) interpersonal systems or groups, (c) social system or society, and (d) interactions and transactions.

Personal System

Within the personal system, Rodin (1986) acknowledges that certain principles of gerontological research must be interpreted in regards to the aging process before one can link aging to the effects of an individual's sense of control of health. Physiological and psychological data show increasing variability with aging. Changes that appear to be related to biological aging may result from other factors associated with being old: widowhood or exacerbation of disease. It is often difficult to generalize to today's elderly individuals from studies done 25 years ago.

The relation between health and a sense of control may grow stronger in old age. This could occur through three types of processes: (a) experiences particularly detrimental to control may increase markedly in old age; (b) the association between control and some aspect of

health may be altered by age; and (c) age may influence the association between control and health-related behaviors or the seeking of medical care. When control of activities is restricted, there are detrimental effects on the health of older people. In contrast, interventions that enhance options for control by nursing home patients promote health (Rodin, 1986).

However, with increasing age, variability in preferred amounts of control also increases, and sometimes greater control over activities, circumstances, or health has negative consequences including stress, worry, and self-blame. The mechanisms mediating the control-health relation include feelings of stress, symptom labeling, changes in the neuroendocrine and immune systems, and behavior relevant to health maintenance (Rodin, 1986).

Two personal factors are especially important with regard to levels of choice and control: functional ability and gender. Residents who are more functionally able expect to have more control over their environment and usually are better able to take advantage of environmental resources. Women are usually more affected than men by variations in environmental conditions. Women are more oriented toward social relationships and may be disturbed by institutions that define women's role as passive recipients of care. Non-employed elderly women expect more

freedom of choice, since they are used to organizing their own pattern of everyday activities (Moos, 1981).

Lemke and Moos (1989b), utilizing the Multiphasic Environmental Assessment Procedure Tool, examined the personal and environmental factors related to the activity involvement of 1,428 elderly persons living in 42 residential settings. Data showed that individuals were more likely to participate in facility-organized activities in settings where overall resident participation was greater, the average functioning of residents was slower, staffing was higher, and the program was more structured. Participation was not related to personal characteristics. Involvement in resident-initiated activities was related to personal characteristics (being functionally intact, female, and better educated) and to facility features (larger size, lower staffing, greater autonomy, and cohesiveness). High-functioning elderly individuals can benefit from a higher level of demand than is optimal for low-functioning individuals. Elderly persons with impaired functioning are expected to be more sensitive to environmental constraints and opportunities than those elderly individuals who are functioning relatively well. Resident-perceived rapport and control have a positive influence on self-initiated activities. Rapport increases

involvement in facility activities among impaired elderly residents.

In order to understand the proactive level of individual involvement, it is essential to be able to describe the individual's locus of control. According to Kohler (1988, p. 22), locus of control refers to an individual's belief about whether or not a contingency relationship exists between a specific behavior (action) and its reinforcement (outcome). Internal locus of control is evidenced when an individual believes that he/she has control over situational outcomes. External locus of control is evidenced in situations where an individual does not believe he/she controls outcomes but that others, outside themselves, maintain this control.

Studies show that there are detrimental effects on the health of older people when personal control of their own activities is restricted. Lumpkin (1985) showed that forced reduction of activity decreases the internal locus of control. Activity seemed to be as strong an influence on locus of control as health. Loss of control of one's physical well-being may result in a feeling of reduced influence over all life events (Brothen & Detzner, 1983).

According to Cicirelli (1987), concepts that overlap with internal locus of control are personal sense of mastery, efficacy, mastery of the environment, and control

of one's destiny. For external locus of control, there is overlap with fatalism, hopelessness, learned helplessness, and powerlessness. Groups living in nursing home environments with limited power and choice tend to have a more external locus of control, suggesting that locus of control shifts with life events. In nursing homes or under conditions of poor health, individuals with internal locus of control who experience loss of control may become depressed, fail to seek help when needed, show noncompliance with treatments, etc., while those with external locus of control may seek help sooner and maintain a more positive self-concept.

Inner locus of control events that one feels are contingent on one's own behavior, self-care, and self-help can be precious qualities for the aged. Noncompliance may be the last vestige of control available to an elder patient who is often overloaded with instructions, tests, and advice that he cannot hear or understand (Burnside, 1986).

Brown and Granick (1983) researched cognitive and psychosocial differences between internal and external locus of control. They found that perception of health status in those oriented to an internal locus of control was significantly different from the perception of subjects

with an external orientation. Internally oriented subjects tended to function more effectively.

Related literature relevant to personal systems discussed in this section dealt with the aging process, health and a sense of control, variability in the preferred amount of control, functional ability, gender, and locus of control. King (1981) acknowledges behavior as an outcome of personal system perceptions which become the basic data of human interactions.

Interpersonal System

The second system that King (1981) discusses is the interpersonal system composed of human beings interacting in the environment. Communication is the means whereby social interaction and learning takes place. To be effective, communication must take place in a caring atmosphere of mutual respect and desire for understanding.

Caring is both a process and an art. It requires commitment, knowledge, continual practice, and reflection. Caring creates a feeling of concern for another and motivates the caregiver to act in a positive way towards the one being cared for. The result of caring is increased intimacy and mutual self-actualization (Bevis, 1981). Leininger (1981) identified 27 different caring constructs that include compassion, concern, empathy, love, nurturance, presence, support, and trust.

Poor staff caring skills can lead to a rigid, coercive approach to patient care. According to Kohler (1988) coercion restricting the patient's need to direct and control his/her life affairs can lead to non-compliant behavior. A balance between external and internal locus of control allows patients to be self-reliant but seek external assistance when appropriate.

Ryden (1985) investigated the relationship between perceived control and morale in four nursing homes. Caregivers saw themselves as the predominant decision-makers because they perceived patients as not being capable of making decisions due to mental impairment and confused behavior. Patients, however, sensed themselves as having more control than the staff perceived them to have. Grooming and eating were identified by both groups as areas where patients had the least control. Availability of options for patients may not have been emphasized. The desire for control on the part of caregivers and their lack of knowledge in gerontology may contribute to the feeling of powerlessness by the aged patients.

In long term care, older adults live for years with chronic conditions and slowly deteriorating health. Small everyday decisions are the heart of long term care, and the time frame expands for decisions and opportunities for

advanced planning. Autonomy is an important aspect of the collective consciousness of American society. This central value becomes a critical issue in the dependency relationships of long term care. Autonomy is a multi-disciplinary, multidimensional concept: freedom and rights, self-determination and informed consent, and control and independence. In long term care, autonomy and community are strongly linked. It is suggested that professional or family caregivers and older adults receiving care change the way in which they interact with each other, and spend more time in communication to enhance social relationships (Hofland, 1988). Nurses are in a unique position to be patient advocates, to promote self esteem by combating ageism, to promote social interaction, and to maximize the control, participation, and independence of alert elderly residents (Taft, 1985).

Special skills are required in gerontological nursing to maintain the patient's well-being with the patient as a partner in care. Kohler (1988) reports that personal or learned helplessness or hopelessness develops when a patient is in a situation of being unable to solve ordinary problems. The nurse may be a confidant or a surrogate family member (Bennett, 1980) and needs to be a positive, empathetic patient advocate to satisfy the physical, social, psychological, and environmental needs of the

patient. The role of the advocate is to inform the patient and then to support the patient's decisions (Kohler, 1988; Langer & Rodin, 1976; Ryden, 1985; Wetle, 1985).

The great challenge to nursing will be providing opportunities for control especially when a patient's energy is low, physical dependency is great, and cognitive functioning may be compromised. Research, policy formation, on-site discussion, and education are needed to encourage recognition of residents as full moral agents, even when they suffer from the limitations of disease and dependency (Jameton, 1988).

Specific skills are required to maintain this perception of the residents as full moral agents while working with groups. Burnside (1986) worked with groups over a limited time period of weeks or months. She believed that the group leader must be directive in her approach and take an active role in giving information, answering questions, and sharing himself/herself with the group members. The leader needs to provide support, encouragement, and empathy. Psychological support from the leader increases each group member's confidence and promotes trust and cohesiveness in the group. For a group to be maximally effective, the members should be able to interact with one another in a confrontive, forthright, non-defensive, non-judgmental manner. A difficult

leadership task is to encourage older people to seize more control over their day-to-day situations and their lives. Membership in the group encourages older people to seize control because the members see that they can interact freely without adverse effects. Each group member needs verbal or non-verbal acknowledgment and affection. Fulfillment of these needs helps individuals in the group gain confidence in their ability to control.

Yalom (1975) states the two tasks of a group leader are maintaining a stable group and building culture. The roles of the group leader are to be a technical expert; a model-setting participant; a mover of the group toward a social microcosm as the groups primary unifying force; a facilitator of growth, learning, and communication; and an instiller of hope.

The interpersonal section reviewed literature pertaining to caring, coercion, morale, staff versus patient perceived control, autonomy, advocacy, promotion of opportunity for control, and group work. These concepts relate to King's (1981) concepts of communication, role, stress, and perception that leads to reaction, interaction, and transaction.

Social System

King (1981) describes the environment as the social system containing organization, power, status, decision

making, and authority. Nursing homes are as varied as acute care settings in the kinds of services offered and types of clients accepted. The dominant goal in geriatric care may be to maximize the person's productivity, creativity, well-being, and happiness. The emphasis should be on function and care rather than disease and cure (Brooke, 1988). Nursing homes are usually run on a medical model emphasizing authoritarian powers utilizing physician orders for physical and mental diseases. These institutions should be homes with a physical environment conducive to long term residential living rather than an acute care setting focused on illness and eventual death (Finney & Moos 1984).

King's (1981) first parameter for an organization discusses human values, behavior patterns, needs, goals, and expectations. Geriatric patients in nursing homes are at risk for problems of low self esteem. Institutionalization intensifies the effect of those forces that are negatively correlated with self esteem, namely stigmatization, depression, decreased social interaction, and loss of control over one's environment (Taft, 1985).

Frequently, control is exercised by providers of health care irrespective of patient wishes or capabilities (Bennett, 1980; Wetle, 1985). Sometimes dependent behavior is reinforced for group manageability and independent

behavior is punished (Rodin, 1986). Variations in the amount of choice and control available to residents in sheltered care settings can have important impacts. Patients who are functioning marginally need more support and structure to protect them from experiencing too much anxiety, whereas patients who are functioning more adequately are more likely to benefit from a program that emphasizes independence and individual choice (Finney & Moos, 1984).

Residents with greater functional resources and women residents are more likely to live in facilities high in choice and control. These personal and environmental factors combine to create independence-oriented social environments with relatively little conflict, enhanced resident functioning, and cohesion among the residents. These factors mutually influence each other. In addition, a cohesive resident population is more likely to be perceived as a social entity by administration. As a social entity, this type of population may be given a greater voice in running the facility (Moos, 1981).

Alvermann (1979) discusses how an "individual only dies when he ceases to live" (p. 16). If the climate in a nursing home is cheerful, harmonious, and congenial, the nursing home can become an extension of what the person originally perceived as a home. The ultimate goal is

optimum functioning, self-sufficiency, love, and peace of mind for the geriatric person in his declining years. Improving function requires attention to identifying and treating correctable problems and to modifying the environment to eliminate physical and psychological barriers to desired autonomy (Kane & Kane, 1988).

King's (1981) second organizational parameter is a natural environment in which material and human resources are essential for achieving goals. The initial impact of this environment extends to all of one's senses. Noakes and Taylor (1983) note that the visual impact portrays a perception of what the nursing home is all about and the kind of care that is delivered. Bakos, et al. (1980) state that building design is frequently the result of architectural programming carried on in a typically bureaucratic manner by people who have not had to live or work in such buildings. The buildings may reinforce the attitude that the occupants are incapable of doing anything and can remain passive and immobile, increasingly dependent on help and helpers. Hazelbaker (1983) notes that the design and decor of nursing facilities must be seen as a multi-dimensional process including technical, functional, economic, esthetic, and human qualities. Coury (1983) suggests that housekeeping plays a vital role in providing a clean, safe living environment to the satisfaction of

each patient. Brown (1983) demonstrates how quality assurance enhances a quality of live environment and how teamwork makes a nursing home a home.

Thayer (1983) discusses the dietary department explaining how food is the yardstick by which happiness and good health is measured despite all the advancement of modern medicine. Marcu (1983) asserts that patients should be encouraged by their surroundings to perform as many tasks as possible for themselves. The environment should maximize patients' use of skills and preserve individual freedom of choice and personal dignity in daily living.

King's (1981) third parameter involves employers and employees who collectively interact to achieve goals. The nursing home environment is nursing's domain. LeSage, Slimmer, Lopez, and Ellor (1989) suggest that in addition to the environment, nurses can contribute to patient dependency and potential loss of control leading to learned helplessness. Nursing staff should see its role as serving, giving as much decision-making to patients as possible to help them realize a sense of control (Johnson, 1983). According to Lawton (1990), nursing leaders in gerontology have been given the responsibility for creating an environment in which high quality patient care standards and high quality professional practices are promoted. Transactions made with the intent of choosing, creating, or

shaping environments that increase need fulfillment among elderly clients through learning to apply choice and self-direction can actively affect their overall quality of life (Lawton, 1990).

Knowledge, technology, decision making, implementation, and evaluation that facilitate goal attainment are the fourth parameters discussed by King (1981). Timko and Moos (1989), utilizing the MEAP and a representative sample of 244 residential care facilities, evaluated whether elderly residents' adaptation is affected by naturally occurring levels of choice and control in sheltered care facilities. Their findings supported the idea that environmental choice and control are related to better adaptation among residents, are partially mediated by policy clarity and facility social climate, and are influenced by the functional ability of the resident.

A cooperative relationship characterized by mutual respect and open communication needs to be developed and maintained. Patient councils are necessary to keep patients apprised of their rights and to give them the opportunity to exercise input and control on life in the nursing home (Nordloff, 1983). High resident control was related to the amount of influence residents perceived they had in running the facility. Enabling residents to enjoy more freedom of choice and to have more control over

appropriate aspects of facility policies leads to more positive social environments in these facilities, as seen by both residents and outside observers (Moos, 1981; Schulz & Hanusa, 1978).

Bennett (1980) suggests the creation of a new department within the nursing home environment called the "Human Services Department." This department would be responsible for the patient's well-being and autonomy. The major concepts of the social system discussed by King (1981) state that human beings are continuously interacting with other human beings and objects in their environment. This section summarized the quality of the nursing home environment; policies, programs, and services within that environment; and resident adaptation to the nursing home environment as they are linked to King's (1981) parameters of an organization.

Interactions and Transactions

The last section of the literature review discusses interactions and interventions that relate to King's theory of goal attainment. Several authors discussed interventions that enhance options for control by nursing home patients to promote health. Descriptive studies by Ryden (1985) stress the need for environmental support. Huss, Buckwalter, and Stolley (1988) reported that nursing has an impact on life satisfaction by maintaining a

confidant relationship in a therapeutic situation. Thomas and Hooper (1983), in a five-year longitudinal study, found that adequate social bonds of healthy elderly with internal locus of control related to good health. Guarnera and Williams (1987) suggested moderate linkage between optimism and locus of control in the health and affiliation of elderly residents residing in a retirement community. These descriptive studies utilized interviews and a variety of locus of control scales, health scales, and social interaction scales.

Quasi-experimental studies also demonstrated the importance of control. For example, Langer and Rodin (1976) conducted a field experiment in a nursing home to evaluate the effects of choice and enhanced personal responsibility. The experimental group were given a verbal communication emphasizing individual responsibility to influence their environment plus a plant to take care of. Communication to the control group stressed staff responsibility for the residents and the plants. Questionnaire ratings and behavior measures showed increased alertness, active participation, and a general sense of well-being in the experimental group. The experimental group was reevaluated 18 months later and found to have sustained beneficial benefits.

Rodin and Langer (1977) cautioned against withdrawing interventions at the termination of their study to prevent a sense of loss of control and further debilitation. Schulz and Hanusa (1978) also raised concern over short term interventions with an institutionalized aged group in a field study experiment. Groups that had initially benefited from the intervention exhibited precipitous declines once the study was terminated, whereas groups that had not benefited from the intervention remained stable over time.

Moran and Gatz (1987) randomly assigned nursing home residents to one of three conditions: the first, a task-oriented group, welcoming new admissions and working on related problems; the second, an insight oriented friendship group where residents could share concerns and learn better coping skills; and third, a waiting-list control group. The first two groups had weekly meetings. Personality tests, coping scales, life satisfaction tests, and interviews were conducted. The task-oriented group was superior with respect to life satisfaction, demonstrating that mastery over the environment leads to a sense of well-being.

In conclusion, the literature supports King's (1981) conceptual framework that describes the nature of interactions that can lead to the achievement of goals.

This theory presents a standard for interactions, proposing that health care professionals interact with clients mutually to establish goals and to explore and agree on means to achieve goals.

Chapter 3

METHODOLOGY

This quasi-experimental study was designed to assess a nursing home social environment and explore the factors that compare patients' perception of control over their environment. The study was conducted in October, 1990, in a Veterans Administration nursing home care unit (NHCU) in an urban area in northern California.

Sample

The experimental group consisted of a convenience sample of 11 members of the NHCU Friendly Social Group. An equal number of randomly selected alert and oriented NHCU residents who were not group members participated in the study as the control subjects. Their names were drawn from a paper bag containing male and female names given to the investigator from head nurses. Both groups had 9 men and 2 women each. All were Caucasian and had served in the military service. Members of the Friendly Social Group had an age range of 64 to 91 with a mean age of 74.45 years. The non-member residents had an age range of 69 to 94 with a mean age of 76.55 years.

Approval for the study was obtained from the study site's Medical Committee for the Protection of Human Subjects in Research (Appendix A) and the San Jose State

University Human Subjects Institutional Review Board (Appendix B). The Associate Chief of Nursing in Extended Care permitted the investigator to use the NHCU population for the study. Each resident in the sample signed a consent form before participating in the study (Appendix C). Demographic data were obtained from resident interviews and NHCU charts (Appendix D).

Cognition Testing

The Folstein et al. (1975) Mini-Mental State exam (Appendix E) was administered to all participants to screen out residents with organic brain syndrome, Alzheimer's disease or any cerebral disease that impaired judgement and orientation. All residents in the non-member group scored in the normal range of the Folstein Mini-Mental State exam. Only 9 Friendly Social Group members scored in the normal range. Two patients had deteriorated since original membership in the group, but remained group members. One member scored in the range of moderate intellectual impairment and 1 member scored in the range of mild intellectual impairment. These 2 members were able to complete the questionnaire with minimal assistance.

Data Collection

Permission was obtained from Moos and Lemke to administer the Sheltered Care Environment Scale - Form R (Appendix F). The Sheltered Care Environment Scale (SCES)

(Moos, 1984) is a testing instrument within the Multiphasic Environmental Assessment Procedure (MEAP) (Appendix G).

The MEAP is structured to reflect four conceptual approaches used in characterizing human environments for the elderly and understanding their relationship to behavior. According to Moos and Lemke (1984), these four approaches focus on physical and architectural features, policies and programs, social climate, and the human aggregate (that is, the characteristics of residents and staff in the setting). The MEAP is designed for maximum flexibility. Any one or all of the MEAP dimensions can be measured for a given facility. In order to use the existing Moos and Lemke norms, each dimension must be kept intact. All items on a dimension must be included in order to determine a facility's score on that dimension. SCES questions are organized under each subscale dimension (Appendix H). A hand scoring form was utilized to determine which items belong to each dimension (Appendix I).

Moos and Lemke's research work (Moos, 1980) was supported by NIMH Grant MH28177 and by Veterans Administration Health Services Research and Development Service funds. The authors report that reliability and validity were demonstrated in research studies in 313 residential facilities for elderly persons in 36 states.

The MEAP dimension items were evaluated by comparing a California sample to the National sample utilizing the criteria of meaningfulness, item distribution, item interrelatedness, and subscale independence (Moos & Lemke, 1984).

Moos and Lemke (1984) give SCES normative data obtained from 1873 residents and 2042 staff from 127 nursing homes. Mean scores representing the average percent of items answered in the scored direction ranged from 34% on self-exploration to 75% on physical comfort for residents and from 53% on independence to 69% on cohesion for staff. The MEAP has been applied to a representative sample of 79 facilities that serve veterans, including 36 Veterans Administration nursing home care units. The MEAP was utilized in nursing homes, residential care facilities, and apartment facilities. In 36 veteran nursing home units resident means ranged from 35% on self-exploration to 73% on physical comfort. Staff means in the veteran sample ranged from 46% on independence to 74% on conflict.

Subscale internal consistencies (Cronbach's Alpha) were given from a representative group of 1041 residents and 792 staff from more than 150 facilities. Six of the seven SCES subscales had moderate internal consistencies (.64 to .78), but for the resident influence subscale internal consistency was relatively low (.50). Moos and

Lemke (1984) calculated split-half reliabilities from the same sample by computing the correlation between the facility score obtained from half the respondents and that obtained from the remainder. These reliabilities were moderate to high (.66 on self-exploration to .90 on physical comfort for residents and .59 on self-exploration to .83 on physical comfort for staff) indicating that SCES results are relatively independent of the specific individuals that responded.

The MEAP discriminates between facilities that offer different levels of care and between geriatric facilities that offer the same level of care. The MEAP has several limitations that point to the need for further development. These limitations include the dichotomous item scoring criteria and a scoring system that gives equal weight to highly salient and less salient environmental features (Moos & Lemke, 1985).

SCES Subscale Descriptions (Moos & Lemke, 1984)

The SCES is a 63-item yes/no questionnaire designed to measure three domains of social climate dimensions: interpersonal relationships, opportunity for personal growth, and the mechanism for system maintenance and change. The SCES provides unique information about how residents feel about the facility. It focuses on their perceptions of the facility's functioning, the quality of

interpersonal relationships, and other important aspects, such as the level of independence (Lemke & Moos, 1984). Seven subscales with a brief definition and an item example of each follows.

Relationship Dimensions

1. Cohesion measures how helpful and supportive staff members are toward residents and how involved and supportive residents are with each other. (Do residents get a lot of individual attention?)

2. Conflict measures the extent to which residents express anger and are critical of each other and of the facility. (Do residents ever start arguments?)

Personal Growth Dimensions

3. Independence assesses how self-sufficient residents are encouraged to be in their personal affairs, and how much responsibility and self direction they are encouraged to exercise. (Do residents sometimes take charge of activities?)

4. Self-Exploration measures the extent to which the residents are encouraged to openly express their feelings and concerns. (Are personal problems openly talked about?)

System Maintenance and Change Dimensions

5. Organization addresses how important order and organization are in the facility, the extent to which residents know what to expect in their day-to-day routine,

and the clarity of rules and procedures. (Are activities for residents carefully planned?)

6. Resident influence measures the extent to which the residents can influence the rules and policies of the facility and the degree to which the staff directs the residents through regulations. (Are suggestions made by the residents acted upon?)

7. Physical comfort taps the extent to which comfort, privacy, pleasant decor, and sensory satisfaction are provided by the physical environment. (Can residents have privacy whenever they want?)

Moos and Lemke (1984) believe that descriptions of social-environmental programs are based on the continuity and consistency of how people see discrete events. For example, if suggestions made by residents are acted upon, if residents have a say in making the rules, and if residents can change some of the procedures in a facility, it is likely that the facility emphasizes resident influence. A feeling of participation and control then occurs on the part of residents. Independence and resident influence subscales measure control perception on the SCES (Lemke & Moos, 1989a).

According to Lemke and Moos (1984) this questionnaire can be administered to both staff and residents of a facility. The SCES requires 15-20 minutes to complete and

should be given in a group setting or self-administered when possible. If the items need to be read to residents, as is the case in most nursing homes, the time involved averages 20-30 minutes for each resident. The answer for each question was tallied on an answer sheet in the yes/no scored direction (Appendix I) as determined by Lemke, Moos, and Marder (1984). The raw score on a dimension showed the percent of an individual's questions that are answered in the scored direction. The Friendly Social Groups' score and the non-members' scores on a given SCES dimension were the average of all individual scores for each group.

The dimensions of the SCES tool that evaluated the patients' perception of control over their environment were the combined scores of independence and resident influence. The dimensions of the SCES tool that measured rapport were the scores on cohesion, conflict, and organization. The two remaining dimensions that measured social climate are self-exploration and physical comfort (Lemke & Moos, 1989a, 1989b).

Research Procedure

As soon as approval was obtained from the Medical Committee for the Protection of Human Subjects in Research at the study institution (Appendix A) and from San Jose State University's Human Subjects Institutional Review Board (Appendix B), contact was initiated with members of

the Friendly Social Group (experimental group) during a group meeting. The purpose of the study was explained to each potential participant. Each group member was visited again in the privacy of his/her own room to discuss his/her participation and a consent form was left with each member to read. On another day, the researcher visited the member in his/her room to answer questions. All group members agreed to participate and consent forms were signed. The Folstein Mini-Mental State exam was administered by members of the staff. Five group members were given the SCES questionnaire to complete on their own. The SCES questionnaire was read by the researcher to 6 group members who had problems with vision or hand movements.

Names of non-group member NHCU residents who were alert and oriented were given to this researcher by NHCU head nurses. Names of females and males were randomly drawn. Initial contact was made with the 11 potential non-member (control group) residents. One female declined to participate, so a second female resident was randomly chosen. The Folstein Mini-Mental State exam and the questionnaires were administered in the same manner as the experimental group. Only 4 residents were capable of completing the questionnaire on their own. The SCES questionnaire was read to the remaining 7 residents. The data collection process took one month.

Inferential statistics were used to analyze the data. The data were categorized utilizing Moos and Lemke comparisons of elderly persons in different residential social environments (Moos & Lemke, 1984).

Chapter 4

ANALYSIS AND INTERPRETATION OF DATA

Analysis of Data

The purpose of this quasi-experimental study was to compare, between two nursing home resident groups, perceptions of control over their environment. The experimental group was a patient advocacy group ($n=11$) and the control group consisted of nursing home residents who were not members of this group ($n=11$). A second objective was to compare, between these two groups, perceptions of the social climate in the environment according to the dimensions of the Sheltered Care Environment Scale (SCES): cohesion, conflict, independence, self-exploration, organization, resident influence, and physical comfort. The SCES, developed by Moos and Lemke (1984), was administered to both groups. Resident demographics were obtained, utilizing interview information obtained from each subject and his/her NHCU chart. These data were analyzed utilizing inferential statistics.

Demographic Summary

The demographics illustrated the similarities between the Friendly Social Group members and the non-group members in the Nursing Home Care Unit (NHCU). There were 11 residents in each group, 9 men and 2 women. The ages of

the Friendly Social Group members were 64-91 years with 74.45 years as the mean. The ages of the non-members ranged from 61-94 years with 76.55 years as the mean.

Two members of the Friendly Social Group were married, 1 was separated, 4 were widowed, 3 were divorced, and 1 was single. Six members of the control group were married, 2 were widowed, 2 were divorced, and 1 was single.

Five members of the Friendly Social Group were in another nursing home before admission to the Veterans Administration NHCU compared to 2 non-group members. The amount of time residents lived in the Veterans Administration NHCU ranged from 20 months to 7 years with a mean of 4.67 years for Friendly Social Group members. Non-member residents length of stay ranged from 2 months to 11 years with a mean of 2.73 years for non-group residents.

All residents of the NHCU were military veterans. Two residents from each group were career military. Post military careers were varied in each group. Careers ranged from blue-collar and white-collar workers to professional occupations.

Diagnoses for both groups involved a complex variety of multiple chronic diseases. These debilitating diseases included cardiovascular diseases, multiple sclerosis, Parkinson's disease, hypertension, rheumatoid arthritis, depression, diabetes, chronic obstructive pulmonary

disease, schizophrenia, cancer, and convulsive disorders. Both groups were at high risk for respiratory infections, urinary tract infections, and acute exacerbation of their chronic disease.

The NHCU utilized a category of care system to classify the care needs of patients. Category I was independent, category II was partial assist, and category III was complete assist. The care needs addressed were basic hygiene/bathing, nutrition/feeding, elimination, mobility, and behavior/orientation. In the Friendly Social Group, 6 members were in category I, 2 members were in category II, and 3 members were in category III. In the non-member population, 3 residents were in category I, 7 members were in category II, and 1 member was in category III.

All residents in each group had debilitating chronic illnesses that contributed to being challenged with a variety of physical limitations. These limitations affected the physical care needs of residents. In each group, 6 residents were unable to walk, 3 residents had difficulty walking, 1 resident had gait tremors, and 3 residents were hard of hearing. The Friendly Social Group had 4 members with decreased use of their hands compared to 5 non-member residents. The non-member control

group also had 1 member who was unable to use any extremities.

The experimental and control groups each had 2 members who were ambulatory, and 2 members who used an electric cart, called a motivator, as a mode of transportation. In the Friendly Social Group, 2 members could ambulate behind their wheelchairs, 5 members were wheelchair bound, and 1 member utilized an electric wheelchair. In the non-member group, 1 resident ambulated with a quad cane, 2 residents utilized a walker, 6 were in a wheelchair, and 2 needed an electric wheelchair.

In October, 1990, only 2 members in the Friendly Social Group remained who were part of the original group in 1984. Two members joined in 1985, 3 in 1986, 2 in 1988, and 1 each in 1989 and 1990.

The demographics revealed no relative differences between the two groups in activity attendance, visitors, outings, or passes. A major theme of both populations was frailty of health.

Statistical Results

To calculate the mean scores for each SCES dimension, the total number of questions answered in the scored direction were added (Moos & Lemke, 1984). This number was divided by 99, the total number of possible points for each group, control and experimental (Appendix I). The median

was the middle score of the total number of questions answered in the scored direction for each participant.

The Mann Whitney U statistical test, a non-parametric procedure for testing the difference between two small independent samples, was utilized to calculate differences between each SCES dimension median score, the middle score of the ranked scores for the experimental and control group members. This statistical test is based upon the assignment of ordinal ranks to the two groups of measures (Orkin & Drogin, 1975).

The alpha value was determined to be significant at $p \leq .006$. The alpha .05 was divided by eight for statistical evaluation because the SCES had seven dimensions plus the control dimension.

Research Question 1

Research question 1 addresses nursing home resident's perception of control over their environment. Lemke and Moos (1989a, 1989b) state that control measures residents' perceptions of how independent and influential residents are in the facility. The score for control is calculated by combining scores on the SCES dimensions of independence and resident influence and then dividing by two. The 18 items on the subscale dimensions of independence and resident influence (Appendix H) are used to assess how self-sufficient residents are encouraged to be, how much they

can influence facility policies, and how free they are from strict control by rules.

Table 1 displays the perceived control mean, standard deviation, and median scores for the Friendly Social Group members and non-member residents. The median score for perceived control was 5.50 for the Friendly Social Group and 3.50 for the non-member residents. The Mann Whitney U value was 16.5 ($p = .0035$). Therefore, perception of control was significantly higher for the Friendly Social Group than the non-member group.

Research Question 2

Research question 2 asks about perception of the environment as addressed by the SCES dimension of cohesion, conflict, independence, self-exploration, organization, resident influence, and physical comfort. Table 2 displays the mean, standard deviation, and median on each SCES dimension for the Friendly Social Group and non-member residents of the NHCU. None of the SCES dimension scores was significantly different at $p \leq .006$. Although the Friendly Social Group members scored higher on the dimensions of cohesion, conflict, independence, self-exploration, and resident influence and non-members scored higher on the dimensions of organization and physical comfort, these differences were not statistically significant.

Table 1

Perceived Control Statistic by Group (N=22)

Perceived Control (independence and resident influence)	Friendly Social Group Residents (<u>n</u> =11)	Non-Members Residents (<u>n</u> =11)	p Value
Perceived Control			
mean	5.18	3.77	
standard deviation	.68	1.60	
median	5.50	3.50	.0035*

Note. *Significance at $p \leq .006$

Table 2

Statistical Comparisons of the SCES Means by Group (N=22)

SCES Dimensions	Friendly Social Group (<u>n</u> =11)	Non-Members (<u>n</u> =11)	p Value
Cohesion			
mean	5.45	5.18	
standard deviation	1.37	2.68	
median	6.00	5.00	.7897
Conflict			
mean	6.09	3.64	
standard deviation	2.34	2.29	
median	6.00	3.00	.0263
Independence			
mean	5.00	3.73	
standard deviation	1.67	1.90	
median	4.00	4.00	.1075
Self-Exploration			
mean	3.27	1.91	
standard deviation	1.74	1.64	
median	3.00	1.00	.0728
Organization			
mean	4.18	5.55	
standard deviation	1.60	1.75	
median	4.00	5.00	.0821
Resident Influence			
mean	5.36	3.82	
standard deviation	1.21	1.99	
median	5.00	4.00	.0268
Physical Comfort			
mean	5.55	6.82	
standard deviation	1.81	2.36	
median	5.00	8.00	.0761

Note. *Significance at $p \leq .006$

Summary

The first research question posed in this study asked if being a member of an autonomous patient advocacy group made a difference in nursing home residents' perception of control over their NHCU environment. The mean score on perceived control was 5.50 for the Friendly Social Group and 3.50 for the non-member residents. Perception of control in the Friendly Social Group was significantly higher at $p = .0035$ (Table 1).

The second research question asked if members of the autonomous patient advocacy group perceived their environment differently than non-group residents as measured by the SCES tool. Using $p \leq .006$ as the level of statistical significance, there were no significant differences on any of the SCES dimensions (Table 2).

The research study hypothesis stated that the mean scores on the SCES subscale dimensions of independence and resident influence, measuring perception of control of nursing home residents over their environment, would be greater for the advocacy group members than the non-group members in the nursing home. Table 1 demonstrated statistically significant differences ($p \leq .006$) for perception of control in the Friendly Social Group ($p = .0035$). The hypothesis of this quasi-experimental research study was supported. The Friendly Social Group

did perceive greater control over their environment than
did the non-member resident population in the nursing home.

Chapter 5

CONCLUSIONS AND RECOMMENDATIONS

This research study focused on the assumption that patients in nursing homes frequently have minimal control over their environment. The ability to exercise choice and increase perception of control is of special significance in the nursing home environment and may possibly influence morbidity and mortality (Baltes & Baltes, 1986).

Long-term care of elderly patients requires a great deal of dedication and patience. Residents are fragile. They have chronic diseases which can be extremely debilitating, exacerbated by acute conditions that can be life-threatening. There can also be deterioration in their chronic diseases such as increased muscle weakness. Health care professionals must be sensitive to all physical frailties and maximize the mental capabilities of each participant, while being aware of the effects of decreased hearing, diminished vision, and other physical limitations. The professional must be especially aware of clients' feelings of powerlessness and perceived lack of control over their environment because of these frailties.

Challenging programs that capitalize on the strengths of the individual elderly clients should be promoted with staff support (Ryden, 1985). A resident group is a good

place to empower alert elderly patients who are interested in participating in an on-going discussion of issues and concerns (Burnside, 1986). In this study the Friendly Social Group, a NHCU patient advocacy group, showed greater perception of control over their environment than the perception of control in the group of patients who were not members of this group.

Perception of Control

Research question 1 asked if being a member of an autonomous patient advocacy group made a difference in nursing home residents' perception of control over their environment. Control was measured through the combined SCES subscale dimensions of resident influence and independence. Perceived control was higher ($p = .0035$) for the Friendly Social Group, but the individual subscale components of the control dimension (resident influence and independence) were not statistically different.

The Friendly Social Group had a mean score of 5.36 versus the non-members mean score of 3.82 on the SCES dimension of resident influence, but the differences were not statistically different. The minutes of their weekly meetings reflect that, over many years, the group has influenced changes in the NHCU by providing input to staff on issues, suggestions, and recommendations for change; and through successful completion of projects. Group

accomplishments included interaction with many medical center departments; beautification projects with the use of flowers, plants, and trees; development of a dining room dress code; implementation of a NHCU monthly newsletter; participation in the removal of a problematic food tray delivery system; planning of monthly memorial services; and input into the new, updated NHCU orientation booklet for residents and families.

Group ideas were tolerated by some staff and endorsed by other staff. The director of the NHCU was very supportive of the advocacy group and had delegated tasks to the group via the co-leaders. Moos, Gauvain, Lemke, Max, and Mehren (1979) stress that if residents can have input into the rule-making procedure and if residents can change things in a facility, then a feeling of participation and control develop on the part of the residents. The conditions establish the social climate or atmosphere of a setting (Moos & Lemke, 1984).

The Friendly Social Group had a higher score for independence, but the difference was not significantly different. The dimension of independence revealed how self-sufficient residents were encouraged to be in making their own decisions, dealing with practical problems, learning new skills, taking charge of activities, not depending on the staff for activities, and being more

interested in the future than the past. Both groups relied on the staff to plan many of the NHCU activities. Because of physical frailties, both groups were taught to maintain skills in the NHCU especially in the area of mobility, safety, and activities of daily living.

The Friendly Social Group members were encouraged to think beyond the individual to include the total NHCU population. They were advocates for themselves and others. The group had also taken charge of activities and projects within the NHCU. Group members planned the menu for the monthly dinners, called family members of deceased NHCU residents to invite them to the memorial services, and collaborated with other medical center departments to get environmental issues resolved.

Perception of Environment

Research question 2 asked if members of the autonomous patient advocacy group perceived their environment differently than non-group residents as measured by the SCES tool. The dimensions of cohesion, conflict, self-exploration, organization, and physical comfort, were first analyzed statistically and then explored utilizing the written minutes of the Friendly Social Group weekly meetings as a means to gain insight related to the groups' perceptions. Appendix H reflects the SCES questions grouped together in the appropriate dimension.

The SCES dimension of cohesion measured staff help, support, and interaction with residents. The Friendly Social Group members scored slightly higher than non-member residents, but the difference was not statistically significant. The group had expressed concern that many NHCU patients do not get much attention socially from staff, but sit passively in front of a television during the day. Concern had also been voiced by both groups over the delay in answering call lights and the delay in staff responding to patient requests. Staff didn't spend as much time with patients as patients and families expected due to increased work load and decreased staff.

The SCES dimension of conflict measured the following activities: residents arguing, expressing anger, criticizing the facility, disagreeing, complaining, expressing impatience, and disrupting peace and quiet. The Friendly Social Group mean score was 6.09 compared to 3.64 for non-member residents, but the difference was not statistically significant. One of the supportive roles of the group was to allow and encourage group members to verbally challenge any issues of concern within the local nursing home and the Veteran Administration health care system. Conflict was supported as a way to foster change within the nursing home. Frequent conflict issues that were discussed at meetings centered around nursing home

food, housekeeping problems, privacy, difficulty in maneuvering wheelchairs through doors and hall clutter, environment beautification, and staff shortages.

The SCES dimension of self-exploration measured expression of feelings and concerns. The Friendly Social Group, whose mean score was 3.27 compared to a mean of 1.91 in non-member residents was not statistically different. The advocacy group met weekly to socialize and discuss life in the nursing home. They would briefly discuss their own health problems, but they always inquired about other members or NHCU residents who were ill or had died. Several group members visited their sick friends in their NHCU rooms. Death was always discussed since memorial services were planned by the group on a monthly basis. Group members also informally networked with new NHCU residents. Some group members were more verbal than others. Money problems, family problems, and past dreams and ambitions were occasionally discussed. The group frequently reminisced about past social events, work situations, friends and family.

The non-member residents had mean scores higher (5.55 versus 4.18) than the Friendly Social Group on the SCES dimension of organization although this difference was not statistically significant. The SCES questions on organization addressed issues about order versus confusion

in the facility, clarity of rules and procedures, and known expectations within the daily routine of a resident. The non-members may have been more complacent, distanced from, able to ignore, or contented with the confusion, disorganization, conflicting rules and staff messages within this complex bureaucratic system.

The Friendly Social Group had demonstrated the ability to question the organization. The members had the freedom to raise concerns about staff, programs, and policies within the NHCU medical center system. Sometimes they needed information regarding how departments operated.

The non-member residents had a higher mean score (6.82) than the Friendly Social Group (5.55) on the SCES dimension of physical comfort. This difference was not statistically significant. Physical comfort addressed furniture, ventilation, privacy, smells, noise, lighting, and decor. The non-members seem to be relatively content with these questions while the Friendly Social Group had been aware of and identified problems within the physical environment of the facility. They challenged issues regarding the structure and placement of furniture; broken equipment; unit clutter; privacy and patient rights; increased noise; and staff attitudes, roles, and perceived insensitivity to the physical needs of the NHCU residents.

Summary

Control measures the residents' perception of how independent and influential residents are in the facility. The Friendly Social Group showed greater perception of control over their environment ($p = .0035$). Timko and Moos (1989) concluded that specialized living environments promoting residents' independence and ability to make choices over the long term may enhance the adaptation of better functioning residents without having a detrimental influence on poorly functioning residents.

Residents who perceive control over their environment in the nursing home are an example of a powerful application of King's (1981) theory of goal attainment. When patients and staff work toward common goals, the interaction and transactions can be challenging and rewarding for both (King, 1981). King indicates that it is exciting and challenging to encourage patients to participate and collaborate in the nursing process. These collaborative interactions give older people some control, dignity, self-reliance, and decision making power, which, as pointed out by Synder (1978), contribute to the pursuit of the best in life. Such interactive practices also raise the quality of life in a nursing home and encourage perception of control in the nursing home environment.

Moody (1988) advocates for negotiated consent, an ongoing process of communication, clarification, and consensus building. Through listening, this negotiation is a commitment to shared dialogue to achieve the best that is achievable for the nursing home residents. The Friendly Social Group advocated for this ongoing process to improve the quality of life in the NHCU.

Discussion

Sixty-three residents of the nursing home care unit have been a part of the Friendly Social Group since its inception. The majority of these residents contributed to the group process of advocacy until they were restricted by health deterioration or death. A few residents were part of the group for a short period of time and dropped out because of difficulty hearing, or because they were incapable of or unwilling to participate in this type of group process.

The benefits of an ongoing group with consistent leadership may include:

1. Group members can count on a weekly forum for information, ventilation, discussion, and feedback on any issue of concern.
2. Group members can support each other and receive support from group leaders during member health deterioration or death. The frailties of aging with all of

the ramifications of living in a nursing home environment can be discussed and problem solved together.

3. Group members, through participation in problem identification and problem resolution, gain an understanding of the complexities within the Veteran Administration bureaucratic system.

4. Group members are able to recognize and have their successes on an issue, concern, problem, or project. These successes encourage further empowerment and advocacy for themselves and others. Some issues and projects take a long time and require group persistence and group patience.

5. The group can be recognized by staff as advocates for themselves and other residents. This protects each individual group member from the potential of negative repercussions. This power of participation with staff on issues can give the group valued control over their environment.

6. Other residents in the nursing home can identify and relate to group members as being advocates for them. An individual can approach a group member with an issue or concern that can be brought up at a group meeting. Group members can also elicit input and responses from nursing home residents and their families.

Recommendations

Further research into the impact a patient advocacy

group has on its members and on the other patients and staff in a nursing home is recommended. Currently, a doctoral nursing student is conducting field research to better understand this group as a community, its members, and its leadership within the nursing home environment.

Future research is encouraged to evaluate geriatric resident groups' perception of control within other nursing home environments. Results could be compared with this study of the Friendly Social Group. This research study utilized the Moos and Lemke (1984) Sheltered Care Environment Scale and applied the scale to King's (1981) conceptual framework to evaluate the perception of control of the advocacy group in the nursing home environment.

A longitudinal study of the Friendly Social Group could be valuable since membership changes so frequently because of the frailty of the nursing home population. The group role in the NHCU, group leadership, and ongoing group interactions and transactions could be studied. Individual resident expectations and ideal preferences could also be evaluated utilizing parallel SCES forms (Moos & Lemke, 1984). Moos et al. (1979) also suggest utilizing the SCES with both patients and staff to compare perceptions of control and perceptions of the social environment. This could be one way to monitor quality of care for the elderly, provide staff with education and guidelines to

improve morale and program effectiveness, and enhance staff and residents interaction towards transactions and mutual goals (King, 1981). Quality of care providing alert nursing home residents the opportunity to be partners with nursing in controlling and managing their environment should be the mission for geriatric nurses within the next decade.

REFERENCES

References

- Alvermann, M. (1979). Toward improving geriatric care with environmental intervention emphasizing a homelike atmosphere: An environmental experience. Journal of Gerontological Nursing, 5(3), 13-17.
- Bakos, M., Bozic, R., Chapin, D., & Neuman, S. (1980). Effects of environmental changes on elderly residents' behavior. Hospital and Community Psychiatry, 31(10), 677-682.
- Baltes, M., & Baltes, P. (1986). The psychology of control and aging. Hillsdale, N.J.: Lawrence Erlbaum Assoc.
- Bennett, C. (1980). Nursing home life: What it is and what it could be. New York: Tiresias Press.
- Bevis, E. (1981). Caring: A life force. In M. Leninger (Ed.), Caring, An Essential Human Need: Proceedings of Three National Caring Conferences (pp. 49-60). Thorofare, NJ: Slack.
- Brooke, V. (1988). Initiating clinical research in a long-term care setting. Journal of Gerontological Nursing, 14(11), 16-20.
- Brothen, T., & Detzner, D. (1983). Perceived health and locus of control in the aged. Perceptual and Motor Skills, 56, 946.
-

- Brown, J. (1983). Homelike care means quality assurance. American Health Care Association Journal, 9(6), 45-47.
- Brown, B., & Granick, S. (1983). Cognitive and psychosocial differences between I and E locus of control aged persons. Experimental Aging Research, 9(2), 107-110.
- Burnside, I. (1986). Working with the elderly, group process and techniques. Boston: Jones and Bartlett.
- Cicirelli, V. (1987). Locus of control. In G.L. Maddox (Ed.), G.S. Atchley, L.W. Poon, G.S. Roth, I.C. Siegler, R.M. Steinberg, & R.J. Corsini. The Encyclopedia of Aging (pp. 406-407). New York: Springer.
- Coury, R. (1983). Comfort brings well-being. American Health Care Association Journal, 9(6), 38-40.
- Finney, J., & Moos, R. (1984). Environmental assessment and evaluation research: Examples from mental health and substance abuse programs. Evaluation and Program Planning, 7, 151-176.
- Folstein, M., Folstein S., & McHugh, P. (1975). Mini-mental state: A practical method for grading cognitive state of patients for the clinician. Journal of Psychiatric Research, 12, 461.
- Fuller, S. (1986). Holistic man and the science and practice of nursing. In L. Nicoll (Ed). Perspectives on nursing theory (pp. 261-267). Boston: Little, Brown.

- Guarnera, S., & Williams, R. (1987). Optimism and locus of control for health and affiliation among elderly adults. Journal of Gerontology, 42, 594-595.
- Hazelbaker, B. (1983). The living environment, an interior that speaks of home. American Health Care Association Journal, 9(6), 12-18.
- Hofland, B. (1988). Autonomy in long term care: Background issues and a programmatic response. The Gerontologist, 28, 3-9.
- Huss, J., Buckwalter, K., & Stolley, J. (1988). Nursing's impact on life satisfaction. Journal of Gerontological Nursing, 14(5), 31-36.
- Jameton, A. (1988). In the borderlands of autonomy: Responsibility in long term care facilities. The Gerontologist, 28, 18-23.
- Johnson, J. (1983). Caring for the resident as a total person. American Health Care Association Journal, 9(6), 29-30.
- Kane, R. & Kane, R. (1988). Long-term care: Variations on a quality assurance theme. Blue Cross and Blue Shield Association, Inquiry, 25, 132-146.
- King, I. (1981). A theory for nursing. New York: Wiley.
- Kohler, P. (1988). Model of shared control. Journal of Gerontological Nursing, 14(7), 21-25.
-

- Langer, E., & Rodin, J. (1976). The effects of choice and enhanced personal responsibility for the aged: A field experiment in an institutional setting. Journal of Personality and Social Psychology, 34, 191-198.
- Lawton, M. (1990). Residential environment and self-directedness among older people. American Psychologist, 638-640.
- Leininger, M. (1981). Caring, an essential human need: Proceedings of three national caring conferences (pp. 3-16, 133-144). Thorofare, NJ: Slack.
- Lemke, S., & Moos, R. (1984). Multiphasic environmental assessment procedure (MEAP): Handbook for users. Palo Alto: Social Ecology Laboratory and Geriatric Research, Education, and Clinical Center, Veterans Administration and Stanford University Medical Center.
- Lemke, S., & Moos, R. (1989a). Ownership and quality of care in residential facilities for the elderly. The Gerontological Society of America, 29(2), 89.
- Lemke, S., & Moos, R. (1989b). Personal and environmental determinants of activity involvement among elderly residents of congregate facilities. Journal of Gerontology: Social Sciences, 44(4), 5139-5148.

- Lemke, S., Moos, R., & Marder, A. (1984). Multiphasic environmental assessment procedure (MEAP): Hand scoring booklet (updated 1988). Palo Alto: Social Ecology Laboratory and Geriatric Research, Education, and Clinical Center. Veterans Administration and Stanford University Medical Center.
- LeSage, J., Slimmer, L., Lopez, M., & Ellor, J. (1989). Learned helplessness. Journal of Gerontological Nursing, 19(5), 9-15.
- Lumpkin, J. (1985). Health versus activity in elderly persons' locus of control. Perceptual and Motor Skills, 60, 288.
- Marcu, M. (1983). The living environment, personal dignity through physical design. American Health Care Association Journal, 9(6), 8-11.
- Moody, H. (1988). From informed consent to negotiated consent. The Gerontologist, 28, 64-70.
- Moos, R. (1980). Specialized living environments for older people: A conceptual framework for evaluation. Journal of Social Issues, 36(2), 75-94.
- Moos, R. (1981). Environmental choice and control in community care settings for older people. Journal of Applied Social Psychology, 11(1), 23-43.
-

- Moos, R. (1984). Multiphasic environmental assessment procedure (MEAP): Data collection forms (updated 1988). Palo Alto: Social Ecology Laboratory and Geriatric Research, Education and Clinical Center. Veterans Administration and Stanford University Medical Center.
- Moos, R., Gauvain, M., Lemke, S., Max, W., & Mehren, B. (1979). Assessing the social environments of sheltered care settings. The Gerontologist, 19(1), 74-81.
- Moos, R. & Lemke, S. (1984). Multiphasic environmental assessment procedure (MEAP): Manual (updated 1988). Palo Alto: Social Ecology Laboratory and Geriatric Research, Education and Clinical Center. Veterans Administration and Stanford University Medical Center.
- Moos R., & Lemke, S. (1985). Specialized living environments for older people. In J.E. Birren, K.W. Schaie (Eds.), Handbook of the Psychology of Aging (2nd ed.), (pp. 864-888). New York: Van Nostrand Reinhold.
- Moran, J., & Gatz, M. (1987). Group therapies for nursing home adults: An evaluation of two treatment approaches. The Gerontologist, 27, 588-591.
- Nathanson, P. (1987). Advocacy. In G.L. Maddox (Ed.), G.S. Atchley, L.W. Poon, G.S. Roth, I.C. Siegler, R.M. Steinberg, & R.J. Corsini. The Encyclopedia of Aging (pp. 11-12). New York: Springer.

- Noakes, E. & Taylor, P. (1983). Nursing home design for community relations. American Health Care Association Journal, 9(4), 38-44.
- Nordlof, S. (1983). Continuing relationships and life style in quality setting. American Health Care Association Journal, 9(6), 23-28.
- Omnibus Budget Reconciliation Act of 1987. (OBRA, 1987). Public Law 100-203. Subtitle C: Nursing home reform. Washington, D.C.: U.S. Government Printing Office.
- Orkin, M., & Drogin, R. (1975). Vital statistics. New York: McGraw-Hill.
- Rice, D., & Wick, A. (1985). Impact of an aging population in health care needs - State projections. San Francisco: Institute for Health and Aging, University of California. San Francisco, 1-3.
- Rodin, J. (1986). Aging and health: Effects of the sense of control. Science, 233, 1271-1276.
- Rodin, J., & Langer, E. (1977). Long-term effects of a control-relevant intervention with the institutionalized aged. Journal of Personality and Social Psychology, 35, 897-902.
- Ryden, M. (1985). Environmental support for autonomy in the institutionalized elderly. Research in Nursing and Health, 8, 363-371.

- Schulz, R., & Hanusa, B. (1978). Long term effects of control and predictability enhancing interventions: Findings and ethical issues. Journal of Personality and Social Psychology, 36, 1194-1201.
- Snyder, L. (1978). Environmental changes for socialization. Journal of Nursing Administration, 44-50.
- Taft, L. (1985). Self-esteem in later life: A nursing prospective. Advances in Nursing Science, 8(1), 77-84.
- Thayer, J. (1983). The way to a man's (or woman's) heart is . . . American Health Care Association Journal, 9(6), 31-35.
- Thomas, P., & Hooper E. (1983). Healthy elderly: Social bonds and locus of control. Research in Nursing and Health, 6(1), 11-16.
- Timko, C., & Moos, R. (1989). Choice, control, and adaptation among elderly residents of sheltered care settings. Journal of Applied Social Psychology, 19(8), 636-655.
- Veterans Administration (1984). Caring for the older veteran. Washington, D.C.: U.S. Government Printing Office.

- Veterans Administration Office of Reports & Statistics,
(1983, December). Survey of aging veterans: A study of
the means, resources and future expectations of veterans
aged 55 and over (RSM 70-84-3). Washington, D.C.: U.S.
Government Printing Office.
- Wetle, T. (1985). Ethical issues in long-term care of the
aged. Journal of Geriatric Psychiatry, 18(1), 63-73.
- Yalom, I. (1975). The theory and practice of group
psychotherapy. New York: Basic Books.

APPENDIXES

Appendix A
Institutional Consent

STANFORD UNIVERSITY
Stanford, California 94305
415/703-1893

CERTIFICATION OF HUMAN SUBJECTS APPROVAL

87

DATE: June 5, 1990

TO: J. Kohn, R.N., S.S.N.
Department of Nursing Research

FROM: Chairman, Medical Committee for the
Protection of Human Subjects in Research

PROTOCOL ENTITLED:
Nursing Home Patients' Perception of Control Over Their Environment.

The Panel approved human subject involvement in your research project on June 5, 1990.

The expiration date of this approval is June 4, 1991. If this project is to continue beyond that date, please submit an updated proposal in advance for the Panel's re-approval. If this proposal is used in conjunction with any other human experimentation or if it is modified in any way, it must be re-approved for these special circumstances. In addition, the Panel requests prompt notification of any complications which may occur during any experimental procedure.

All continuing projects and activities must be reviewed and re-approved at least annually by the Panel. Panel approval of any project is for a maximum period of one year. It is the responsibility of the investigator to resubmit the project to the Panel for annual review.

for David Oakes, M.D., Chairman

cc: Sponsored Projects
D. Lockard, RN, PhD
M. Hays, M.D., VA

Funding Agency: (Un-sponsored) (N)
Period of Time: 06/05/90 through 06/04/91
Investigational New Drugs: N
Investigational New Device: N
Cooperating Institution: N
Expedited Review
Assurance Number: M1272
IRB #01

Appendix B
University Consent

To: Jean A. Kohr, Nursing

From: Charles R. Bolz
Office of Graduate Studies and Research

Date: August 6, 1990

The San Jose State University Human Subjects Institutional Review Board has accepted your Stanford University Human Subjects Institutional Review Board approval to use human subjects in the study entitled:

"Nursing Home Patients' Perception of Control
Over Their Environment"

This approval is contingent upon the subjects participating in your research project being appropriately protected from risk. The Board's approval includes continued monitoring of your research by the Board to assure that the subjects are being adequately and properly protected from such risks. If at any time a subject becomes injured or complains of injury, you must notify Dr. Serena Stanford immediately. Injury includes but is not limited to bodily harm, psychological trauma and release of potentially damaging personal information.

Please also be advised that each subject needs to be fully informed and aware that their participation in your research project is voluntary, and that he or she may withdraw from the project at any time. Further, a subject's participation, refusal to participate or withdrawal will not affect any services the subject is receiving or will receive at the institution in which the research is being conducted. This approval is subject to the time restrictions imposed by your submitted HSIRB approval and will expire on the same date.

If you have any questions, please contact Dr. Stanford or me at (408) 924-2480.

cc: Sharon Wahl, M.S.

Appendix C
Resident Consent Form

EXPERIMENTAL SUBJECT'S BILL OF RIGHTS

* Persons who participate in a medical experiment are entitled to certain rights. These rights include but are not limited to the subject's right to:

- be informed of the nature and purpose of the experiment;
- be given an explanation of the procedures to be followed in the medical experiment, and any drug or device to be utilized;
- be given a description of any attendant discomforts and risks reasonably to be expected;
- be given an explanation of any benefits to the subject reasonably to be expected, if applicable;
- be given a disclosure of any appropriate alternatives, drugs or devices that might be advantageous to the subject, their relative risks and benefits;
- be informed of the avenues of medical treatment, if any, available to the subject after the experiment if complications should arise;
- be given an opportunity to ask questions concerning the experiment or the procedures involved;
- be instructed that consent to participate in the medical experiment may be withdrawn at any time and the subject may discontinue participation without prejudice;
- be given a copy of the signed and dated consent form;
- and be given the opportunity to decide to consent or not to a medical experiment without the intervention of any element of force, fraud, deceit, duress, coercion or undue influence on the subject's decision.

INFORMED CONSENT

You are invited to participate in a study of nursing home patients' beliefs about their surroundings. This researcher hopes to learn about events which allow nursing home patients to influence their surroundings. You were selected as a possible participant in this study because you are a patient in the nursing home or are a patient in the nursing home and a member of the Friendly Social Group.

If you decide to participate, this researcher will give you a questionnaire to complete which requires 15-20 minutes of your time.

Signature & Date

Signature of Investigator
or Witness

If you need assistance with this questionnaire, it will require 20-30 minutes of your time. In addition to the questionnaire, this researcher will ask you several questions which should take 5-10 minutes of time. Other than the inconvenience of time, there will be no discomfort or risks. The benefits would be discussion with you on your thoughts about the Nursing Home Care Unit, how you get along with other people, and influence in your surroundings.

WE CANNOT AND DO NOT GUARANTEE OR PROMISE THAT YOU WILL
RECEIVE ANY BENEFITS FROM THIS STUDY.

Any data that may be published in scientific journals will not reveal the identity of the subjects. In the interest of public safety, patient information will be provided to Federal and regulatory agencies as required. The Food and Drug Administration, for example, has the right to inspect research records and, therefore, could learn your identity if you are involved in any study performed under FDA supervision.

There will be no cost to you for participation in this study. Your participation is voluntary.

No institution(s) (e.g., NIH) companies are involved in the study through funding, cooperative research, or by providing study drugs or equipment.

Your decision whether or not to participate will not prejudice you or your medical care. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time without prejudice to you or effect on your medical care. You do not have to participate in this study unless you wish to. The alternative to participation is to refuse to fill out the questionnaire or answer the researcher's questions.

If you have any questions, I expect you to ask me. If you have any additional questions later, I will be happy to answer them. If you wish to talk with my faculty advisor, please call Ms. Sharon Wahl, MS at

Signature & Date

Signature of Investigator
or Witness

STANFORD LIABILITY CLAUSE

All forms of medical diagnosis and treatment -- whether routine or experimental -- involve some risk of injury. In spite of all precautions, you might develop medical complications from participating in this study. If such complications arise, the research will assist you in obtaining appropriate medical treatment, but this study does not provide financial assistance for additional medical or other costs. (Additionally, Stanford is not responsible for research and medical care by other institutions or personnel participating in this study.) You do not waive any liability rights for personal injury by signing this form. For further information, please call (415) 723-5244 or write the Administrative Panel on Human Subjects in Medical Research at Medical School Office Building, Room C-051, Stanford, California, 94305. In addition, if you are not satisfied with the manner in which this study is being conducted or if you have any questions concerning your rights as a study participant, please contact the Human Subjects Office at the same address and telephone number.

VA LIABILITY CLAUSE

In the unlikely event you are injured as a result of participation in this study, Palo Alto Veteran Administration Medical Center will furnish humanitarian emergency medical care (for non-veteran participants) or medical care (for veteran participants) as provided by federal statute. Compensation for such injury may be available to you under the provision of the Federal Tort Claim Act (for non-veteran and veteran participants) and/or 38 U.S.C. (for veteran participants). For further information, contact the VA District Counsel at (415) 744-7487.

SAN JOSE STATE UNIVERSITY LIABILITY STATEMENT

For questions or complaints about research subjects' rights, or in the event of research - related injury, contact Serena Stanford, Ph.D. Associate Academic Vice President for Graduate Studies and Research at (408)924-2480.

YOUR SIGNATURE INDICATES THAT YOU HAVE READ AND UNDERSTAND THE ABOVE INFORMATION, THAT YOU HAVE DISCUSSED THIS STUDY WITH THE PRINCIPAL INVESTIGATOR AND HIS OR HER STAFF, THAT YOU HAVE DECIDED TO PARTICIPATE BASED ON THE INFORMATION PROVIDED, AND THAT A COPY OF THIS FORM HAS BEEN GIVEN TO YOU.

Signature & Date

Signature of Investigator
or Witness

Appendix D
Demographic Data Form

DEMOGRAPHIC DATA FORM

Name:

Age:

Sex:

Marital Status:

Admission Date to any nursing home:

Admission Date to Palo Alto VA Nursing Home Care Unit:

Military Service:

Branch:

Years:

Occupation:

Diagnoses:

Physical Limitations:

Mode of Ambulation/Transportation:

VA Category of Care: I II III

Membership in Friendly Social Group: Month/Year

Activities in NHCU:

Visits and Frequency:

Outings/PASS:

Appendix E
Mini-Mental State

MINI MENTAL STATE

DATE: _____

PATIENT'S NAME: _____

Max

Score Score ORIENTATION

- 5 () What is the (year) (season) (date) (day) (month?)
- 5 () Where are we: (state) (county) (town) (hospital) (floor)?

REGISTRATION

- 3 () Name 3 objects: 1 second to say each. Then ask the patient all 3 after you have said them.

Give 1 point for each correct answer. Then repeat them until he learns all 3. Count trials and record.

Trials

ATTENTION AND CALCULATION

- 5 () Serial 7's. 1 point for each correct. Stop after 5 answers. Alternatively spell "world" backwards.

RECALL

- 3 () Ask for 3 objects repeated above. Give 1 point for each correct.

LANGUAGE

- 9 () Name a pencil, and watch. (2 points)

Repeat the following "no ifs, ands or buts." (1 point)

Follow a 3-stage command: "Take a paper in your right hand, fold it in half, and put it on the floor." (3 points)

Read and obey the following: "Close your eyes" (1 point)

Write a sentence. (1 point)

Copy design. (1 point)

TOTAL SCORE

ASSESS level of consciousness along a continuum.

Alert Drowsy Stupor Coma

Appendix F
Consent to Utilize
The Multiphasic Environmental Assessment Procedure (MEAP)

SOCIAL ECOLOGY LABORATORY

STANFORD UNIVERSITY SCHOOL OF MEDICINE
VETERANS ADMINISTRATION HOSPITAL

Laboratory Facilities 99
Veterans Administration Hospital
3801 Miranda Bldg. 4, Rm. B-11A
Palo Alto, California 94304
(415) 859-3996

SHELTERED CARE PROJECT

June 1989

Dear Colleague:

As part of our work on the Sheltered Care Project, we have developed a procedure for characterizing the social and physical environments of settings for the elderly, such as nursing homes, residential care facilities, and congregate apartments. The Multiphasic Environmental Assessment Procedure (MEAP) consists of five instruments that can be used either separately or together. The following MEAP materials are currently available:

- (1) The five MEAP Data Collection Forms are in one booklet.
- (2) The MEAP Handbook for Users provides item definitions and instructions for organizing data collection.
- (3) The MEAP Hand Scoring Booklet provides the scoring key in a format that makes it possible to obtain subscale scores without a computer.
- (4) The MEAP Manual includes descriptions of the dimensions, psychometric and normative data, facility profiles, and standard score conversion tables.
- (5) The MEAP Supplementary Manual: Ideal and Expectations Forms covers the adaptation of parts of the MEAP to measure preferences about settings. The Supplementary Manual includes psychometric and normative data, facility profiles, data collection forms, and scoring instructions for the Ideal and Expectations Forms.

These materials replace the 1979 Edition of the MEAP Data Collection Forms, Handbook for Users, Hand Scoring Booklet, and Preliminary Manual. Individuals who have used the initial (1979) Data Collection Forms can use the revised scoring key and norms since the initial forms include all scored items in the revised MEAP.

To order these materials, complete the enclosed request form and send it with a check for the appropriate amount to the Laboratory address above.

You are welcome to use the MEAP or parts of it in your research and to make copies of it for this purpose. Please be sure to include the copyright notice on all copies of the MEAP forms. We like to maintain information on work using the MEAP. If you find applications for it, we would like to hear from you concerning your experiences and to receive a copy of any relevant manuscript.

Good luck with your work,

Rudolf H. Moos and Sonke Lemke

Appendix G
The Sheltered Care Environment Scale
Questionnaire

Name (Optional) _____ Age _____

Name of Facility _____

☐ Male ☐ FemaleHow long have you lived or worked here? _____
Years Months DaysIf you are a staff member, check the following box ☐

and indicate your staff position _____

Today's date _____

There are 63 questions here. They are statements about the place in which you live or work. Based on your experience here, please answer these questions YES or NO. Ask yourself which answer is generally true.

Circle YES if you think the statement is true or mostly true of this place.

Circle NO if you think the statement is false or mostly false of this place.

Please be sure to answer every question. Thank you for your cooperation.

1.	Do residents get a lot of individual attention?	102 Yes	No
2.	Do residents ever start arguments?	Yes	No
3.	Do residents usually depend on the staff to set up activities for them?	Yes	No
4.	Are residents careful about what they say to each other? . .	Yes	No
5.	Do residents always know when the staff will be around? . . .	Yes	No
6.	Is the staff strict about rules and regulations?	Yes	No
7.	Is the furniture here comfortable and homey?	Yes	No
8.	Do staff members spend a lot of time with residents?	Yes	No
9.	Is it unusual for residents to openly express their anger?	Yes	No
10.	Do residents usually wait for staff to suggest an idea or activity?	Yes	No
11.	Are personal problems openly talked about?	Yes	No
12.	Are activities for residents carefully planned?	Yes	No
13.	Are new and different ideas often tried out?	Yes	No
14.	Is it ever cold and drafty here?	Yes	No
15.	Do staff members sometimes talk down to residents?	Yes	No
16.	Do residents sometimes criticize or make fun of this place?	Yes	No
17.	Are residents taught how to deal with practical problems? . .	Yes	No
18.	Do residents tend to hide their feelings from one another?	Yes	No
19.	Do some residents look messy?	Yes	No
20.	If two residents fight with each other will they get in trouble?	Yes	No
21.	Can residents have privacy whenever they want?	Yes	No
22.	Are there a lot of social activities?	Yes	No
23.	Do residents usually keep their disagreements to themselves?	Yes	No
24.	Are many new skills taught here?	Yes	No

25.	Do residents talk a lot about their fears?	Yes	No
26.	Do things always seem to be changing around here?	Yes	No
27.	Do staff allow the residents to break minor rules?	Yes	No
28.	Does this place seem crowded?	Yes	No
29.	Do a lot of the residents just seem to be passing time here?	Yes	No
30.	Is it unusual for residents to complain about each other? . .	Yes	No
31.	Are residents learning to do more things on their own? . . .	Yes	No
32.	Is it hard to tell how the residents are feeling?	Yes	No
33.	Do residents know what will happen to them if they break a rule?	Yes	No
34.	Are suggestions made by the residents acted upon?	Yes	No
35.	Is it sometimes very noisy here?	Yes	No
36.	Are requests made by residents usually taken care of right away?	Yes	No
37.	Is it always peaceful and quiet here?	Yes	No
38.	Are the residents strongly encouraged to make their own decisions?	Yes	No
39.	Do residents talk a lot about their past dreams and ambitions?	Yes	No
40.	Is there a lot of confusion here at times?	Yes	No
41.	Do residents have any say in making the rules?	Yes	No
42.	Does it ever smell bad here?	Yes	No
43.	Do staff members sometimes criticize residents over minor things?	Yes	No
44.	Do residents often get impatient with each other?	Yes	No
45.	Do residents sometimes take charge of activities?	Yes	No
46.	Do residents ever talk about illness and death?	Yes	No
47.	Is this place very well organized?	Yes	No
48.	Are the rules and regulations rather strictly enforced? . . .	Yes	No

49. Is it ever hot and stuffy in here?	Yes	No
50. Do residents tend to keep to themselves here?	Yes	No
51. Do residents complain a lot?	Yes	No
52. Do residents care more about the past than the future? . . .	Yes	No
53. Do residents talk about their money problems?	Yes	No
54. Are things sometimes unclear around here?	Yes	No
55. Would a resident ever be asked to leave if he/she broke
a rule?	Yes	No
56. Is the lighting very good here?	Yes	No
57. Are the discussions very interesting?	Yes	No
58. Do residents criticize each other a lot?	Yes	No
59. Are some of the residents' activities really challenging? . .	Yes	No
60. Do residents keep their personal problems to themselves? . .	Yes	No
61. Are people always changing their minds around here?	Yes	No
62. Can residents change things here if they really try?	Yes	No
63. Do the colors and decorations make this a warm and
cheerful place?	Yes	No

Appendix H
Organization of SCES Questions
under Subscale Dimensions

<u>Item No.</u>	<u>Scoring</u>	<u>Item</u>
<u>1. Cohesion</u>		
1	Yes	Do residents get a lot of individual attention?
8	Yes	Do staff members spend a lot of time with residents?
15	No	Do staff members sometimes talk down to residents?
22	Yes	Are there a lot of social activities?
29	No	Do a lot of the residents just seem to be passing time here?
36	Yes	Are requests made by residents usually taken care of right away?
43	No	Do staff members sometimes criticize residents over minor things?
50	No	Do residents tend to keep to themselves here?
57	Yes	Are the discussions very interesting?
<u>2. Conflict</u>		
2	Yes	Do residents ever start arguments?
9	No	Is it unusual for residents to openly express their anger?
16	Yes	Do residents sometimes criticize or make fun of this place?
23	No	Do residents usually keep their disagreements to themselves?
30	No	Is it unusual for residents to complain about each other?
37	No	Is it always peaceful and quiet here?
44	Yes	Do residents often get impatient with each other?
51	Yes	Do residents complain a lot?
58	Yes	Do residents criticize each other a lot?

<u>Item No.-</u>	<u>Scoring</u>	<u>Item</u>
<u>3. Independence</u>		
3	No	Do residents usually depend on the staff to set up activities for them?
10	No	Do residents usually wait for staff to suggest an idea or activity?
17	Yes	Are residents taught how to deal with practical problems?
24	Yes	Are many new skills taught here?
31	Yes	Are residents learning to do more things on their own?
38	Yes	Are the residents strongly encouraged to make their own decisions?
45	Yes	Do residents sometimes take charge of activities?
52	No	Do residents care more about the past than the future?
59	Yes	Are some of the residents' activities really challenging?
<u>4. Self-Exploration</u>		
4	No	Are residents careful about what they say to each other?
11	Yes	Are personal problems openly talked about?
18	No	Do residents tend to hide their feelings from one another?
25	Yes	Do residents talk a lot about their fears?
32	No	Is it hard to tell how the residents are feeling?
39	Yes	Do residents talk a lot about their past dreams and ambitions?
46	Yes	Do residents ever talk about illness and death?
53	Yes	Do residents talk about their money problems?
60	No	Do residents keep their personal problems to themselves?

5. Organization

5	Yes	Do residents always know when the staff will be around?
12	Yes	Are activities for residents carefully planned?
19	No	Do some residents look messy?
26	No	Do things always seem to be changing around here?
33	Yes	Do residents know what will happen to them if they break a rule?
40	No	Is there a lot of confusion here at times?
47	Yes	Is this place very well organized?
54	No	Are things sometimes unclear around here?
61	No	Are people always changing their minds around here?

6. Resident Influence

6	No	Is the staff strict about rules and regulations?
13	Yes	Are new and different ideas often tried out?
20	No	If two residents fight with each other will they get in trouble?
27	Yes	Do staff allow the residents to break minor rules?
34	Yes	Are suggestions made by the residents acted upon?
41	Yes	Do residents have any say in making the rules?
48	No	Are the rules and regulations rather strictly enforced?
55	No	Would a resident ever be asked to leave if he/she broke a rule?
62	Yes	Can residents change things here if they really try?

<u>Item No.</u>	<u>Scoring</u>	<u>Item</u>	109
<u>7. Physical Comfort</u>			
7	Yes	Is the furniture here comfortable and homey?	
14	No	Is it ever cold and drafty here?	
21	Yes	Can residents have privacy whenever they want?	
28	No	Does this place seem crowded?	
35	No	Is it sometimes very noisy here?	
42	No	Does it ever smell bad here?	
49	No	Is it ever hot and stuffy in here?	
56	Yes	Is the lighting very good here?	
63	Yes	Do the colors and decorations make this a warm and cheerful place?	

Appendix I
SCES Scoring

- STEP 1: DISCARD QUESTIONNAIRES WITH MORE THAN 10 UNANSWERED QUESTIONS.
- STEP 2: IF RESPONDENTS HAVE MARKED ON THE QUESTIONNAIRE RATHER THAN ON THE ANSWER SHEET, TRANSFER ANSWERS TO THE ANSWER SHEET (PAGE 70). A SEPARATE ANSWER SHEET SHOULD BE USED FOR EACH RESPONDENT.
- STEP 3: CUT OUT THE BOXES MARKED WITH AN "X" ON THE SCORING TEMPLATE (PAGE 71).
- *** The columns on the template are labeled with the SCES dimension names. Each of the seven columns contains all the items used in scoring one SCES dimension (e.g., items 1, 8, 15, 22, 29, 36, 43, 50, and 57 are on the Cohesion subscale; items 2, 9, 16, 23, 30, 37, 44, 51, and 58 are on the Conflict subscale, and so on).
- STEP 4: ALIGN THE SCORING TEMPLATE OVER AN ANSWER SHEET. OBTAIN THE RAW SCORE FOR COHESION BY COUNTING THE NUMBER OF RESPONSES APPEARING IN THE WINDOWS IN COLUMN 1.
- STEP 5: DIVIDE THE RAW SCORE BY 9 (THE TOTAL POINTS POSSIBLE ON EACH DIMENSION). THIS IS THE INDIVIDUAL'S PERCENTAGE SCORE FOR COHESION. (A SAMPLE TALLY SHEET FOR KEEPING TRACK OF SCORES IS ON THIS PAGE.)
- STEP 6: REPEAT STEPS 4 AND 5 FOR EACH OF THE DIMENSIONS, RECORDING THE RESPONDENT'S PERCENTAGE SCORES ON THE TALLY SHEET. SCORE EACH PERSON'S SCES IN THIS WAY, KEEPING RESIDENT AND STAFF GROUPS SEPARATE.
- STEP 7: TO CALCULATE FACILITY SCES SCORES, AVERAGE THE INDIVIDUAL PERCENTAGE SCORES FOR EACH OF THE DIMENSIONS. YOU SHOULD END UP WITH SEVEN FACILITY MEANS (ONE FOR EACH DIMENSION) FOR THE RESIDENT GROUP AND SEVEN FOR THE STAFF GROUP.

SAMPLE TALLY SHEET

RESPONDENT #	COHESION	CONFLICT	INDEPENDENCE	SELF-EXPLORATION	ORGANIZATION	RESIDENT INFLUENCE	PHYSICAL COMFORT
Friendly Social Group	62	68	56	36	46	60	62
Non-Member Residents	58	40	41	21	62	42	76
Friendly Social Group Difference	+4	+28	+15	+15	-16	+18	-14

CUT OUT ALL BOXES WITH AN "X", AND THE DARKENED CORNERS OF THE ANSWER BLOCK. ALIGN THE TEMPLATE OVER THE SCES ANSWER SHEET MATCHING THE CORNERS. FOLLOW INSTRUCTIONS ON PAGE 64 FOR SCORING SCES DIMENSIONS.

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	COHESION COL 1	CONFLICT COL 2	INDEPENDENCE COL 3	RESIDENT INFLUENCE COL 4	ORGANIZATION COL 5	SELF- EXPLORATION COL 6	COMFORT COL 7	
	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	
YES	X	X			X		X	YES
NO			X	X		X		NO
	Item 8	Item 9	Item 10	Item 11	Item 12	Item 13	Item 14	
YES	X			X	X	X		YES
NO		X	X				X	NO
	Item 15	Item 16	Item 17	Item 18	Item 19	Item 20	Item 21	
YES		X	X				X	YES
NO	X			X	X	X		NO
	Item 22	Item 23	Item 24	Item 25	Item 26	Item 27	Item 28	
YES	X		X	X		X		YES
NO		X			X		X	NO
	Item 29	Item 30	Item 31	Item 32	Item 33	Item 34	Item 35	
YES			X		X	X		YES
NO	X	X		X			X	NO
	Item 36	Item 37	Item 38	Item 39	Item 40	Item 41	Item 42	
YES	X		X	X		X		YES
NO		X			X		X	NO
	Item 43	Item 44	Item 45	Item 46	Item 47	Item 48	Item 49	
YES		X	X	X	X			YES
NO	X					X	X	NO
	Item 50	Item 51	Item 52	Item 53	Item 54	Item 55	Item 56	
YES		X		X			X	YES
NO	X		X		X	X		NO
	Item 57	Item 58	Item 59	Item 60	Item 61	Item 62	Item 63	
YES	X	X	X			X	X	YES
NO				X	X			NO