THE PHYSICAL ENVIRONMENT
and
THE ELDERLY
in
SOCIAL WORK
PRACTICE

NORMA G. HOEPPNER

A Thesis
Submitted to the Faculty of Graduate Studies in
Partial Fulfillment of the Requirements
for the Degree of

MASTER OF SOCIAL WORK

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ABSTRACT

Key words: (built/physical) environment/social work practice/interdisciplinary/aging/quality of life/ safety/ support/ form/style/sensory stimulation/information-giving/ecology

This thesis explores and addresses the effects of the physical environment on the elderly, broadening the social worker's view of person-in-environment systems. Specifically, the physical environment of the elderly in long-term care facilities is addressed. Additional aspects of caregiver and worker stress and the physical environment are touched upon. The inclusion of the physical environment incorporates a holistic view of the individual and reinforces social work systemic theory. Apart from facilitating further information on appropriate environments best suited to the changing physical/psychological and social needs of the aging, this thesis serves to include the exploration of the practice possibilities incorporating knowledge of the physical environment.

A main research goal was looking at the current level of understanding amongst social workers in gerontology around issues involving the built environment. This was pursued through an interview process at Personal Care Homes. This qualitative interview process uncovered both social workers' present knowledge base as well as the application of their knowledge of physical environment components in their practice with the elderly. Issues included are: privacy; social interaction/isolation; sensory stimulation/deprivation; institutionalization/personalization; barriers to mobility; quality of life issues; lighting/colour; texture; sound and acoustics.

The findings indicate that social workers seem to have a sensitive awareness of the impact of the physical environment overall, although knowledge and understanding is sometimes lacking. Their major concerns with the Personal Care Homes were recurrent themes of lack of privacy, lack of space, too much noise, poor lighting, and a lack of special needs provisions. In turn, this qualitative data illuminates a need for implementing a curriculum component around the physical environment and advocacy training in social work education. This would be an extension of ecological concerns.

In addition, administrators need to accept greater responsibility in assuring quality environments and in implementing an effective interdisciplinary approach to improve health-care.

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Chapter I: INTRODUCTION

The system of the physical environment has been overlooked and neglected in social work practice even though many studies have emphasized and documented the great impact of the physical environment on people. This is particularly true of the elderly, when one's environment is limited by reduced mobility and choices. The basis of social work theory is that, at any one time, an individual's behaviour is the result of interacting environments (Gutheil, 1992; Compton & Galaway, 1989). The physical environment is in fact embedded in all interacting systems.

The pursuit of a thorough systemic approach through inclusion of the physical environment is the motivation and rationale for my thesis research. In order to achieve a holistic view of systems which have an impact on an individual's health and behaviour the physical setting also must be included. Issues of control, choice, privacy, sensory stimulation or deprivation, safety, and support, as well as individuality, are all strongly linked to the physical environment.

The conceptual framework for this thesis is an eclectic approach rooted in holistic theory which perceives that the physical environment can be described through attention to form (function) and style (aesthetic) (Keen, 1989), and to the information-giving functions of these combined factors (Resnick & Jaffee, 1982). Components of the physical environment can be described as either one, or a combination, of form and style.

Steps towards assuring an improved physical environment include incorporating more ecologically sound principles (Goodman, 1978; Hundertwasser, 1991; Rand, 1993; Christenson, 1990; Gutheil, 1992). The environment can be viewed as four

possible variations of both the internal and external influences on the social and physical environments and how these environments work together in shaping and influencing behaviour (Weick, 1981).

To accomplish this there is a need for a link between policy and environmental design to be achieved through heightened multidisciplinary interaction and action (Lacy, 1981; Brogan & Douglas, 1980; Christenson, 1990; Germain, 1978; Gutheil, 1992; Hundertwasser, 1991). This combined framework is woven through the literature review and explained in more detail.

Chapter II: **LITERATURE REVIEW**

INTRODUCTION

This chapter opens with a general overview of the global environment. The distinction of the physical environment, including its meaning in social work practice, is then explored. Following this are the effects of aging in the physical environment. The work will be sub-categorized into smaller components of the physical environment such as colour, light, sensory stimulation, and their respective roles in the lives of the elderly. Implications for social work are also explored.

Four major concepts need to be distinguished in order to build a relevant argument regarding the physical environment and the elderly. They are: 1) the natural environment as the accumulative conditions of temperature, precipitation and insects, etc. (i.e. the outdoors) 2) the built or physical environment referring to all places, buildings, spaces and transportation and 3) the urbanized environment which includes crime, pollution, traffic congestion, and noise characteristics; and 4) the social welfare environment entails the municipal services, social, and medical services.

This thesis focuses on the third concept, which is the built or physical environment. All four concepts, however, are interconnected.

We are only beginning.

The elderly are not simply holding on to a few final days, but live from day to day, hoping for quality and special moments, as do the young. The daily pleasures may be less intense, but the need and desire for them are still strong. The environment is a vast area in which many varied pleasures may be experienced and enhanced.

The physical environment is so omnipresent that it is overlooked. It becomes masked through its insidious overtness. It has been said that fish are likely to be the last creatures to discover water. Sometimes we are blinded by those things that affect us the most, and we are unaware of their persuasive powers. The literature indicates that human beings have tended to overlook the physical settings in which they are embedded as sources of influence in behaviour. Gutheil (1992) emphasizes that often this influence occurs on an unconscious level, making it all the more potent, because operating outside of conscious awareness, it easily eludes evaluation and understanding. Clinical social work practice was derived from the philosophy of systemic thinking, 'yet it is ironic that the environmental system is almost always diminished if not completely ignored' (Germain, 1978; Weick, 1981).

Anthropologists, environmental psychologists, architects, geographers, and biologists have actively studied people's relation with the physical environment (Germain, 1978). Social workers have been slower to consider this realm and the implications for good practice (be it individual, family, group, or community). **Studies of the physical setting hold promise for social workers**

concerned about the adaptive needs of people and the properties of the environment that promote or inhibit the release of adaptive potential.

Hendricks (1986) describes how, as a consequence of what is sometimes referred to as psychological railroading within highly routinized environments, some older residents are prone to a kind of institutional neurosis. "Chief among its symptoms is a gradual erosion of the uniqueness of one's personality traits so that residents become increasingly dependent on staff direction for even the most mundane needs" (1986, p.284). Visitors too, often complain about the sense of distance between themselves and the resident, or the resident's seeming lack of interest in events outside the institution. It is not necessarily the personnel, but rather the operational procedures themselves that breed a kind of docility, leading in turn to a leveling of character attributes.

The physical environment of day care is an important factor that directly influences both work-related stress for staff and quality of care for clients. Also, a resident's freedom of movement and independent choice of activities may be directly limited by a restrictive physical environment (Luborsky et al, 1989).

Money and education can carry the handicapped only so far. **Virtually every individual at some time experiences a physical disability** (Beating the Averages, 1969), yet the issues are poorly understood and addressed and the barriers faced by the disabled remain. These barriers encompass everything from narrow doorways, transportation difficulties, high water fountains and showers without seats and handrails, to inappropriate restaurant tables, phone booths and problematic revolving doors; all of which we the able bodied take for granted, with great privilege. What is our excuse? The technology is there, legislation is there, but the will to

change is not (Beating the Averages, 1969). Twenty-six years later our situation is still not so different. For effective change, awareness must be at all levels, namely, policy makers, architects, contractors, owners, construction workers, and social workers who can serve as advocates for change. This indeed emphasizes the multidisciplinary thread throughout my review, also emphasized by various authors (Brogan & Douglas, 1980; Goodman, 1973).

For example, there are internalized societal attitudes which perpetuate ageism. Opposing these attitudes is essential to shifting societal stigmas of aging (Barrow, 1983; Beating the Averages, 1969; Gutheil, 1991; Hendricks, 1986). As with the disabled portrayed in the film 'Beating the Averages' (1969), often the biggest barriers the elderly face are peoples' attitudes. People with disabilities used to be labelled witches in the superstitious middle ages--and even now, as one wheel-chaired woman describes in 'Beating the Averages' (1969), "the attitudinal barriers are still worse than the architectural obstacles". Clearly, there is much work to be done in the social and physical environments of homes, work places, institutions, and communities. The disabled population voice frustration and humiliation at being turned from persons into 'freight'.

As an Inuit carver studies a stone for what it is that has to come out, so should an architect study a space. This very principle is fundamental to design. Would it not make sense to have for example, in the center of a courtyard a play structure or fort, where children are well entertained and the elderly, often more isolated to their interiors can engage in observation of the spontaneity, joy, and life about the structure (Reville, 1989; Beyond Shelter, 1975).

The depth of shade and sunshine can easily present a playful visual shift throughout the day and year--readily accomplished by lattice work on a wooden deck. The colour and texture of flower materials perhaps growing amidst this design can stimulate memories, imagination, fragrance, and the view; just as the design of snow can create multilevel sculpture on a well designed terrace or deck. The seasonality of a design is crucial to successful planning. How does one use a space? What is needed? The texture of changing seasons should be effectively optimized so as to ensure visual interest. How simple a pleasure for the elderly to watch children playing in the snow as their own memories are triggered and energized. Thus, the physical environment comprises the natural world, both animate, and inanimate, and the man-made or 'built world'. Human beings are a part of both worlds, and this is where the complexity begins.

If slides were taken of the view many institutionalized elderly watch daily, it would likely be stark, bleak, isolated, paved, monochromatic, and terribly uninteresting. This dismal picture of the outside world is their only visual escape. Their surveillance zone--the visual field or space outside one's home that can be viewed from the windows or doors--is often their only link to the outside world; to observation, to memory and to nature. How do we facilitate this outlet?

Expectation of life at birth provides a simple measure of the state of health of a country. "The principal factors responsible for the trends and the current differences in these expectations, are changes in the social and physical environment, in personal behaviour, and in medical care. The principal environmental hazards worldwide are those associated with poverty of individuals within the market economies and of communities in the developing countries and that in the future, they will be the effects

of overpopulation and the production of greenhouse gases" (Doll, 1992, p.933). As this point demonstrates, we are generally well acquainted with the concerns and hazards within our natural environment, and their effects on health, such as the ozone depletion. **Yet our built world exerts an equal influence on us: it can change our mood, our affect, our energy level, even our appetite and our level of alertness; still it receives precious little consideration in practice.** This point is the basis of my thesis. Additionally, the physical environment when overlooked, ignored, and poorly managed can have many deleterious effects, including sensory deprivation and psychosocial withdrawal.

Prevention of disease depends just as much on our architecture as on immunization. Chronic stress and psychological distress lead to physical disease. Poor housing can, of course, produce physical disease directly as a result of dampness, mould growth, cold, and risk of infection, as well as the accumulation of chronic stresses compiled with psycho/social distress.

Without an understanding of the environment's impact, caregivers to older people may overlook important and often manageable causes of feelings and behaviour. "The physical environment exerts a powerful influence, having the power to evoke strong feelings, attitudes, and behaviour" (Guthiel, 1992, p.131). It must also be remembered that elderly coping with limitations and infirmities are especially susceptible to the impact of their physical settings, as it is difficult for them to remove themselves from unsupportive environments. All people are challenged to maintain a sense of self when dealing with diminishing control over their lives. Moving from one's home to an alien environment devoid of personal items is a crucial experience of such loss of control.

The challenge to improve institutional environments is especially compelling because a sense of control over one's life is associated with higher levels of satisfaction and good coping skills. Gutheil points out a study by Langer and Rodin (1976) that found residents who were given opportunities for more control of their lives were happier and more active. They suggest that "some of the negative consequences of aging may be retarded, reversed, or possibly prevented by returning to the aged the right to make decisions, and a feeling of competence" (Gutheil, 1992, p.133). Because the physical environment can be planned and managed, it is a tremendous resource for promoting competence and a sense of control in residents.

What is crucial for social workers to understand is that a physical setting is not a closed system with fixed boundaries. Many factors contribute to determining a room's physical properties, such as the lighting, furniture arrangement, and people present. Therefore one may say, "interdependence exists between the behaviour and the setting" (Gutheil, 1992, p.391). This point is clearly key to social work assessment and practice. My thesis explores whether social workers in Personal Care Homes are aware of the impact of the physical environment on the behaviour and wellness of the elderly.

It is frustrating, however, to wade through the literature about the effects of environments on older people, with ways clearly indicated to develop improved and supportive environments that we consistently still face the question--with technology and education within our grasp and feasible implementation, WHY are there facilities where major physical environment deficits exist?

The next section of the literature review will categorize different aspects of the environment and explore them individually towards the collective effect.

PERSPECTIVES on the PHYSICAL ENVIRONMENT

Considerable strength is added to the concept of environment if it is viewed as a multidimensional field that includes both internal and external factors. Weick proposes that the simple aspects of internal and external environments consist of four possible environments: the internal-social, the external-social, the internal-physical, and the external-physical (1981, p.141). These environments work together in shaping and influencing behaviour. However, social work has tended to focus one-dimensionally on the psychological and social environment, to the exclusion of the physical ones. "Social workers can greatly extend the concept of environment by adding the influence of physical factors in the shaping of behaviour, particularly with the elderly and physiological change, which inhibit their independent ambulation and comfort, as well as ability to hear, and fear of falling. The internal-physical environment includes genetic traits, metabolism, organ functioning and adaptive capacity" (Weick, 1981, p.141). The external physical environment includes climate, air, noise, lighting, food, biological rhythms, and atmospheric conditions. "At a gross level all these environmental circumstances affect physical survival. On a more subtle level these environmental conditions pose continual challenges to physical adaptation" (Weick, 1981, p.142).

Maintaining a balance in the physical environment is a process that parallels the complex relationship between the psychological and social spheres. "All the environments form a dynamic matrix of interaction that shapes an individual's

behaviour" (Weick, 1981, p.142). The basis of social work theory, is that at any one time, an individual's behaviour is the result of these interacting environments. **All four sets of environmental influences must be considered, to view behaviour comprehensively.** The result is "a broader diagnostic base that acknowledges the significance not only of psychological and social factors, but also of physical factors in the shaping of human behaviour" (Weick, 1981, p.142).

Buffum (1988) too emphasizes that the goal of social work is "full functioning" which requires the development of whole environments in which people can maximize their individual capacities. It is posed that an optimal fit occurs when one's personal wants are being met through the use of available environmental resources. "A deficit occurs when the wants of a person are not matched with adequate environmental opportunities. This deficit condition has been described as 'life stress'" (Buffum, 1988, p.36).

Health is an essential concept in the pursuit of a broader view of behaviour. Although health is often seen simply as the mirror image of disease, social workers can radically expand and enrich the word's definition. According to the World Health Organization (WHO), health is defined as a state of complete physical, mental and social well-being. If we assume the four possible afore mentioned environments form a "basic matrix of behavioural influences, then we can define health as a qualitative expression of the interaction among environments" (Weick, 1981, p.142). It could also be defined as the product of the ongoing mutual interaction between physical and social elements.

People also affect their environment (ozone depletion as a case in point) (Doll, 1985). Broadening perceptions, to include the external environment in its physical and

social aspects is a critical piece in establishing a synthesis between the individual and society.

For the purpose of this literature review, however, it is a useful distinction to limit the examination to the man-made world or built world, including landscaping (Weick, 1981). This 'built world' termed the physical environment, includes space, lighting, colour, texture, noise, and the structures and objects that human beings create and arrange in space. "In addition to providing shelter and space for organized work and play, the physical environment serves an information-giving function and exerts influence on behaviour in that setting" (Resnick & Jaffee, 1982, p.354).

Information giving functions of the physical environment are easily demonstrated through commonplace examples such as the conclusions a patron forms about the potential quality of the meals or service available in a restaurant whose external appearance is either dirty or unappealing, or conversely, is elegant or very attractive.

The physical environment provides clues regarding at least three aspects of a system: 1) The central task or purpose of the system; 2) the dynamics of individuals within the system; and, 3) the attributes of the system (Resnick & Jaffee, 1982, p.355). The physical structure of a social system can inform observers regarding its fundamental purpose. A poignant example of the first aspect can be seen in the exterior of a prison, as its walls and their thickness in addition to the presence of bars on the windows, connote security and control. An example of the second aspect can be seen in perceiving information about individual dynamics; an executive might observe that a fellow executive tended very often to arrange to sit at the head of a rectangular table at staff meetings, regardless of whether his status or role required

that he be seated there (Resnick & Jaffee, 1982). **If sensitized to the symbolic messages provided by people's use of the physical environment, the observer might draw the plausible inference that this individual had a need for control or centrality in such situations.**

Keen (1989) embellishes dichotomies between such architectural elements as form (functional) and style (aesthetic). Another dimension explored is space. The organization of space in buildings has both direct and indirect effects on the way that people communicate with one another. The layout of a building also communicates meaning; so we derive information from both the layout and the interior design.

The essentially institutional nature of nominally private spaces, that is, bathrooms--to become public, is a most crucial point in understanding the assault to human dignity within communal living spaces. Keen's study (1989) demonstrates the desire of the elderly for privacy in institutional environments, and also the fact that they are denied it, and that even worse, staff were inclined to only pay lip service to the privacy of residents. There are four specific senses of privacy identified by Keen, namely, solitude, intimacy, anonymity, and reserve (associated with the need people have to withhold certain aspects of themselves). Keen (1989) also speaks of visual privacy, acoustic privacy, and olfactory privacy; all virtually unobtainable in a hospital setting, or other care facility where more than one person resides. Surely one concept which should be implemented in design is flexibility; buildings, properly designed, can accommodate people's changing needs.

People require space to conduct social interaction, and "suffer as much from isolation as from crowding. Humans are more adaptable than any other mammation species and can create symbolic space and privacy without walls" (Kellet, 1989,

p.266). Cultures can dictate different social distances, and the ideal housing environment must take custom into account. In Western society we spend the major part of our lives in a man-designed* and man-made* world. Hence, systems and person-in-environment issues are key, and doctors, as well as social workers, do not serve their patients by ignoring their environment.

With respect to the social work context, the various ways in which clients and workers related to the physical environment of the treatment setting, both prior to and during the treatment process, may provide potentially useful information regarding their functioning as individuals. "In an indepth, exploratory study of their perception of treatment in a family service agency, it was found that clients stressed the impact of the agency's social and physical environment on the helping process and its outcome"(Maluccio, 1979, p.734).

It is possible, for example, to learn about a client's internal state of affairs from careful attention to the way s/he use and orient her/himself in the physical environment of the treatment setting. Resnick and Jaffee's article (1982) has pointed out that the style and size of a chair chosen by a child in a treatment institution, as well as the distance of that chair from other chairs in the room, is significant in expressing the self-image of the child.

There are also different ways of relating to and manipulating the physical environment. Resnick and Jaffee describe how a severely depressed borderline girl

[***Man-designed/*man-made:** In this context the reference is a gender indication of possible bias inherent in the design through predominantly male designers. These terms are used throughout the thesis with this in mind]

"demonstrated a range of responses that reflected her therapeutic progress and adaptation to the milieu" (Resnick & Jaffee, 1982, p.355), in a residential treatment setting. She brought with her a large number of suitcases and cartons stuffed with her toys and belongings from home. She arranged her belongings around the periphery of her room as a way of indicating her anxiety in a strange situation and perhaps her effort to populate the room with objects familiar to her which would make her feel less anxious. As time went on, she replaced her belongings with materials she had made in arts and crafts activities at the institution and decorated her room with symbols appropriate to institution activities. "Thus, the way that she manipulated the aspects of the physical environment over which she had some control expressed both her initial pain at separation from her own family, and her subsequent lessened anxiety and pain as she progressed in treatment" (Resnick & Jaffee, 1982, p.356).

AGING and the PHYSICAL ENVIRONMENT

Although the foci of this thesis are the psycho/social aspects effected by the environment, in a literature review of the physical setting for the elderly, the human body itself cannot be ignored. The physiological aspects of aging include a diminishing of all the senses; vision, auditory, olfactory, taste, and touch. This occurs in varying degrees. It is because of this that staff must be sensitive to the changing needs of the elderly and consequently the demands of the environment.

Other conditions which accompany aging which relate to interior environments are:

1. more frequent urination (washrooms should be close to social areas);

2. a less efficient respiratory system;

3. the skin is less elastic and develops sores and cuts more easily;

4. the cardiovascular system is also weaker creating the situations of hypertension and heart disease;

5. the muscular and skeletal systems stiffen, creating arthritis and other problems of mobility (Marshall,1978);

6. impaired mobility; often the aid of a walker and/or wheelchair is required demanding more manoeuvering space.

Selwyn and Goldsmith (1972), also points out that the changing skeletal and muscular arrangements not only slow down mobility, but change the actual proportions of the body (cited in Marshall, 1978). Thus, different sets of standard measurements must be used for interior fittings for the aged than for the young.

The obvious physiologic impairments that occur with acute illness such as respiratory or kidney failure, call for environmental modifications such as respirators or dialysis. As Pastalan and Pawlson (1991) point out, however, it is essential to recognize the importance of small, ongoing modifications in the physical

environment, that may allow the elderly individual to maintain a level of function despite a loss in individual functional ability. It is important that health-care workers, [namely physicians and social workers] working with the aging serve as advocates for well-designed physical environments for them (Christenson & Taira, 1990). Attention must be paid in particular to visual impairment and legibility factors within agencies (room numbers, signs, colours, lighting), cognitive disorders and orientation to spaces, increased physical vulnerability and the need for security (Pastalan & Pawlson, 1991, p.574).

Essentially, an approach to environmental settings that accounts for psychosocial and physiologic concomitants of aging and disease is necessary: one working with the elderly must recognize that most eighty-year olds cannot handle the same level of environmental complexity as most twenty-five year olds. Hence, it must be addressed that the very old spend most of their days within limited interior spaces.

"Beyond Shelter" (1975), which is a Canadian National Film Board production, compares the situation of the old in Denmark to their plight in Canada. It shows the many alternatives available in Denmark designed to keep the elderly out of institutions. Perhaps biased by a rose-filtered lens, the eyes of the film-maker give a truly touching view of aging in dignity, made plausible through Denmark's provisions.

North America's system is described as short on material options. Here an institution is based on rules/regulations and devoid of individuality. The fear of loneliness amongst the aging is acute, and retaining independence is conveyed in the film as virtually the impossible dream. It is North America's lack of community

workers and a serious housing shortage which are major problems (Beyond Shelter, 1975).

In Copenhagen, there is both public and private care for the aged. In Denmark it is their overall planning, policy, and common sense, that makes supporting their elderly so successful. The first priority of the Danish is to help the aging person stay at home and adapt to make this feasible. Through rent subsidies, home helpers, and sheltered flats the independence and dignity of the aging individual is better maintained. A sheltered flat refers to an ordinary apartment center in close proximity to medical and social facilities and emphasizes the matter of CHOICE; for example, grocery stores as part of the facility if they choose to cook, or access to a community dining room for any or all of their meals. There are daycare centers strategically stationed for the interaction and enjoyment of both age groups. The sensibilities of such a design are very impressive. The option of these daycares particularly for those without family is terrific. As one woman interviewed stated, "sometimes she gets annoyed with the children but watching them prevents her boredom" (Beyond Shelter, 1975).

Even their true acute-care facilities for the elderly remain uninstitutionalized. How refreshing and inspirational it was to see a bedridden woman in her own self-created environment, amidst the hominess of her own personal items, with the security of not having to move again. In all the rooms the film presents in Denmark, be it individual units or more acute care, there is true ingenuity and sensitivity everywhere as demonstrated by the adaptive designed gadgets which aid independence and comfort of the aged residents. There are alarm cords, adjustable

counter height, rails in washrooms, special electric beds, and the option to sit outside and enjoy the gardens which are well integrated into the design.

The film 'Beyond Shelter' portrayed a crucial point; that despite the expense of implementing these barrier free designs complete with effective adaptable devices, **there is a longterm financial, physical and emotional saving** (Beyond Shelter, 1975). Clearly, in any institution the biggest expense is staffing costs. In Copenhagen's specially designed environment, staffing is substantially lowered. The film demonstrates that the residents need far less assistance, and the design also allows for ease of maintenance compared to the North American counterpart. North American costs of staffing institutions are extremely high and there is much to be learned and saved through researching and following Denmark's example. The film also shows that such a specially designed environment preserves pride and self-esteem for the elderly as well as the overtaxed workers.

'Beyond Shelter', a Canadian production exploring the Danish system, emphasized that a sensible alternative must be heard through the obstinacy of North American attitude as currently we seem only to perpetuate costly institutions which serve the needs of no one.

A decade or two ago the solution was to place ambulant people with dementia in psychiatric hospitals and lock the doors. As a result it was common to find people with dementia "becoming increasingly disturbed at being locked in a place which must have seemed to them to be a prison" (Tooth, 1994, p.1). The consequent violence was then controlled by medication or by physical restraint (Tooth, 1994). Both 'solutions' had deleterious effects. Restraining a patient can often make the behaviour worse and the resident with dementia can become aggressive when he cannot

understand the situation and is thwarted from going somewhere. "Unfortunately, because the brain damage that causes the dementia always destroys short-term memory and usually the ability to learn, reasoning just does not work" (Tooth, 1994, p. 1).

The factor commonly evident in violent patients is a sense of helplessness. Violent behaviour has no single cause, however, two of four kinds of factors which involve the environment to varying degrees are psychodynamic. As such, it is important to address this when exploring the physical environment. "The hospital has a strong responsibility to provide a generally pleasant environment to minimize the likelihood of provoking disturbed patients into more violent behaviour" (Lacy, 1981, p.45). The literature points out that the buildings in which one lives, works, and is cared for can create feelings of helplessness, alienation and isolation. We as individuals are multifaceted creatures with continually changing needs and demands, which adds yet another dimension to an already complex process. As 'Beyond Shelter' demonstrates, when our needs are not met, we become bored. Creating a supportive environment counters the boredom, frustration, helplessness and alienation that Lacy argues can lead to violence. **Thus, a supportive environment also creates a safer environment.**

"Much aggression in dementia is the result of people being alarmed at being unable to cope with the circumstances of the moment or of being confused by an unfamiliar environment" (Tooth, 1994, p.2). Therefore it seems imperative that they should be accommodated in a residence that as nearly as possible resembles a normal house and that all the normal activities of living should go on there, including cooking. A very important feature has to be hidden security arrangements so that

although they are in fact locked in, it does not appear so to them. The ADARDS (Alzheimer's Disease and Related Disorders Society) Nursing Home of Tasmania, Australia has accomplished this successful model within the same cost of any other method of caring for people with dementia. Essentially, the success of the ADARDS nursing home is because they live in a 'normal' house with friendly people around them and the environment is manipulated to ensure the minimum of fear and frustration.

Many new psychiatric hospitals are experimenting with less traditional architectural forms and are creating spaces that are inviting and encourage social interaction. The use of architectural elements to create a supportive, humane, and therapeutic environment can result in a cheerful, interesting hospital that allows for a wide choice of activities. The environment is an essential part of therapy, as the physical environment most surely does affect human behaviour. Simply viewed-- walls and floors contain and limit movements; a more complex view involves the environment's ability to actually affect one's attitudes and actions. For example, loud music, flashing lights, and bright colours create an active, noisy environment, and we respond accordingly. By the same token, patients in hospitals are acutely aware of and responsive to their environment. In a study conducted at St. Vincent's Hospital in New York City, ninety-five percent of the ninety-one patients interviewed felt their surroundings were important, and were concerned with cleanliness, order, and having a cheerful, pleasant environment (Lacy, 1981, p.45).

The financial results of ADARDS Nursing Home are striking. The cost per resident/year of accommodating this group with the most difficult behaviours is approximately $30, 000 U.S. per resident/year, which is about 2/3 the cost of

maintaining them in psychiatric hospitals (Tooth, 1994, p. 6). ADARDS has shown that people with dementia and the most difficult behaviours can be accommodated in a domestic-style environment and at a cost that is significantly less than that of the psychiatric hospital, provided that special attention is paid to the design of the physical environment and that the staff are well trained. ADARDS has also shown that the quality of life for these residents is dramatically improved. In addition, the work of staff in such a facility is more rewarding and considerably less stressful than in less well designed units. This Australian example, after three years in operation has no cases of staff burn-out and is a remarkably happy and successful place (Tooth, 1994).

Briefly, as an introduction to improvements for the elderly, the existing literature shows that a few items contributing to residents sense of control and competence include; well-lit entrances, non-slip floor surfaces, chairs with arms, call buttons, adjustable window blinds, plants, sculptures, and other objects used to individualize different areas, drawers and closets which are easily accessible and well lit to aid finding things, as well as private places where residents can be alone or meet with friends (Christenson & Taira, 1990). Design features to be considered are: safety as a primary consideration, negotiability of mobility, planning for sensory deficits (compensating for deficit in vision and hearing, for example), warning systems such as smoke alarms, incorporating both visual and auditory components, basic needs via personalizing and by such demarcating a territory, use of space, and creating a meaningful richness (Christenson & Taira, 1990).

A barren environment is devoid of meaning, depriving its inhabitants of the opportunity to participate in the process of living. Spivak (1984), warns that residents of barren facilities lose their desire to continue to remain engaged and competent (cited in Gutheil, 1992, p.140).

SENSORY STIMULATION vs DEPRIVATION

With the elderly and disabled, regression is often a major problem in institutional settings. Those who live in institutions often experience a loss of self-esteem, self-assurance, and integrity, due to a loss of their independence and self-reliance. Often, this is compounded by a loss of significant relationships. Hospitals, nursing homes and retirement homes need to be planned to combat those experiences and the frightening dangers of isolation and sensory deprivation as well. "Such privacy must of necessity, be equipped with colours, sounds, motion, or they will surely encounter neurotic disturbances" (Birren, 1969, p.28). The therapy of sensory deprivation is actually its prevention. People are exposed to the hazards of sensory deprivation when they are forced to dwell in man-made environments-- away from nature (Hundertwasser, 1991). Such monotony and sensory deprivation can lead to hallucinations, mental lassitude, and mental deterioration. As Woodburn notes, "It appears that exposing the subject to a monotonous sensory environment can cause disorganization of brain function similar to, and in some respects as great as, that produced by drugs or lesions" (cited in Birren, 1969, p.79). Understanding the physical environment is the first fundamental step towards progressive change.

Preventive work, such as meaningful mental stimulation which is related to a person's experiences and expectations, will be of great importance for institutionalized elderly people. Wikstrom et al (1992) perform a rigorous and sound investigation and their study shows that pictures of works of art arouse reactions on several levels at the same time and give free rein to a person's imagination. Emphasized in their study is the continuity of aesthetic experience and life, "pleading the cause of the arts as of the highest value to human beings because of their uniting and liberating effect" (Wikstrom et al, p.68). Again, as is the common link throughout the literature, it is stressed that in growing old there are limitations which can be caused by normal biological changes, illness, and by environment. As such, old people must be viewed as a heterogeneous group with different medical, social, and psychological needs. Here is where art and the creative process fit in well, as common to all aging are the increasing demands for meaningful activities in order to feel well physiologically as well as psychologically. Sometimes we have to intervene, as social isolation and underestimation is associated with various adverse psychophysiological consequences. Simply, we must often aid the natural tendencies toward growth and development which exist within all persons--the most important aspect of caring. To aid this goal we must foster creativity, stimulation and enhanced quality of life through incorporating works of art and creative exercises into institutionalized life with the elderly (Hoeppner, 1991; Wikstrom et al, 1992).

The phenomenon of environmental deprivation is of high incidence among the elderly, particularly the institutionalized aged. Environmental deprivation is the name Mazumdar (1992) gives to the phenomenon where occupants experience a loss or 'take-away' of physical environmental elements legitimately considered "theirs", or experience a lack of provision of reasonably expected physical environmental

elements, or "substitution of environmental elements with those socially or individually considered inferior" (Mazumdar, 1992, p.692). The literature describes how grief overcame occupants who were losing their homes to urban renewal; yet little consideration seems to be given to the aged in the same position.

One large requirement for a supportive personal care home is an environment that is not monotonous; **"the lack of adequate stimuli leads to boredom, disorientation, and abnormal behaviour, such as violence" (Lacy, 1981, p.44; Tooth, 1992). Visual stimuli are essential; they can come from changing patterns of light (preferably from the outdoors), variations in texture, colourful graphics, and variations in colour value, as well as in the colours themselves (Marshall, 1978; Wikstrom et al, 1992).** This was also addressed in "The Urban Garden", in regards to texture of flowers and seasonality, etc. Visual effects can also be used to improve the traditional long corridors, which foster alienation and disorientation, and to cause spaces to appear larger or smaller. Allowing patients some control over their environment by encouraging them to hang personalized decorations, re-arrange furniture, or participate in renovations, can relieve frustration and the sense of helplessness.

Even closer attention must be paid to the environment for those such as the elderly, both in hospitals and long term care situations, in which the length of stay is typically thirty days or longer. "The technological sophistication through man-made critical care environments tends to lessen the focus on the human aspect of care" (Whitaker & Karolyl, 1976, p.76). Through the redesign of hospital interiors we attempt to alleviate the environmental sterility of institutionalization and provide

instead, a relief from monotony, both psychologically and physically, through pleasant visual and sensory stimuli.

COLOUR

In the design of modern environments it should be understood that colour is highly important. "In fact, it is ahead of form in man's unconscious regard" (Birren, 1969, p.28). This statement illuminates the important role style (aesthetic) plays separately from form (function), reinforcing Keen's (1989) framework of dichotomies for effective environmental design. The physical effects of colour on the human organism induces psychological reactions. "Behind the psychological responses to colour are more basic responses to specific wave lengths of radiant energy" (Birren, 1969). A person is likely to feel cheerful on a sunny day and glum on a rainy one. Conversely, psychological attitudes toward colour affect bodily responses. In other words, the whole person, his/her body, mind, emotion, spirit, represents a coordinated unity, or macrocosm, and colour pervades all aspects of it (Birren, 1969; Halse, 1978). This indeed re-emphasizes Gutheil's (1992) point that the environment often influences our behaviour on an unconscious level. Birren (1969) states, **"colour perception is not an art involving only the retina, and consciousness, but the body as a totality**"(p.29).

If there is no direct therapy in colour, there is much indirect psychotherapy that could be applied. "Psychosomatic medicine has finally impressed the point that a high percentage of human ills may be traced to psychological tensions, anxieties and fears. If pathological disturbances result, no cure is effective unless the mental condition is

attended along with the physical one" (Birren, 1969, p.29). Social workers pride themselves on an understanding of psychosomatic stress, thus they should also realize the importance that physical surroundings play in the accumulation, or conversely the elimination of tensions, anxieties (safety issues) and stresses, both through the function and aesthetic of the physical setting.

Throughout the discussion on colour, one must keep in mind that colour in its subjective effects is quite personal, and likes and dislikes will vary. Most colours have a duality, a potential for positive or negative responses depending on personal variance. However, through appropriate use of colour the impact of a sterile environment can be diminished (Wikstrom et al, 1992).

Two major visual problems that accompany aging are reduced colour discrimination and inability to tolerate glare (Birren, 1969; Christenson & Taira, 1990; Marshall, 1978). Studies show that colours with short light waves, such as green, blue, and violet, are much more difficult to see than are red, orange, and yellow. It is because of this, in addition to the yellowing of the aging lens, that the elderly retain the ability to differentiate between warm colours, such as orange and red (Birren, 1969; Marshall, 1978). However, they have an inability to distinguish between two shades of a similar colour. Hence, red, yellow, and other warm deep tones are visually best for the elderly (Marshall, 1978). Cool colours and pastels should be avoided, as well as extremes in light. Due to the yellowing of the lens, it is also difficult to know how in fact a hue truly looks to the elderly.

Rooms should be painted in warm tones for the elderly who need a warmer environment, not only as a visual aid, "but because of their decreased ability to regulate suitable body temperatures" (Birren, 1969, p.85; Marshall, 1978).

Surrounded by warm tones the elderly person will feel more comfortable. Warm colours are also more conducive to creating healthy appetites and complimenting the appearance of food.

Red is said to increase muscular tension and stimulate high blood pressure. It is so intense and vibrant that it can be used as a visual stimulant in the elderly. Again one must be cautioned that red can stimulate aggressive behaviour and could perhaps be better utilized for group activities (posters, costumes, visual aids, a red recreation wall, etc.), than strictly as an interior colour choice. In 'Colour Preferences for People over 65', Marshall (1980) cites that the entire sample of 198 seniors picked olive for their first choice as an accent wall and maroon (deep red brown) as the next choice. These were from a range of ten colours. White should be avoided all together as white walls present a problem with glare, and "white is also an emotionally negative colour" (Birren, 1969).

Colour coding walls and hallways in an institutional setting with bright and attractive colours can encourage the patients to ambulate independently without the fear of getting lost in a maze of hallways. When painting rooms, it is a reasonable consideration to paint one wall darker--this should supply moderate visual and emotional relief from monotony. This is particularly true for patients bed-bound for any extended period of time and it would be feasible to have the ceiling a contrasting colour, and/or decorated with pictures, for those faced to stare at it twenty-four hours a day. The danger here is the size of the room and the colour chosen which might cause the ceiling to 'press in visually' creating a claustrophobic effect. When choosing colours or art work for the elderly, one should avoid pastels which they have difficulty seeing. Dark colours and objects also provide a problem because they

blend into and create shadows, limiting visual perception (Birren, 1969; Christenson, 1990; Marshall, 1978).

The elderly suffer from decreased depth perception and need contrast in colour between the floor and the wall, wall and doors, and furniture and the room (Christenson & Taira, 1990; Hiatt, 1985; Marshall, 1978). This aids the elderly individual and reduces the risk of falls.

A general awareness of these influences impressed by colour should be noted with those working in gerontology. Clearly, specializing in this knowledge is not the social worker's role, but with an awareness of the impact of colour s/he can play an important interdisciplinary role in education, support and advocacy for the needs of the elderly within the health care system.

LIGHTING

Light is one environmental input which seems to be modifiable even on a restricted budget. In most cases, even with strained finances, a little imagination can be stretched a long way in promoting an inviting physical and social climate. Effective lighting for the elderly can be a difficult order because of their need for heightened illumination while accomplishing decreased glare. It is not only the light but the shadows light create which pose a tricky dilemma.

Lighting, "is one of the few inputs which can influence an individual both by virtue of its energy, that is, photobiological effect through the skin or photoreceptor,

and as a source of information about the world: visual stimulus" (Hughes, 1981, p.67). In a study by Hardy (1974), the relative environmental importance of light is perceived by the individual as nine-hundred office workers related the importance of twelve environmental factors for their work (cited in Hughes, 1981, p.79). Good lighting ranked first, followed by good ventilation, comfortable temperature and plenty of space. For the average individual, good lighting ranked first; for the visually impaired, it is even more important. The changes in the visual mechanism during aging are certainly important but should not be considered in isolation regarding environmental lighting.

An ergonomic approach to lighting should be concerned with the total impact of light on the person in the environment. "This includes examining light's impact not only as optical radiation evaluated in accordance with the brightness response function of the human eye, but also as radiant energy having important photobiological consequences for human life" (Hughes, 1981, p.81). For example, "the neuroendocrine system receives significant light mediating inputs known to modify or affect sexual development, reproduction, metabolism, body temperature, activity sleep-wakefulness, and rhythmic endocrine functions. Another important area for the elderly is the involvement of light in the vitamin D synthesis, which among other things aids calcium absorption, fundamental to brittle bones" (Hughes, 1981,p. 69). It is important to be aware of the fundamental importance of lighting, not only as an aid to the visual environment, but as it impacts on a individual photobiologically through the skin or photoreceptor.

Another example of an ergonomic approach is that cool white lights should never be used at low levels and light that is too yellowish should never be used at high

levels (Hughes, 1981). In nearly every study made on the chromatic quality in light as related to human appearance, warm illumination is preferred.

Illumination creates and destroys space. The beauty of form can be destroyed by too much 'flat' lighting. Most people maintain a love of beauty, of form and colour to the end of their days. It is fundamental to remember and implement the importance of visual aesthetics when creating an environment for any human being regardless of age. As illumination grows dim, all deep colours tend to melt together in value and brightness, if not in hue. With softer surroundings, cooler hues (i.e., grey, blue, green, turquoise), and lower brightness, there is less distraction and a person is better able to concentrate on difficult visual and mental tasks. It promotes good inward orientation; it is perfect for the rapport between social worker and the client. A brighter environment draws attention outward and is conducive to muscular activity. The softer surrounding is less distracting and aids visual and mental concentration.

In creating bright environments, fluorescent lighting presents the problem of flickering. Although lowered visual acuity is common with geriatric individuals, they are still extremely sensitive to the shift of light flickers with fluorescent lights. This is disturbing to them and an additional strain to their orientation. Hence, the brighter intensity provided by fluorescent light is really of little value for the elderly due to the disturbing light flicker.

Older people need more light in order to differentiate figures from background with the same facility they had in their youth (Hiatt, 1985). Improved lighting increases use of vision, whole poor lighting contributes to deterioration of sight (Cullman, 1979, 1980).

Other problems associated with lighting are overcoming difficulties of artificial lighting, such as, glare, exposed light sources, placement, and flicker (Hiatt, 1985). Glare is especially difficult to control from floors, walls, and bathroom fixtures. Unfortunately, shine has been simplistically equated with cleanliness (Hiatt, 1985), but should be avoided in geriatric facilities. Non-reflectant floors can appear more secure, and if the individual feels comfortable he/she will be encouraged to exercise their mobility (Christenson & Taira, 1990; Hiatt, 1985). Inspectors and housekeeping should be aware that matte finished surfaces for floors are very important and will aid in decreasing the probability of falls and accidents. Draperies are another item which assist in cutting down glare as well as introducing the element of choice. Literature suggests that social workers sensitive to such concerns can better empower the elderly to feel competent and in control about independent ambulation and thereby increase interaction and socialization.

The placement of lights and their control mechanisms must be accessible and safe for the elderly individual. Often touch control lamps are preferential to switches, as is lower positioning of the controls to compensate for the stiff arthritic restriction of mobility. Switches hidden behind furniture or otherwise awkward to reach places are obviously inappropriate but surprisingly common.

The problems older people have adjusting to shifts from light to shadowed or dark areas are well documented (Hiatt, 1985). Sensors might be applied here to control changes in light throughout a day and to minimize sharp contrasts in lighting which can, again, increase the risk of accidents, especially falls (Hiatt,1985). Improving inconsistent lighting and eliminating shadows are very helpful steps.

Contrasting edges on important objects for greater visibility and recognition are easy and very effective to aid mobility, orientation and safety. Longer range possibilities for optical aids, products or printed materials have yet to be explored (Hiatt, 1985). A dark background with light letters for high contrast are easier to view than traditional dark characters on white. This is an important issue for ease of dining as well with appropriately contrasted utensils aiding the cause (Christenson & Taira, 1990).

The practicing social worker can and should be aware of how glare and lighting issues will effect the aging client. An awareness of the physiological aspects of aging will enhance this application of knowledge. For example, even the blind elderly benefit from the photobiological effect of light by virtue of its energy.

Christenson (1990), a gerontological occupational therapist cites, "every therapist providing rehabilitation services to the elderly has met more than a few clients whose disability should not have happened" (Christenson, 1990, p. 53). The standard loose carpets and poor lighting problems that contribute to falls, as well as everyday occurrences such as carpet patterns and window glare which cause visual disturbances and sometimes even confusion are all culprits in the problem. What Christenson does so well in Aging in the Designed Environment is to describe small solutions to potentially large problems. One example of many is, well placed art work can consistently direct a disoriented person to their room and may reduce the need for constant redirection by staff (Christenson, 1990; Wikstrom, 1990).

It is important in addressing this issue to remember, as Christenson points out, that we must consider how well most older persons do function with the limitations

that age presents, and then we will begin to realize the potential for the elderly is still vast and, if we work to provide properly designed environments, their capabilities can be maximized. Beyond Shelter (1975) shows a glimpse of this possibility.

Christenson covers everything from safety, fires, falls, floor surfaces, taste, smell, furniture design, to aesthetics; lending weight to the often trivialized aspect of aesthetics. The term often conjures up a strictly visual approach to design. She points out, however, that fundamental to the definition is the sensual response that it evokes. An additional approach to aesthetics is a person's perception of quality. **There are spatial components in terms of rhythm and balance, not only maintenance and upkeep.** When designing senior housing, one is also designing for those who visit the resident, and this too should be considered.

SOUND and ACOUSTICS

One of the greatest differences between our own homes and institutional environments is the quality of the acoustical environment. Our tolerance to noise is lower when we are sick than when we are healthy. This is important for the social worker to be aware of with clients. In individual, group or family therapy, especially when physical illness or chronic pain is an issue, having a better understanding of sound and acoustics may enhance therapeutic benefits.

Two major changes occur in hearing with age: difficulty in perceiving high-pitched tones such as soprano tones, some voices, sirens, etc., and problems in hearing voices against background noise. As well, hearing loss is higher in the

demented (Christenson & Taira, 1990; Health & Welfare Canada; Hiatt , 1985; Hendricks, 1986; Hilton, 1987).

"Poorly managed and designed acoustical settings can be as great a barrier to older people as steps are to a wheelchair user" (Hiatt, 1985). Institutional settings have often been designed with hard, smooth surfaces on non-porous materials (Christenson & Taira, 1990; Hiatt, 1985). Without absorbent materials such as drapery, fabric wall coverings, fabric upholstery, bookshelves, plants, and textured personal possessions, voices and equipment noises echo and bounce off walls, often masking conversation and creating general irritation.

The quality of the sound environment may be so discouraging to the elderly resident that s/he could withdraw completely as her/his comfort and confidence diminishes. The sound threshold of an institution should also be considered for potential sleep and privacy disturbances (Christenson & Taira, 1990; Hilton, 1987). In pursuit of general health, the way the environment affects such basic needs should be noted by those working in personal care homes and social work clinicians have a responsibility to take the physical environment into account for the improved well being of their client.

Music which may be relaxing when we are well can become irritating during illness. Our need for quiet and peace is thus increased during illness, which is also true for those suffering from dementia. Considering this, it is ironic then, that hospital sounds frequently exceed recommended levels of tolerable sound threshold for the healthy individual, let alone the frail elderly (Hilton, 1987).

Noise can enhance pain perception, startle the patient, damage hearing, induce sensory disturbances, constrict coronary and peripheral arteries, reduce digestive secretions, slow gastrointestinal mobility and stimulate epinephrine production (Hilton, 1987, p.87). This list demonstrates how physical transformations are induced through our surroundings with little conscious awareness. Social workers can use this knowledge to help their clients.

Psychological responses include increased annoyance and irritability, heightened arousal, impaired judgement and altered perceptions. Noise may interfere with thinking, sleep patterns, conversation and music. Disruptive noises increase agitation and often increase wandering in elderly patients. Conversely, a restful environment can put a client at ease and benefit both the physiological and psychological well-being of an individual promoting quicker recovery (Gutheil, 1992; Hiatt, 1985). Suggestions to bring such situations under control are a) the elimination of unnecessary sources of noise of equipment b) fire-retardant textiles and absorbent wall coverings should be used to baffle--through absorption--unnecessary noise c) the use of soft surfaces and irregular shapes for example, circular corners (Beyond Shelter, 1973; Hundertwasser, 1991); and d) every effort should be made by staff to lower their pitch and to minimize the distance between individuals conversing, particularly on geriatric wards. Additional efforts can be made such as sprayed on acoustic plaster ceiling, which aids in absorption and requires respraying about every four years (Hilton, 1987, p.95).

Information gathered by our senses serves to stimulate, over-stimulate, or deprive us of our equilibrium, peace and harmony. These viusal and auditory concerns are crucial to the comforts of human dwellings and are often overlooked or poorly designed. A part of sensory concerns should be the issue of sensory

deprivation within the institution. The following excert describes the potential effect of such an experience.

Herbert, Leiderman and associates (1969) tested a number of volunteers who willingly confined themselves to a bland environment for periods of thirty-six hours. All reported difficulty in concentration, periodic anxiety feelings, and a loss of ability to judge time. Eight reported some distortions of reality, ranging from pseudosomatic delusions to frank visual hallucinations. Four subjects terminated the experiment because of anxiety; two of these, in panic, tried to release themselves (cited in Birren, 1969, p.78).

The results of such experiments are particularly important when one considers that disturbed or ill people not to mention healthy individuals often spend long hours and days in confined and drab quarters. Prisons are an acute example of this. "What good does it do a patient to undergo a surgical operation that may correct his illness, if his confinement leads to other unexpected maladies because of sensory deprivation" (Birren, 1969, p.78). Leiderman et al. (1969) write that if normal persons can develop psychotic like states..."how much more likely is it that sick patients, perhaps already perilously near the mental breaking point, can be tripped into psychopathological states by the stress of sensory deprivation" (Birren, 1969, p.78).

There is accumulated clinical evidence that sensory deprivation may be one element of importance in the etiology of mental disturbance as a complication of various medical and surgical conditions. The importance of utilizing all methods to stimulate the senses and make them as acute as possible in the declining years cannot be overemphasized.

THE ROLE OF FURNITURE

The literature suggests that the arrangement of furniture is a simple way to remedy certain aspects of isolation and atmosphere in our practice. To demonstrate, gerontological nursing staff must be sensitive to the way the chair isolates a resident from the physical environment and must never place the person in an open area of a room where there is nothing to touch, or no one to talk to. It is recommended that older persons be placed at an angle to each other so their wheelchairs almost touch. Often the elderly cannot see or hear their neighbour if they are simply parallel to them. The angled arrangement encourages socialization and stimulation, and allows the partners to focus on each other's faces (Weick, 1981).

Plastic, vinyl, and other nonporous materials are frequently used in upholstery for practicality: to minimize soil, to repel urine stains or food and drink spillage for easy maintenance. "However, these same materials, when used in seating induce heat build up and perspiration, and can contribute to decubitus ulcers or bedsores" (Hiatt, 1985). Plastic or vinyl furniture can contribute to sliding off from seats, a cold, unchanging, uninviting appearance, and offers little acoustical advantage. "By introducing more texture into wall systems, decor and furniture, we may also stimulate gross and finer motoric behaviour, mental exercise, and minimize the ambient noise"(Hiatt, 1985). The message these materials send to the resident about quality and worth can be directly reflected in self worth and self esteem issues; clearly within the social work realm.

Although there must be consideration in providing a safe and satisfying environment for the ambulatory elderly, we must still adapt much of the environment to the individual confined to a wheelchair.

Some examples of these necessary adaptations are pictures must be lowered, doorways must be wider and beds, chairs and toilets must be the same height as a wheelchair seat. Control switches for lights, etc., must also be lowered, accessible and simple to use for an arthritic hand. Closet shelves and dresses must be arranged so that they can be reached from a sitting position. Sinks, desks, and tables must also be at an appropriate height. Full length mirrors either in hallways or rooms allow the individual to identify with their changing image and prevents them from only seeing a segment of themselves. As part of a healthcare team social workers should be aware that "special considerations must be made for these individuals whose living space has shrunk to the size of a chair" (Andreasen, 1985).

Furniture for the ambulatory should have wide arm rests, short seats, and high backs to support old tired backs and allow the elderly to rise easily from a sitting position with minimal assistance. Furniture should be covered in textured fabric to increase tactile stimulation. There are stain-resistance treatments for fabrics or washable fabric coverings for vinyl cushions which serve as a functional option. Pedestal tables prevent tripping on protruding table legs.

A chair back should provide a firm and high back and the chair should have a sturdy base without being too heavy. An average guideline for seating is firm but slightly springy cushions (Marshall, 1980).

End tables could be built from the wall to avoid the use of legs. This would aid ease of mobility and serve as a more effective use of space (Whitaker & Karolyl, 1976). Furniture designed this way would also allow the option of putting the table up against the wall to free up additional space when needed.

When these issues are attended to with both form and style considered it reflects a safe, comfortable, and quality environment with aesthetic appeal. This not only makes the elderly feel better but will encourage them to ambulate, socialize and interact providing increased stimulation, self esteem and dignity while still providing a sufficient retreat when privacy is needed or desired (Gutheil, 1992; Keen, 1989; Resnick & Jaffee, 1982). These psycho/social issues are hand in glove with the presentation of the physical environment. Even furniture arrangement plays an important role in socialization and interaction. The furniture format is not simply functional but also carries an important symbolic message for the social worker to consider, along with the potential aesthetic of a homey environment (Christenson & Taira, 1990; Marshall, 1978).

TEXTURE and the HUMAN TOUCH

The literature on tactile sensitivity and kinesthesis indicates that relatively slight changes are experienced by most older individuals (Hiatt, 1985). Unfortunately, in many public settings and institutions, textures are minimized in response to concerns over sanitation, fire safety and an appearance of orderliness. "For the elderly, the contact with textured products is even more limited, often hampered by less effective

mobility. Hence, human contact, both with other people, and with textured products, is limited. Access to warmth, vibration, movement, surface contours, and varied materials becomes more difficult for mobility and sensory impaired older people" (Hiatt, 1985).

Textural variety environmentally is one of the most effective areas for stimulation with the elderly, as this sense decreases the least (Christenson & Taira, 1990; Hiatt, 1985). It is essential then, to move away from only the cold, hard, smooth surfaces most common in institutional settings, and implement as much variety as possible. Those daily tasks we take for granted can be a source of daily enhancement for the elderly. The textural difference between, clothing, bedding, and even grooming implements becomes fundamental stimulation in their monotonous and deprived environment (Christenson & Taira, 1990).

An additional concern remains: textured items may be out of reach, or touching may be prohibited or discouraged. This is an important factor for staff to be aware of and adapt (Lacy, 1981).

Greater attention must be paid to the physical characteristics of an object rather than solely the visual ones (Hiatt , 1985). Social workers can play a key advocacy role in the implementation of varied and quality textures as their awareness of the need for touch should be central in their work with the elderly (Gutheil, 1991). A soft piece of velvet could inspire memories of a cherished pet or a favourite dress; this in turn not only stimulates the senses and imagination but can enhance creativity, validation through stimulated memory and hence life review (Hoeppner, 1991). When touch is limited through loss of relationships (i.e. spouse, pet) and through limited mobility, tactile variation becomes exceedingly necessary. It is a basic human need.

ENVIRONMENTAL DESIGN & HUMAN BEHAVIOUR

Maluccio's study (1979) presented interesting observations in reactions to the physical environment; he states that workers in contrast to clients, took the environment for granted or had little to say about it. The agency is comparable to most member agencies of the Family Service Association in respect to size, staff, and programs. The research focused on its counselling program. The sample was representative of the client population at the agency (Maluccio, 1979).

In giving their impressions of the agency as a whole, at least two-thirds of the clients, in fact, offered remarks about the physical setting. Most of these comments were negative comments about the location and physical appearance of the agency, the size and condition of the waiting room and offices, and the lack of parking. These comments came from satisfied, as well as dissatisfied respondents. Some typical remarks about the physical setting were:

"Location: I was leery about going there; did not like going to that area; location very poor."

"Appearance: looks like it needs a coat of paint; looked rundown; physical surroundings bad."

"Office: tiny offices; I felt closed in; office seemed too empty; looked . . . cold; no rug or pictures" (Maluccio, 1979, p. 745).

Some clients, regardless of socio-economic backgrounds, felt even more strongly about the environment than those cited above and noted ways in which it

affected the helping process. For example, after expressing his understanding that the agency realistically had limited resources, one client stressed the significance of adequate facilities: "The only thing I could hope for would be to have the facility in a decent location. The physical setting makes an impression on people. I think they could do a better job if the facilities are improved. People would feel better about going there. Well, maybe the counsellors themselves would feel better" (Maluccio, 1979, p.746). Some respondents suggested that certain qualities of the physical environment affected the way they felt about themselves.

Over one-fourth of the clients were especially critical of the size or appearance of the worker's office. "Oh, I kept thinking that maybe I should go somewhere with better offices . . . sometimes we wasted time talking or thinking about the office." "The room looked empty like I felt for quite awhile . . . sometimes, well, it made it hard to get going" (Maluccio, 1979, p.747).

Maluccio makes his point that in light of the many negative remarks about the office, workers should be more sensitive to the meaning for particular clients (also Gutheil, 1990; Germain, 1978). Administrators as well as practitioners, should consider ways of improving the office and the messages it conveys to clients (Germain, 1978; Hundertwasser, 1991). It appears that we consistently fail to make use of the information available from others on "the effects of colour, lighting, furniture arrangement, and amenities on providing the kind of setting that is desired" (Maluccio, 1979, p.788). Moreover, it is noteworthy that for many clients the poor quality of the physical environment accentuated the stigma of going to this particular agency, which they already perceived as a setting for poor or lower-class clients. This evidence supports the assertion that, "space, design and decoration in our agency

settings communicate messages about their status and worth to users of service and affect self-esteem and psychic comfort" (p.750). Maluccio, Ittleson, Proshansky and Revein (1970) all have shown that the physical setting is one of the major variables contributing to the effectiveness of therapeutic programs in a psychiatric hospital.

From the perspective of clients, the findings suggest that an agency's social and physical environment is an important component in the process of a person's becoming engaged with the worker and using the service. This aids the position that client-worker interaction occurs within a broader context that includes the agency with all of its physical, social, and operational features. This infers, first of all, that a practitioner needs to evaluate the quality and meaning of the environment for each client. Secondly, numerous questions should be asked at a broader level, such as the following: Does the setting have a first appearance of concern, competence and comfort; the type of place where the client will find the kind of understanding and wise help that is sought? Or does the setting give the message of incompetence, lack of respect, lack of privacy and lack of comfort that could well deter persons (Maluccio, 1979; Gutheil, 1992; Christenson, 1990)?

Certain concepts of the physical environment of the agency itself have been addressed including the way in which the desk, furniture, lamps, shades, rugs and accessories are arranged. Each individual configuration can create an ambience that can affect the desire of the client to enter or remain in the office. In addition to the quality and comfort of a practice, consideration of the safety and accessibility of its location and the general climate of its atmosphere are important aspects to regard and are issues not only of the physical agency but within practice itself. **By this it is meant that certain architectural elements and considerations in the home**

situation of the client may be of essential value to identify in the therapeutic process.

Such a balanced work of art as the social project of Hundertwasserhaus, funded by the City of Vienna, is a living example that successful environments can be done. The house cost approximately six million dollars, U.S., compared to ten to forty times as much for a single fighter jet, that is actually nothing but an instrument of destruction and pollution (Koller, 1993). Hundertwasserhaus stands not as the focus for this thesis but as an inspirational guideline, for broadening the staid and often pedestrian views of the built space in which a great deal of our lives unfold.

Hundertwasserhaus is not only a house. It is a successful environment--in more than one respect. Until now, hardly any architect has dared to look so deep into the core of life's processes in order to develop architectural forms. It is a concept rooted in the artist's sensitive understanding of human nature and in the basic knowledge that chlorophyll--steeped in sunshine--is the only foundation upon which everything else can follow (also The Urban Garden, 1979).

It really has a lot to do with "coming home" (Cole, 1991; Beyond Shelter, 1975; Rand, 1991; The Double E, 1978), when your feet feel the trusted unevenness of the ground, the gently swinging hills and valleys--your body has them all within its memory. "Only those who follow the laws of the plants and vegetation cannot go wrong" (Rand, 1991, p.15). Suddenly we can envision a city of houses built upon these principles, where the climate is no longer determined by dictatorship of machines, but by the gentle power of the vegetation. The more Hundertwasserhaus', the fewer hospitals (Rand, 1991). It is imperative for social workers and architects

alike to understand the impact and influence of our physical environment on our physical, mental, emotional health, and well-being (Koller, 1993).

The house encloses space--its interior--and excludes space-- everything outside. "Thus, the house reflects how human beings see themselves, both the interior selves revealed only to close intimates, and the public facades displayed to others" (Germain, 1978, p.518). **The threshold of the house is regarded as one of the most important dividing lines between the inner private space and the other private world.**

In one psychiatric hospital when requests are made for admission, a social worker makes a home visit to explore alternatives to hospitalization or to help prepare for admission. The following is an excerpt from a report in Germain's article of one such visit, which aptly demonstrates the impact and symbolic message of the physical setting on clientele:

> When I arrived at the home, Mr. and Mrs. H. met me and were obviously very anxious about the visit. But Jane (the eighteen-year-old daughter and designated patient) was even more anxious. She went to her bedroom before I got into the house, locked the door and refused to see me. This house was the most forlorn, on a remote lane of small houses; the bushes in front are overgrown, obscuring the number plate and making the house difficult to locate. The house was unusually cluttered, creating a sense of great disorder. The most striking thing about the H's house, however, is that all of the interior doors were closed and locked. Mr. H. explained that Jane locks her door so they keep the others locked as well. To add to the air of isolation, all the drapes on the front of the house are closed. Jane has chased her mother several times with a paring knife,

so Mrs. H. now leaves only the back door unlocked in order to get out and away from Jane, if it becomes necessary (Germain, 1978, p.518-19).

Clearly, the locked doors in the interior of the house reflected the family's image of itself as being in constant danger from within and without. "The hidden threshold, the closed drapes, the disorder, and the location of the only escape route at the back suggest the family's lack of nutritive interchange with the outside world. This impression was later substantiated in the on going work" (Germain, 1978, p 519).

Germain also points out the belief that public low income housing, (high rise apartments for example), violate the self-image of the resident as a separate and unique person of worth and dignity through its uniform sterility and monotony of design. Hundertwasserhaus in Vienna, stands as an example against the violating trend of public low income accommodation. It serves as a fine example of public housing accomplished in quality, style and pragmatism. However, more typically, "the vandalism seen in housing projects may be, in part, the resident's angry response to the blatant violation of the house-as-self" (Germain, 1978, p.519). Such substantial influences of the physical environment are crucial to understand, and can, on some counts, even be clinically negligent to overlook (Germain, 1978).

Another concept in self/other relations is a psychological factor rather than a spatial one. Crowding and its opposite, social isolation, are psychological-social states. They are experienced when the processes of personal distance and territoriality do not function effectively. The actual physical space available affects how distancing mechanisms work. Where space is inadequate and privacy difficult to maintain, the processes of adaptation and coping are more difficult. In overcrowded housing, even the bathroom may not be available as a retreat. In one study of the

physical environment, "the bathroom is said to serve some family members as a library, a telephone booth, a think tank, a refuge from other family members, or even a locale for suicide, in addition to its original biological purpose" (Germain, 1978, p.520).

Brogan and Douglas (1980) examine the hypothesis that the psychosocial health of urban dwellers is related to characteristics of the physical environment where they live. The results of this study indicate that characteristics of the physical environment are about as important as characteristics of the sociocultural environment in explaining variation in psychosocial health. Studies such as this one indicate that urban planners need help from community psychologists and are hoping for a research thrust that will provide it. This reinforces once again the need for interdisciplinary consultation for the future.

Percival Goodman (1978) explains how we could have a higher quality of life in both our homes and in our cities, if we planned and designed with economy and ecology for people and in greater symbiosis with nature. This is reminiscent of the architect Hundertwasser's philosophy and work. Goodman's view is that tighter management of this arena would ensure a more efficient and healthier environment for all. His main plea is to open the view of the future from its current myopic limitation. His view of technology is that it represents political views of the day and that it is born out of a religious attitude of utilitarian materialism. This in turn suggests an alienation from nature and a predisposition to ulterior motives. The major problem with cities is that they are no longer of human scale so we no longer relate to them. Technology has taken over people; humanity, as it were. A palace can be a prison and

a prison a palace. Attitudes towards homes must change and shift for us to survive in the future (Goodman, 1975).

Native Americans regard art as an element of life, not as a separate aesthetic ideal. To them Art is indispensable to ritual and ritual is the Native American concept of the whole life process. Aboriginal philosophy does not separate healing from art or religion. "Traditional aboriginal healing using Shamanic knowledge is remarkably consistent across the planet. In spite of cultural diversity and the migration and diffusion of peoples across the earth, the basic themes related to the art and practice of Shamanism form a coherent complex" (Duffrene, 1990, p.123).

The world of the human being and the world of nature and spirit are essentially reflections of each other in the Shaman's view of the cosmos (Duffrene, 1990). This, to me, is both inspirational and sensible in approaching holistic health, and directly connects to my viewpoint and intentions for adjustment in the physical environment.

Hundertwasser's work has elements of a profound ecological concern and a balance of person with nature and art that also incorporates this experience and understanding. From these views, such as Aboriginal philosophy and social/cultural trends, much can be learned as to appropriate directions for long-term institutions for creating not just shelter but a home to live as a healthy whole. This is, of course, in keeping with an holistic approach to social work practice.

Convenience and safety are primary concerns for the satisfaction of the elderly in regard to housing and shelter. Being annoyed because appliances break down and being concerned that a thief might break in, are experiences that produce emotional stress, anxiety, frustration, and fear, and also suggests an environment that is outside

of the elderly person's control (Golant, 1985). This, in turn, adversely affects life satisfaction. Experiencing fatigue from getting to places in one's community is also indicative of increased discomfort. Immobility often incurs social isolation which is likely to produce strong emotional discomfort, and as such negative attitudes about one's self-worth and feelings of failure because satisfying interpersonal relationships cannot be achieved. In addition, the negative consequences of boredom partly derive from the unpleasantness and anxiety of monotony. There is also a greater sense of competence and confidence of being able to live relatively independently and autonomously. The description of these psychological properties provide an intuitively reasonable explanation for how the everyday environment (both social and physical) impinges on life satisfaction of an elderly population .

Gutheil (1992) points out that because social workers do not attend to clients' physical environment with the same precision they bring to the social environment, an important tool in assessment and practice is underused. Social work tends to view the physical environment as a backdrop for human processes but generally does not recognize the influence the environment has on these processes (Germain, 1978; Gutheil, 1992). As a structural example this impact may occur when a too-narrow doorway barricades entrance for someone in a wheelchair or as a perceptual example, how a person perceives the setting, as Gutheil offers, as when a client will not sit in the worker's chair, even at the worker's invitation.

Theories about the impact of space organization and concepts useful to understanding people's relationships with their environments follow. Central to these issues is the application of theory about people's physical settings to social work practice; spacial issues around territory, personal space, crowding, and privacy, as

well as organization of space, including fixed-feature and semifixed-feature space. (Semifixed-feature space refers to arrangements of those parts of an area that are movable.)

"Place is a symbolic anchor for being in the world" (Hendricks, 1986, p.277). As such, adaptability, coping and environmental press are crucial facets of the point Lawton brings into his landmark work (1980, p.278) in reference to the well being of the elderly. Home and place are buffers, mediating how the world is perceived. As such, the trauma of relocation naturally stirs grieving for their lost home, "the losses mourned are physical, social and psychological since the move is a separation from the person's heritage and the cues that bolster old memories" (Hendricks, 1986, p.278; Mazumdar, 1992, p.692).

It is exciting to see, when reviewing the literature, how similar concepts, philosophies and research data are continuously reinforced and connect varied situations and approaches with many common threads. Lacy (1981) examines the physical environment of a psychiatric facility, emphasizing the need for support and safety. "We cannot accept a safe environment that is not supportive, nor a supportive environment that is not safe" (Lacy, 1981, p.44).

Again, the need for interdisciplinary action is emphasized. Achieving these environment goals is a process that requires energy and dedication by hospital staff and designers. The literature seems to support that what must simply be recognized is respect, particularly in institutions, for human needs for privacy, rest, diversion, stimulation, and variety. Encompassing these factors we have what could be deemed a supportive environment. Ensuring a person's safety is also a necessary element to a successful environment.

As several articles and films have suggested, and as Denmark has demonstrated, integration of the young and old is not only a good idea, but is very effective in encouraging adaptability, spontaneity, and youthful vigor in the old. As well, of course, older people have qualities that make them the "perfect" mentor, caregiver, teacher, counsellor, and friend, for younger people. Reville (1989) re-emphasizes this. An environment that supports and nurtures the strengths and the potential of individuals at both ends of the continuum, provides opportunities for optimal growth and adaptation for both the young and the old.

SUMMARY

As social workers begin to experience for themselves "the power of knowledge about clients' physical world" (Gutheil, 1992, p.395) and the effects of the physical environment of our own practice; "attention to this aspect of clients' lives will become routine, benefiting both workers and clients" (Gutheil, 1992, p.95), through obtaining the optimum goals of practice.

Home is a particularly complex concept and is bound up with several others, including privacy and shelter. There is a distinction between home and housing, with homes as personalized houses, consisting of both physical and metaphysical elements. To enhance our institutions we must incorporate a heightened awareness of our physical setting and its impact on us, on the aging, and on all people.

Cole's commentary (1991) describes that the homeless people we saw (in the 1980's) on city streets, on television, in newspapers, and magazines--not only

revealed a profound failure of policy, they also symbolized a widespread sense of being lost or displaced. As social workers know all too well, a growing anxiety about home has grown from new revelations of child abuse, wife abuse, and elder abuse, along with the rise of impoverished, single-parent households. Issues of aging, inter-generational relations, and care of the sick or demented elderly found a prominent place on the silver screen of Hollywood. It is fitting in literature dealing with the physical environment, that such a theme; a search, or longing, for home--filled with much ambivalence and uncertainty--runs through many of these films. Can we really go home again? Who will guide us or care for us at the end?

" 'Home is where one starts from', wrote T.S. Eliot in Four Quartets. 'As we grow older, the world becomes stranger, the pattern more complicated/of dead and living' " (Cole, 1991, p.427).

There is a trend in the literature that suggests great attention must be given to the final home of the elderly; as institutions have a responsibility to retain the importance of this symbolic anchor. Yet, this attention to the physical environment remains scanty in the theory and practice of social work. This thesis aims at beginning to fill that gap, both within the literature and social work practice itself.

Chapter III: CONCEPTUAL FRAMEWORK

This particular chapter will introduce and summarize the conceptual framework of this thesis and introduce its research questions. The objectives and methodology will follow.

Achieving holistic health through the pursuit of a thorough systemic approach is the motivation and rationale for my thesis research. In order to achieve a holistic view of systems which impact on an individual's health and behaviour, the physical setting must be included. Incorporating the effects of the physical environment into an understanding of systems theory is essential towards accomplishing this goal. Issues of control, choice, privacy, sensory stimulation or deprivation, safety and support as well as individuality, dignity and self-assurance are all strongly linked to the physical environment.

The literature suggests several possible theoretical frameworks for further study. I have chosen a combination of the following interpretations. The physical environment can be described through attention to such architectural dichotomies as form (function) and style (aesthetic) (Keen, 1989), and to the information giving functions of these combined factors (Resnick & Jaffee, 1982). Information giving functions of the physical environment provide indicators of at least three aspects of a system: 1) the central task or purpose of the system; 2) the dynamics of individuals within the system; and 3) the attributes of the system (Resnick & Jaffee, 1982, p. 355; Keen, 1989).

Keen (1989) also identifies four specific senses of privacy; solitude, intimacy, anonymity, and reserve (associated with the need people have to withhold certain aspects of themselves). From this is further distinguished visual privacy, acoustic privacy, and olfactory privacy. These aspects then, are crucial for social workers to be aware of, particularly in an institutional setting where most aspects of privacy are impinged upon.

Steps towards assuring an improved physical environment include incorporating more ecologically sound principles (Christenson, 1990; Goodman, 1978; Gutheil, 1992; Hundertwasser, 1991; Rand, 1993). These principles involve the inclusion of ecology in the structural design, the use of organic shapes in the structure, the efficient use of space, and the integration of effective landscaping into the design.

The environment can be viewed as four possible variations of both the internal and external influences on the social and physical environments. These are the internal-social, the external-social, the internal-physical, and the external-physical. These environments work together in shaping and influencing behaviour (Weick, 1981). However, social work has tended to focus one-dimensionally on the psychological and social environment, to the exclusion of the physical setting. Social workers can greatly extend the concept of environment by adding the influence of physical factors in the shaping of behaviour. This can hold particularyy true for the aging who experience physiological changes that often inhibit their ambulation, comfort, sensory perception and independence as the existing literature demonstrates. "The internal-physical environment includes genetic traits, metabolism, organ functioning and adaptive capacity" (Weick, 1981, p.142). The external-physical environment includes climate, air, noise, lighting, food, biological rhythms, and

atmospheric conditions. "At a gross level all these environmental conditions pose continual challenges to physical adaptation" (Weick, 1981, p.142).

Maintaining a balance in the physical environment is a process that parallels the complex relationship between the psychological and social spheres. "All the environments form a dynamic matrix of interaction that shapes an individual's behaviour" (Weick, 1981, p.142). The basis of social work theory is that, at any one time, an individual's behaviour is the result of these interacting environments. All four sets of environmental influences must be considered to view behaviour comprehensively. The result will be "a broader diagnostic base that acknowledges the significance not only of psychological and social factors, but also of physical factors in the shaping of human behaviour" (Weick, 1981, p.142).

To accomplish the incorporation of all environments in practice, there is a need for a link between policy and environmental design to be achieved through heightened multidisciplinary interaction and action (Brogan & Douglas, 1980; Christenson, 1990; Germain, 1978; Gutheil, 1992; Hundertwasser, 1991; Lacy, 1981).

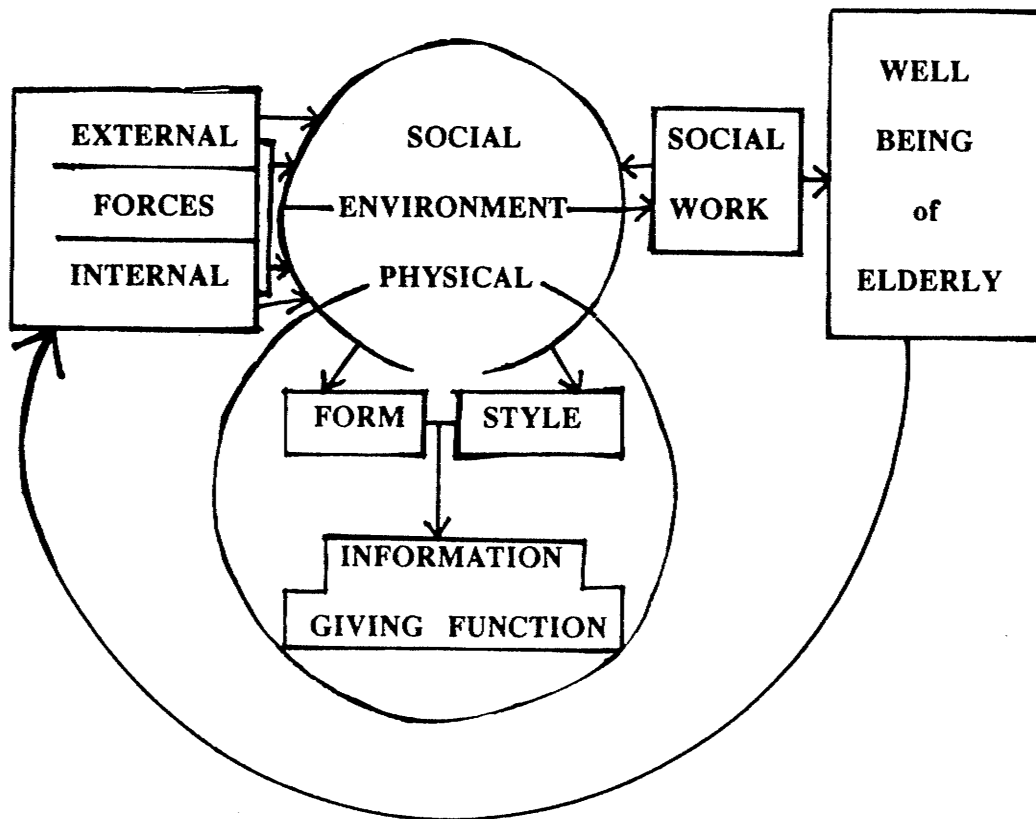

FIGURE 1:

The Conceptual Framework

Chapter IV: **METHODOLOGY**

Little research has been done in the social work field on the physical environment and the well being of the elderly. To achieve a more holistic approach it is important to consider all systems that impact on people. However, the social work profession has not concentrated on the physical environment to the same degree. It is because of this, that I have chosen to concentrate on the physical environment in my thesis. The literature on the physical environment related to social work practice is scarce. As a result, my work serves as an exploratory study. The frameworks I have described in the previous section outline a descriptive format for studying the environment. From this information my objectives, research questions and the interview guide are formulated. My research questions are:

1. What is the awareness of social workers in Personal Care Homes (PCH) on the effects of the physical environment on the elderly?

    1-a. Is social workers' awareness of the physical environment more around form or style?

2. How, if at all, and when, do they implement this awareness in their practice?

    2-a. Which element of the environment, form or style, do they implement more?

    2-b. What are the obstacles towards implementing that awareness?

DEFINITIONS OF MAJOR CONCEPTS

The following underlined words indicate major concepts of the thesis and are defined here to assist the reader identify their contextual meaning for the purpose of clarifying this work.

Form: Form refers to the functional value of the physical environment. i.e. furniture height, doorways wide enough for wheelchair manoeuvering.

Style: Style refers to the aesthetic quality of the physical environment. i.e. impact of colour, tactile quality of furniture coverings. Both form and style can be interconnected or serve independently.

Social worker: Social worker in this study means those individuals operating in a social work capacity holding a minimum professional education of a Bachelor's of Social Work degree.

Implementation: Implementation means that social workers actively use a given skill or awareness with the PCH residents and/or family members and staff.

Physical environment: The physical environment refers to all places, buildings, spaces and transportation. This entails their inherent functional (form) and aesthetic (style) qualities such as conditions of temperature, lighting, quality of air and information giving functions, including the view and surveillance zones through windows and doors.

Awareness: Awareness refers to the conscious knowledge and a heightened sense of understanding.

Acoustics: Acoustics have to do with the sense of hearing, and pertains to the science of sound. Acoustics are the qualities of a room that determine how well sound can be heard in it.

Holism: Holism refers to the art and science of social work practice which looks at the total, complete person including mental, emotional, physical, environmental and social influences.

RESEARCH DESIGN and DATA COLLECTION

A cross sectional survey design was used. The data collection component was a face to face interview conducted by myself with the social workers at the Personal Care Homes. The interviews were audiotaped with the respondents' permission. The semi-structured interview guide was used. (See Appendix C).

Hospitals are meant for short term and generally acute care thus the environment cannot readily be modified and those elderly in the community have more control over their own environment by virtue of their independence. The PCH is a long term care facility serving as 'home' to the elderly in Manitoba. Social workers can help enhance the physical impact of this setting. For these collective reasons, the PCH was chosen as the unit for study.

A list of PCHs in the city of Winnipeg was attained from the provincial Department of Health of all Personal Care Homes(PCHs). There are 34 total Personal Care Homes in greater Winnipeg and they were categorized by the number of beds into small (under 90 beds), medium (90-150 beds) and large (151-284). Five facilities

contacted did not have a social worker. This brings the sample size out of 29, not 34. This study focuses on the PCHs in Winnipeg. The unit for the sample is the PCH. The sample was drawn through a stratified random sampling by the size of the PCH. A table of random numbers was used to identify the study sample. Six PCHs were drawn from the small category, 7 from the medium, and 7 from the large. Only one social worker was asked from each facility for the interview with one exception where two were interviewed simultaneously. The names of social workers and contact numbers of each PCH were identified. The name list of respondents and contact numbers was locked away to ensure confidentiality.

One pilot interview was conducted to test the instrument, since only minor revisions were necessary the interview result is included in the data. A total of twelve interviews were completed. Interviews were conducted until the data seemed saturated. Since, one interview involved two workers simultaneously a total of 13 social workers were interviewed. This leaves the sample size at 35% of the Personal Care Homes, 41% of those with social workers. All of the interviews were taped, except for two, with the respondent's permission. The average duration of the interview was forty-five minutes. In addition to interviews the study utilized observation by the researcher. Each Personal Care Home social worker provided a tour of the facility which varied from fifteen minutes to over one hour depending on the individual social worker and size of the facility. The interviews were transcribed and all identification was eliminated. The transcription was analyzed. The tapes were erased when the thesis was completed.

As this is a qualitative exploratory study, the sample size is smaller. The data is saturated. Qualitative descriptive data analysis will be used. Issues of credibility and dependability will be discussed in the limitations of the study.

CHARACTERISTICS OF THE SOCIAL WORKERS

The social workers interviewed were all full-time except for one part-time. Their average education was a Bachelor's of Social Work attained in the 1980's with 6 recent graduates since 1989. Six had additional degrees, primarily a Bachelor's of Arts degree. One of these was a Master's of Social Work. This interviewee was more detailed and specialized in her awareness and although certainly not a sample to draw inferences, it was interesting that the BSW had a more generalized approach.

The average amount of time working with the elderly was 9 years with the range from a minimum of 2.5 years to a maximum of 29 years. Nine social workers had worked 5 or more years with the elderly. The average time at the PCH was 5 years; the range from a minimum of 1 month to a maximum of 24 years. One worker had been at the PCH over 20 years, 5 had worked at the facility over 5 years and less than 10, 5 worked between 2.5 to 4 years at the PCH and 3 social workers had been there a year or less. This did not seem to tangibly influence their perspective on the physical environment at all, apart from varying attitudes of loyalty to the facility. This may also be a symptom of individual personality rather than longevity with the facility. Loyalty may affect their response but it was not an obvious factor. The average time as a Social Worker was 9 years with a range of 2 to 24 years. Two social workers had worked over 20 years in the field, with 9 over 5 years and only 1 with under two years experience.

The nature of the Social Worker's responsibilities varied within the job but was generally very consistent from PCH to PCH. This includes individual and group work, family therapy, administrative tasks, tours, community liaison, consults, referrals, adjustment counselling and ongoing support. The balance of these roles and

the focus varied from each facility. The sample consisted of two small, four medium and five large PCHs.

There was no consistent trend noted regarding the size of institution. Common difficulties were noted within the facility such as congested traffic areas and far distances to travel for the large institutions. Lack of funds seemed a common place concern although more acutely in the smaller facilities; with less interdisciplinary communication and support also noted in the smaller facilities.

The PCH buildings ranged from 1 to 65 years old, with the newer facilities often less adequate in design. This will be discussed further.

LIMITATIONS OF THIS STUDY

The small sample size restricts generalizability of the findings to other settings. This is an issue of external validity and due to the construct of transferability the burden of demonstrating the applicability of this data rests "more with the investigator who would make that transfer than with the original investigator." (Marshall & Rossman, 1989, p. 145). As such, the problem lies not in generalizing my findings about this sample but in a second investigator applying these findings to another setting. This is referred to as 'the second decision span' in generalizing (Marshall & Rossman, 1989).

Additionally, as the researcher and writer there are certain biases which I bring to the study. 'Sankar & Gubrium point out 'Science' cannot be separated from the traditions, beliefs, prejudices and world views of its practitioners' (Sankar & Gubrium, 1993, p.8). As such, my perspective must be acknowledged as a particular bias. This however, lends itself as both a strength and a limitation and should simply be kept in mind by the reader.

This very limitation serves as a strength in qualitative studies because as the data-collector and data analyst--the impressions and feelings picked up in the research process through interaction with the study participants serves as a source of information about the subject of study. A primary advantage of the interview study is its directness and intimacy. It also provides the opportunity for probing which gains more detailed information, thus, it helps to enhance credibility of the data (Miller & Crabtree, 1992).

The subjectivity of the responses must also be noted. The interview guide itself is an interpretive tool between myself and the respondents. In a study of this nature, human individuality is always an uncontrollable variable which, in my view, lends research its strength and intrigue.

Therefore, there remain certain limitations within this small sample of qualitative data. However the strengths of this study insure credibility of the findings and the rich and informative interviews offer a unique contribution to qualitative research.

Chapter V:

What do social workers know about the effects of the physical environment on the residents of Personal Care Homes?

THEIR MAJOR CONCERNS:

Social workers expressed consistent concerns throughout the interviews which indicated data saturation as well as major themes. The following discussion is a summary of these concerns determined through the interviews with social workers in Personal Care Homes.

1. Lack of Privacy

One of the common concerns expressed by the social workers at PCHs is lack of privacy. This extends to many concerns including private consultation, residents' personal space and privacy and lack of space for private meetings i.e. a family room for bereavement. As a result supportive counselling is often overlooked or inadequate because of the restricted space which impinges on family comfort, levels and confidentiality. As one interviewee responded, "There is not enough provision for privacy and dignity, for example around sexuality."

One respondent described that s/he felt a real lack of privacy as a staff member and they could only imagine its impact on the residents. S/he continued with, "staff view the PCH as a work place sometimes losing sight of the PCH as the residents' home". This comment illuminates the different needs of staff and residents and the often contradicting agenda. Such contradiction perhaps, is not only due to the workers' lack of knowledge but lack of proper policy.

Another respondent succinctly pointed out that "there are very few private areas and a resident's room is not even a private area because anyone can come in. There is no area you can get away except maybe outside." Many have recognized that it is a gross oversight to have no family provisions or quiet, private spaces for such inevitable concerns in institutions (Keen, 1989; Buffum, 1988; Lacy, 1981; Maluccio, 1979).

In addition, lack of privacy definitely infringes on the issue of sexuality among the institutionalized elderly. This was a concern for several PCH's as privacy for a couple is virtually impossible, as one worker indicated, "barring a momentarily empty elevator which generally leads to community gossip within the PCH". Most social workers were concerned about lack of understanding for the need and respect of the elderly person's privacy. Two respondents went further with this concern indicating staff and family were often condescending or controlling about the elderly person being 'sexual'.

The division of olfactory, acoustic and visual privacy is again fundamentally inadequate particularly because of the sharing of private spaces such as bathrooms, thin walls, and the constant threat of intruders. Respondents frowned upon the staff members going into the residents room without knocking as if this were a public space. There is a consistent problem across all facilities with preventing wandering patients (dementia) from infringing on other people's space.

These social workers believe that staff respect for residents' privacy could be greatly improved, particularly through knocking AND WAITING for an appropriate response from the resident. Some respondents pointed out that "staff paid lip service to respecting residents' privacy", but were often poor in translating this to action.

2. Lack of Space

Directly linked to most concerns is a poor design and lack of space. "The design of the facility. . . ." is the largest barrier, stated one social worker. This also entails confusing floor plans, again inhibiting successful orientation for the residents. An example of poor design is a long, institutional corridor with inadequate visual cues for orientation. As one respondent commented on their facility, "it's a new building but it is not nearly as functional as expected." One worker pointed out that "there is no space for large groups." Several workers echoed this concern as well as indicating that "the residents' rooms are very cramped."

Size adjustments and increased space were often first on the list for desired changes with one interviewee describing the need for "space enlargement in all areas." Another stated "the size of rooms (residents') are too cramped." Another respondent simply said, "the design of the facility itself is our largest barrier."

There were consistent complaints of crowding, poor manoeuvrability particularly for wheelchairs and lack of rooms for such private needs as bereavement, family visits, consultation and personal needs of the residents such as sexuality. *Social workers often voiced surprise and concern that a facility built specifically for the elderly disabled population could have such fundamental oversights as inadequate space for wheel chairs to manoeuvre*. This is also my opinion, and clearly these concerns echo the findings in the literature.

3. Too much Noise

Distracting and disorienting to the residents, noise often reduces the residents' ability to cope. This is particularly true of the cognitively impaired. This is pointed out in the literature cited in the section 'sound and acoustics'. Both staff and residents' were

reportedly bothered by the excessive noise level in PCHs. Eighty-three percent of social workers interviewed reported noise as a problem in their facility. "My office has too much commotion, lack of privacy, too much noise -- I can get as agitated and impatient as the residents." Another social worker described that "the noise level is distracting. . . " both to residents and to the staff.

Common sources of excessive, disruptive noise noted by the social workers in the Personal Care Homes were; televisions, paging systems, phones, housekeeping equipment, and calling out by the cognitively impaired. Paging systems in particular were identified as disruptive and disturbing to both the residents and the staff by virtue of their frequency of use and their decibel level. One interview indicated that traffic sounds, specifically the frequency of alarming ambulance and fire truck sounds, were disruptive and agitating to the residents. This point in turn directly links to the issue of location for the facility.

A few social workers also complained of the staff themselves being insensitive to this concern by being excessively noisy, particularly during the night-time change of shift. As one social worker describes, " yes the noise level is disruptive and annoying. The staff are careless and noisy particularly at change of shift when residents need to sleep. They could be quieter." This manifests itself in sleep disturbances for the elderly which in turn affects their coping skills and functioning the next day as well as potentially impairing their long-term well-being.

Lack of adequate sleep not only affects our mood, energy level and even our intellectual capacity but it also increases the vulnerability of our immune system (Vickery & Fries, 1981). As such this is a particular concern in a communal living environment, namely institutional settings, where the rate of exposure to viruses and bacteria is heightened (Vickery & Fries, 1981). The cognitively impaired residents calling out at

night is a more difficult problem to manage and as such illuminates the need for special needs units which can, if not minimize, at least localize the disruptive effect.

'Poorly managed and designed acoustical settings can be as great a barrier to older people as steps are to a wheelchair user' (Hiatt, 1985, p. 59). An example given by a respondent demonstrates this point. "Mrs M, a cognitively impaired woman, was overstimulated with too much noise from paging, and housekeeping etc, and too much hustle for her to handle. As a result her behaviour became over aggressive and at times violent. It was thought she was more impaired than she was and that she had a hearing deficit. When she was moved into a special needs area with low stimulation, low traffic, alike residents, etc., she was suddenly smiling, hearing well again, and had a greatly improved attention span".

Lacy (1981), who studied creating supportive environments in a psychiatric setting also reported success with decreased stimulation for the cognitively impaired. These examples serve as evidence for the importance of special needs units.

The quality of the acoustic environment may be so discouraging to the elderly resident that they could withdraw completely as their comfort and confidence diminishes (Hilton, 1987). As a former recreation therapist on an extended care unit, I often found the elderly would withdraw and become uneasy if distracting background noise impaired their ability to follow a group session and dialogue. As a matter of self-preservation it became easier for the resident to decline participation rather than to admit to their declining hearing and, as a result, be left feeling inadequate. By improving the quality of the acoustical environment we can facilitate the elderly person's socialization, independence and confidence while simultaneously preserving their sense of self-worth and dignity.

"Noise can also enhance pain perception, startle the patient, damage hearing and induce sensory disturbances" (Hilton, 1987, p78). In addition to this, noise often increases annoyance and irritability, impairs judgement, interferes with thinking, sleeping patterns, conversation and music.

Staff also found the noise of the PCH disturbing in their work and irritating (Birren, 1969). One social worker added she responded the same way the residents do to the commotion and excessive noise by feeling anxious and impatient coupled with difficulty in concentrating. "I used to get more work done and was more focused in a quieter office setting." During the interviews with social workers that stated noise was not a particular problem for them, we were interrupted numerous times by an abrasive paging system, loud t.v., or other noisy apparatus. I found this a curious contradiction and wondered if they had simply grown accustomed to the level of excessive noise. As one worker stated, ". . .it (noise) used to bother me a lot, but now I don't really notice anymore."

Social workers, even if not well versed in acoustic studies, should be sensitive to the distraction background noise creates for those with declining or impaired hearing, limiting the elderly in their social role.

Additionally, particularly for urban places and institutions, the importance of silence is emphasized by pointing out the incidence of ambient noise. How can the noise be masked (Hilton, 1987; An Urban Garden, 1979)? To achieve silence one must sometimes add sound. As with "An Urban Garden"; the addition of rocks, over which runs recycled gushing water, can enhance the universal association with pleasure from this most essential natural element . Sometimes disguised noise is the closest to a necessary silent sanctuary that we can create. Information gathered by our senses serves to stimulate, over-stimulate, or deprive us of our equilibrium, peace,

and harmony (Resnick & Jaffee, 1982). These visual and auditory concerns are crucial to the comforts of human dwellings and are often overlooked or poorly designed.

4. Poor Lighting Links to Safety Hazard

Not all, but most PCH's had a lack of necessary natural lighting. Often areas, even if recently renovated, were too dark for the residents to manoeuvre safely and comfortably. Shadows and glare were byproducts of lighting design and the materials used. The element of safety in the environment is inhibited by such concerns. Mobility is impaired for the elderly due to shadows and glare, as well as an increased incidence of falls and consequently broken bones. In addition to these concerns, both poor lighting and lack of visual cueing inhibits the information giving function of the environment (Resnick & Jaffee, 1982). As one social worker emphasized, s/he was appalled at "the lack of provisions for visual deficits which pertain to virtually all elderly."

Several social workers complained of frequent headaches, often daily, as a result of their poor lighting and acoustic environments. One social worker described, "If I had a brighter office I'd have less headaches. No natural light and the noise are troubling."

"I respond dramatically to my physical environment. Profoundly. I hate my office, because there is no natural light I have a headache everyday. Everyday." emphasized one respondent. Another interviewee added, "I don't like my office. The windows are small, you do adapt better when there is more sunlight."

Good lighting ranked first in the importance of environmental factors in a study of nine hundred office workers conducted by Hughes (1981). For the visually impaired it is even more important. One respondent pointed out that in some wings "the floors give off so much glare the residents don't know what it is and they believe they are seeing water."

I visited each facility during daylight hours. As such my observations on lighting provisions are limited. Natural lighting however was limited in a number of facilities, with many shadowy corridors, glaring floors and walls and dim rooms. Lighting control switches were not always easily accessible for the elderly. A few facilities did have beautiful views through large windows which brightened the rooms with much needed natural lighting.

5. Lack of Special Needs Provisions

Most PCHs were in need of a special circular walkway for Alzheimers type dementia residents to wander (movement systems) Both indoor and outdoor provisions for wanderers to move safely were lacking. Only three social workers interviewed, (one quarter), had adequate walkways for ambulation. The unfortunate reality in my hospital work experience is the fact that corridors always dead-ended the alzheimer sufferer increasing his/her agitation and potential aggression. A closed or locked door also translates into the idea of imprisonment which does nothing for the wanderers' comfort and peace of mind. A safe and supportive environment must go hand in hand or one aspect is defeated in pursuit of the other.

Unfortunately, many facilities also had trouble with their front door monitoring system. Again, this was particularly problematic with wanderers. I witnessed a great many cognitively impaired elderly heading for their escape with the stressed front lobby workers carralling them back while trying to juggle the duties of their hectic position. Many of these facilities faced busy streets with many potential immediate hazards. It would only take a few seconds with the staff facing the wrong way for an unassuming wanderer to stretch their legs and their curiosity courting disaster as they do so. A more successful PCH design would offset the attention to the exit and eliminate the possibility

of patients disappearing without agitating them by constantly blocking their escape efforts.

As one social worker pointed out, most, if not all residents, are visually impaired to completely blind. It would seem sensible then, to design a building in collaboration with the Canadian National Institute for the Blind (CNIB) or to have some ongoing consultation and intervention with such an organization. Another respondent also mentioned resources, such as the CNIB, were generally discontinued when a resident moves into a PCH. It would seem more sensible to maintain such necessary resources for the elderly even within their long-term institution. The respondent's frustration was that the building was definitely designed for those with good vision. This was a very common theme. Visual cues, and updated lighting including natural sources are necessary for virtually every resident yet are still currently inadequate. This directly affects the information giving function of an environment and contributes to disorientation and sensory deprivation as well as decreased mobility (Resnick & Jaffee, 1982; Weick, 1981). Neither of these aid an individual's health, independence or self-esteem. Lighting and visual cues are crucial to both the quality of life of the elderly and their safety, as well as to the productivity of the staff within the facility. Social workers need to understand the enormous impact of this feature (lighting) to advocate effectively for improved environments.

The Environment as a Whole

This section details the awareness of social workers on the impact of the physical environment around style vs form, sensory stimulation, privacy and symbolism, choice and individuality, control and independence, and interdisciplinary roles and

responsibilities. The first areas of discussion are the general impressions and an overview of the entire environment.

The interviews revealed that social workers do acknowledge the physical environment to some degree. There was a general recognition and acknowledgement of environmental influence, but the social worker's degree of concern seemed to be reflected by their level of commitment to holism. Briefly, holism refers to a comprehensive approach towards health including the emotional, mental, physical and social elements of an individual. This 'natural' approach encompasses all facets of a person, as well as often looking at alternatives to medication, and artificial interventions.

Steps towards implementing holistic theory include incorporating more ecologically sound principles (Goodman, 1978; Hundertwasser, 1991; Rand, 1993; Christenson, 1990; Gutheil, 1992). These principles involve the inclusion of ecology in the structural design, the use of organic shapes in the structure, the efficient use of space, and the integration of effective landscaping into the design.

The unfortunate absence of greenery within the majority of facilities was duly noted. A lack of greenery ranked as one of the largest perceived barriers to an enhanced design as detailed later. One interviewee insightfully suggested the addition of a solarium would be invaluable not only because the institutionalized elderly are alienated from nature but also because our harsh and long winters demand heightened attention to indoor horticulture.

There was a unanimous emphatic agreement among the social workers that the physical environment affects the elderly person. One social worker said, "In everything, totally . . . " Another simply stated, "Definitely." Some other social workers offered that, " . . . it affects everything . . . colour, design, security, accessibility. . ." and "those

with Alzheimers are very affected by factors such as noise, lighting, space, colours and glare." These statements indicate that the social workers are aware of the effects of the physical environment on the elderly in the Personal Care Home.

The appearance (style) of the environment was rated very highly on its own. As one social worker described, appearance (style) plays a major role. "Residents pick the facility because of the physical environment. Location and quality of life issues are key." Another indicated that it helps give dignity. "It is important to be proud of home." Respondents collectively emphasized that the appearance has to be pleasant with good lighting including cleanliness and upkeep. "It is depressing in a run down place," added one worker.

In the role of location, aesthetics of the PCH was emphasized for issues of accessibility and the panorama as well as the building itself. One respondent commented that the location and appearance were more important to the family than the resident. Only one respondent did not stress its importance but rather stated,"The physical aspect can take a backseat if there is CARING staff. Good quality staff are most important. The aesthetic environment is important but not a prime area."

Although style was ranked very high, in comparison, form still ranked above style in the social workers collective mind. Certain crucial factors such as lighting intertwine both form and style; but yet lighting would be more heavily ranked as functional by the respondents.

In terms of their own reactions to their work space and how they themselves were affected, all but two had some negative reaction. The two who were satisfied both had their own office with huge windows, natural lighting, ample space, privacy and little noise interruption. The others were not so fortunate. Some common complaints were,

"if I had a brighter office I'd have less headaches. Having no natural light and too much noise is troubling . . . " and "it's really warm, which causes lethargy as well as aggravating headaches." Another social worker stated that the physical environment "affects me dramatically. Profoundly. I hate our offices. With no natural light, I get headaches everyday." "The noise level is distracting . . . " added another respondent. One social worker described that "my office has too much commotion, lack of privacy, too much noise -- I can get as agitated and impatient as the residents." This evidence would seem to reflect that the physical environment has an overwhelming impact on able bodied people, let alone those suffering declining health and ailments such as the elderly.

The social workers rated the overall PCH from good to adequate. Others expressed mixed feelings often stating that the facility is a confusing structure. "Honestly? It's a horribly designed building" offered one frustrated social worker in a brand new facility. One social worker summed up the message of all interviews with the statement that "there is room for improvement in many areas of the physical environment to enhance the quality of life."

The perceived largest barriers to an enhanced physical environment in PCH's were poor facility design including poor visual cues; an often times serious lack of space; lack of funding for improvements; a lack of greenery and access to the outdoors; problematic elevators; a lack of adaptation for the cognitively impaired and special needs; and an overall lack of communication and understanding amongst the various professions. This last point is in spite of the response by most that, theoretically, the facility employed a multidisciplinary approach with some educational exchange.

Some barriers are embodied in this respondent's words,". . . it's not geared for cognitive impairment or even special needs i.e. visual deficits. The units all look the

same. In addition the staff (except for the specialities) are generally not aware and reluctant to adapt towards improvement in the physical environment."

Another glaring example of poor environmental provision in facilities which allegedly cater to the needs of the disabled elderly population, was the absense of adequate visual cues which result in inhibiting independence and confidence of the resident as well as inhibiting general orientation.

Two social workers describe their facilities' barriers as "the elevators. They are a drag for the elderly. I wish the PCH was spread out instead of up. Elevators transfer food/deliveries/emergencies/ housekeeping/ garbage/staff/and residents. There is such a tight schedule for elevators it's a real drag.". The other said, "It's built in layers. Elevators are a problem. It is the cattle effect . . . dehumanizing."

Some social workers were extremely frustrated with the physical environment of their PCH, regardless of the date of construction. There was a common feeling that social workers lacked an avenue to voice their expertise and concerns in planning and improving the physical environment.

Sensory Stimulation and Deprivation

Generally texture variation was poorly understood and poorly implemented. Either texture had not been considered or it was fairly institutional i.e. cold, plastic, and industrial strength. Additionally there was very little variation. Only two of those interviewed thought texture variation was good. Both of these institutions allowed a lot of personal items, freedom of choice in decor of residents' rooms and were older buildings with more structural variation.

Colour was not weighted with as much importance for several respondents. Others found that the colours of the facility were depressing, cold and inappropriate, or as one interviewee described "the PCH was recently repainted in garish and bizarre colours chosen in the left over shades that physical plant had available."

Noise was considered a mild to extreme problem in all facilities. Noise was also considered a point contributing to disorientation for many of the elderly as well as distracting from concentration for staff. This was questioned separately for both residents and respondents, as well as for the residents' sleeping patterns. Staff insensitivity with 'change of shift' noise and commotion, particularly at night was mentioned by social workers in several facilities.

When asked whether the environment provided enough sensory stimulation there was a four way split between emphatic 'no's'; emphatic 'yes's'; 'there could be a lot more' and those who said 'I think so.' The adamant majority indicated there was not enough positive sensory stimulation. The general impressions of social workers were critical of most individual factors regarding sensory stimulation .i.e. colour, texture, pictures, plants, outside views, and window coverings.

Inadequate space for wheelchairs was a problem, with lack of privacy in common areas indicated as well, for example, no place for group meetings. Inappropriate furniture and poor or cluttered furniture arrangement were often emphasized.

Pets are another element which add life, spontaneity and stimulation to the declining elderly. For some elderly with impaired vision and hearing, touch is one of the last remaining senses and an all important connection to our exterior world. It serves as an important source of orientation and feedback. Pets were a successful addition to several PCHs. As a visitor I certainly enjoyed being greeted by furry resident diplomats.

It puts one at ease adding a homey feeling. Pets even offer a communicative outlet for some residents, particularly those who do not have many visitors. It is important for visitors too, to feel welcome and comfortable in PCHs. The elderly need social company and discouraging environments limit peoples' motivation to visit. A more relaxed, supportive environment also encourages families to stay for a longer visit. For example, with a kitchen available parties and dinners are readily planned and carried out providing more support, stimulation, interaction and variation for the elderly.

Interdisciplinary Responsibility and Policy

One half of the social workers interviewed felt their PCH implemented a strong multidisciplinary approach to health care. Four felt they did not, one stated they did philosophically but not in practice, and one indicated it needs improvement. Just over half stated there was educational exchange between professionals with the remainder indicating there was not.

If a purchase was made the decision was primarily made by the administrators, board, or director of nursing, with discussion amongst staff at one third of the facilities interviewed. Residents were consulted at one quarter of the PCHs. Social workers often felt left out of decision making and several interviewed indicated that they felt an often autocratic system resulted in inappropriate purchases for the PCH. In my view, these results indicate a need for increased input and involvement from other disciplines regarding purchasing and from the residents who *live* in the environment which afterall, is being modified by the new purchases. While administrators might initially resist this joint effort it would potentially improve the quality of the environment through making

wise choices by taking many concerns into account, raising the level of control residents feel, and being cost effective by avoiding inappropriate choices in the first place.

The attitude of the institution was either perceived as very positive and concerned, or perceived as very negative and blind to the needs and priorities of the residents. There was no middle ground. The positive attitudes fortunately outweighed the negative ones. However, "making changes to the environment, getting things passed by the board. . . " can be exceedingly difficult as this respondent indicates one of his/her largest barriers to an enhanced environment.

Despite the majority indicating multidisciplinary team work, interdisciplinary understanding of the environment was rated as low to nil, with only four respondents indicating it was good. The others felt much improvement was needed.

Barriers regarding social workers own work were, commonly, a shortage of space and lack of privacy. Noise was also a prominent complaint. The respondents' office being poorly situated with inadequate exposure to visitors was another common problem. The facilities indicated they are very tight for space which partially translates once again into no room for group work and private meetings.

Obstacles to changing these barriers were identified as a lack of funding and a shortage of space. One social worker was not even recognized at department meetings as a professional, and was therefore excluded from team meetings. Another difficult obstacle was that administration was not paying attention to needs that could be addressed. Some social workers indicated a lack of communication and understanding between departments around the needs of the elderly. Recent renovations in one large PCH demanded input from other staff yet, "no one asked us (social work) for input about the renovations." stated the social worker about his/her facility.

The physical environment was an area of concern in respondents' work for all but one, yet everyone indicated they try to implement concerns with residents regarding their comfort, dignity, independence and adaptation, and serve as their advocates. They accomplished this through encouraging personalization of the residents' rooms, recognizing and respecting the need for privacy, attempts at educating staff, and supportive counselling on the resident's transition to the PCH.

There was no one profession held most responsible for concerns of the physical environment with the vast majority of respondents indicating it was everyone's responsibility, referring to the team. Of those that specified individual professions, one named nursing as most responsible, two held social work accountable, one named architecture, and one identified occupational therapy, physical therapy and social work equally.

Overall, the emphasis by respondents was placed on the need for cooperative working environments to enhance the quality of life for the residents to the optimum possibility. Pooling knowledge means potentially increasing the depth of understanding and finding detailed solutions. Shared accountability also aids in stress distribution and a more supportive climate.

Choice and Individuality

It was a unanimous response that personalization of the resident's space was both encouraged and important and that it was an issue which tied into social work.

The transition to the PCH was aided in various ways often with similar methods from facility to facility. This included pre-admission tours, communication and orientation with the family, personalization, multi-team effort, and preparation and

support from social work. One facility even offered a respite room for a trial run visit over night for the potential resident.

Only two respondents felt residents were afforded choice regarding the physical environment, while one third felt they had some control, with one quarter stating residents had very little choice, and one quarter indicating 'no', basically they had no choices. When questioned as to whether residents felt they had control, two respondents said yes, two said 'some', and eight said 'no to absolutely not.'

"They are afraid to speak up," offered one social worker, "There might be repercussions or disfavour etc". Another interviewee reinforced this scenario, adding that the residents were nervous to speak up because they had witnessed reprisal by the staff for residents who had spoken up in the past. Such discoveries would indicate that the control and choice the elderly feel they have in their PCH is glaringly slim.

Since the residents themselves have not been interviewed, I can only assess this situation through the impressions of the social workers and my own observations. Several respondents indicated that residents did not always feel 'safe' or comfortable about speaking their mind. This silencing is a sad reflection of the vulnerable position of our elderly, particularly those who are institutionalized. It is important for individuals to feel a sense of control and choice around their living conditions in order to enhance and ensure health and well-being, especially self -esteem. The more control one has over their circumstance the less stress they feel and the less likely they are to become depressed. In these examples it would seem the psychosocial health of residents is not being considered. The value of the residents' input is not recognized by the PCH. The social workers I interviewed seemed sensitive to this issue but uncertain as to how to administer change. The challenge of empowering the resident, who is often cognitively impaired, in the midst of a beaurocracy is a difficult dilemma.

Issues inhibiting the elderly person's transition to the PCH were many and varied. Many acknowledged that they are facing so many losses, while dealing with new faces and new rules. The number of staff to resident ratio is often very tight which limits effective support time. Fifty percent of respondents identified the stresses of congregate living, and the rigidity of scheduling therein as a main factor. Loss of control is again tied to all of these points.

Intimidation due to extensive size of facility, disorientation and confusion over the design, and inadequate signage were all mentioned repeatedly as additional transition issues for the elderly.

A large eating area was often identified as problematic to the resident. There were suggestions made by several social workers that smaller dining rooms would be preferable. The rationale for smaller eating areas was to reduce noise, sit alike residents together more easily, reduce long distances to travel for the residents, and create a more intimate, homey environment. Social workers felt that the large dining setting was often a source of intimidation and confusion to the elderly.

Fifty percent of the respondents mentioned cramped space once again as a big issue. This is particularly true for the resident who moves from their own home to one room they now share. This is a huge transition difficulty of institutionalization.

Privacy and Symbolism

All respondents stated they considered the message sent by the environment but symbolism of closed doors, furniture arrangement and other messages were overlooked.

My observation of virtually every facility was that most lounges and foyers had very formal and crowded furniture arrangements. This discouraged both feeling welcome to sit down as well as conversation once seated. Several social workers complained of too many chairs in common rooms, especially considering that most residents were in wheelchairs and needed more space to manoeuvre as well as providing their own seating arrangement. This furniture arrangement creates many concerns which are both functional and aesthetic. A cluttered environment tends to look junky. This in turn does not convey quality and value which is what should be reinforced throughout the environment. The message that the environment sends reflects how residents may feel about themselves. We all absorb information from our surroundings. The impact of this message should not be under-rated. The PCH is their home, afterall.

The furniture was often labelled as "office like and institutional" with one social worker likening the furniture "to a fast food restaurant like McDonalds. Not exactly what I would want in MY living room!" Furniture, like the decor, sets the ambiance and tone for a room as well as providing information on the purpose of that space. Fast food restaurants have their psychological strategy well mapped out as should a PCH; however, these two domains should not even be vaguely similar in appearance.

One third of respondents felt there was a general respect upheld by the staff for the residents' privacy. The majority thought there could be more and that education was necessary with a few respondents gravely disappointed with the lack of respect for privacy. Only one respondent was pleased with the level of respect saying 99% of the time staff was great. [This particular facility constantly discussed the issue of respecting privacy with the staff]. Privacy provisions rated even poorer with one quarter indicating there were adequate provisions, a couple indicating it was pretty good, and over half indicating 'no', provisions for privacy were <u>not</u> adequate. This entailed not only visual,

but olfactory and auditory privacy (Keen, 1989) as well as respect around personal property. All facilities had individual closets for residents and all but four could provide locked drawers for personal possessions.

All respondents recognized the importance of the issue of grieving for the resident's lost home and its meaning to the elderly. One interviewee indicated it was addressed in an informal way only, and another felt it was not handled as well as it should be. It was acknowledged as a big issue by all and only two social workers indicated they did not work with the issue specifically.

Control and Independence

Half of the respondents felt that the physical environment both enhanced and impaired the residents' independence. Only one social worker was very positive stating the residents' independence was 'definitely enhanced'. There was no further description of why this was the case but later this respondent identified that his/her PCH was a positive environment well suited to the needs of the residents, fairly functional and pleasant aesthetically. One other interviewee offered that it was generally enhanced because the elderly had a small community to manoeuvre in safely. On the other hand, two social workers indicated that the residents' independence was impaired by the environment while two others were emphatic that the environment in fact created dependence. Overall the findings indicated one third of respondents felt that dependency rather than independence increased for the resident within the PCH.

Since PCHs are built specifically for the disabled elderly the facilities should unquestionably enhance their independence. The realization that many of these institutions instead accomplish creating dependence, is an atrocity. By virtue of their

disabling circumstance it is natural that certain residents' independence is invariably impaired through the necessity of institutionalization; however, this circumstance should not limit all options of choice and control for the elderly. Through my own observations across the facilities interviewed, it would appear that impaired independence is sadly the more common experience. Sometimes this is through discouraging glare or background noise, disorientation in manoeuvring through confusing spaces, or far distances to ambulate.

Socialization for the elderly often improved within the PCH, while social contact in the extended neighboring community was often impaired. The neighboring community includes external places such as shopping malls, homes of friends, grocery stores and the like. The collective group voice of the social workers that were interviewed echoed that there was a common need for smaller groups and increased program sensitivity, and that in many ways the environment did not foster social interaction. The acoustic quality of a room discourages some elderly from participating in social events that become too stressful to decipher when dealing with a hearing impairment. However, on a daily basis the residents are guaranteed to see other individuals if only the staff. This obviously helps reduce the isolation factor to some degree.

For one third of the facilities, impaired transportation was a major issue for the elderly, particularly regarding the shortage of elevators and the sprawling floor layout. These floor plans were difficult for the residents to manoeuvre due to the long distances and the confusing layout. In addition to the shortage of elevators and as such the implicit time-wasting factor, the elderly often expressed anxiety or dis-ease at taking an elevator especially if they were adjusting to the use of a wheelchair. These factors contribute towards discouraging the elderly from socializing within the PCH.

Again, acoustics were noted as a common problem restricting socializing particularly for the hearing impaired. Large dining rooms were reported as problematic for those with sensory deficits (virtually all residents). Several respondents indicated that the way the units are layed out, in addition to the furniture arrangement, inhibits socialization. Furniture was repeatedly described as inadequate, uncomfortable and lacking creativity in the lay out. Finally, half of the respondents also indicated that poor visual cues within their facility inhibit orientation and confidence and the long distances are discouraging to many residents.

In general, the following summary indicates what factors social workers would like to see changed in the physical environment. Most of all respondents would like Personal Care Homes to be more homey and less institutional. This could encompass eliminating bad smells, replacing long hallways with a more effective design, and integrating more variation in textures thus also improving sound absorption. Several social workers indicated a great need for more greenery and specifically a 'green area' (i.e. a greenhouse, indoor garden, solarium, sitting area etc). This was stressed particularly in lieu of a prolonged and harsh winter climate in Winnipeg which even further isolates the disadvantaged institutionalized residents from nature (Tooth, 1994; Hundertwasser, 1991; Beyond Shelter 1975). Additional greenery immediately lessens the institutional climate as well.

The cramped size of rooms and the need for more space was emphasized by one third of respondents with improved provisions for privacy named within that demand. One respondent described the need for more space through the request for a private family room particularly for bereavement needs. It is a difficult ordeal to be overwrought with emotion in a public setting with nowhere but a corridor to react. Residents, family and

visitors need the safety of a private physical space to experience these inevitable emotional events.

Another elevator to speed the traffic between resident and support service use was a big desire for a few facilities. A few smaller dining rooms in lieu of one large one was a common desire amongst social workers, with the rationale that the smaller space would reduce stress, disorientation and sensory overload. This issue also ties into the need for developing a special needs unit. Social workers indicated that this unit should include a circular walkway for those wandering residents with dementia. Greatly improved visual cues throughout the entire facility are also needed as virtually all elderly are visually impaired to some degree.

A Different Perspective: Women Serving Women

One wonders if the issue of female predominance in the realm of Personal Care Homes, both as staff and as residents, alters the environmental experience. Whatever our individual viewpoints, we are all subjects of our own cultural socialization. Cultural socialization was not a specific research question of this study but remains a concern. From my observations, culture was not given a great amount of attention apart from individual PCHs which specialized in another language.

Cultures can dictate different social distances, and the ideal housing environment must take custom into account. In Western society we spend the major part of our lives in a man-designed* and man-made* world. Hence, systems and person-in-environment issues are key, and doctors, as well as social workers, do not serve their patients by ignoring their environment.

Informally, during the tour of the facility, workers were asked whether they felt there were different environmental needs between the male and female residents. Generally there was no recognition of specific concerns to this gender difference.

Women, particularly of the current elderly population, probably feel a higher need and desire for privacy than their male counterparts. This extends to changing, bathing and sleeping. For many it is unnatural to sleep with an open door. For women this may bring the additional issue of safety as a concern, conditioned throughout their lives if not to be afraid, then at the very least, to be careful. Sleeping in a large facility with strangers, particularly male, would not be an easy adjustment. This is particularly true when most social workers interviewed complained of inadequate privacy provisions on some level in their facility, from mild to severe.

Additionally, those rooms in which I viewed the most personalization were always occupied by female residents. Perhaps females in general are more sensitive to the aesthetic value of the environment. This may be a result of our socialization, for in part, it is the females we are comfortable encouraging to 'decorate'. Females are the gender that tend to be more comfortable and accustomed to expressing themselves creatively in aesthetic ways. The current elderly generation was particularly accustomed to the women running the 'home' as their domain, with crafts, sewing, decoration and design falling within their role. This could translate into elderly men not being comfortable or interested in creating their own aesthetic environment because it was the traditional female role of their generation.

Cultural awareness did not seem to be an issue within the facilities. Primarily the facilities appeared culturally neutral, except for those few who cater to a specific population. Both gender and culture, would be interesting study areas regarding their influence in correspondence with the effects of the physical environment.

This brings the major points of this section to a close, leading into a more detailed discussion. Lack of privacy, space and special needs provisions as well as poor lighting and too much noise link to sensory stimulation and deprivation issues and safety hazards. Viewing the environment as a whole includes considering interdisciplinary responsiblities and policy concerns. Issues of choice, control, individuality and symbollism are also key to these concerns. Exploration of these points is followed by the conclusion and implications of the thesis.

Chapter VI:

BEYOND SHELTER FOR THE ELDERLY

Through the tours of the facilities, general conversation, observation and perceptions, it would seem that ironically some of the newest buildings had the most complaints and obvious environmental dilemmas. It is distressing to see the same errors repeated again and again. The newest facility I explored was the coldest most institutional I had entered. There was nowhere to sit for visitors coming in, the front was very congested with elderly crowding for a seat, and the colours were all pale and cool, a poor choice for the elderly. I felt edgy and uncomfortable. That was the first 20 seconds.

The front door led onto a busy street which the disoriented wanderers, even during my short stay, were mysteriously drawn to. The decor was tasteful but did not cater to the elderly. The social worker of the facility was very frustrated with the design of the building stating that it "reinforced dependency." The even larger dilemma to this was the stubborn, insensitive attitude of the administration towards improving obvious blunders.

The examples of the problems of this facility were multitudinous. The bathrooms were poorly designed with ineffective grab rails, there was no access to the outdoors for the elderly, the bedrooms were painted depressing, dark and cold colours; the paging system was disruptive--used too frequently and loudly, and there was no security system monitoring wandering residents for a front door that opened on to a very busy street. In the kitchenettes the electrical outlets were too high for an arthritic arm to reach. In addition, the PCH did not allow residents to bring in their own furniture and discouraged pictures from being hung on the wall. As a result it looked very institutional and lacked

any homey feel or atmosphere in my opinion and that of the interviewee. This example illustrates the failure of certain facilities to provide a safe and supportive physical environment through optimizing the physical setting as a crucial resource. Even the simple addition of a personal piece of art or furniture, a shift in colour and a quilt could reduce the sterile ambiance. Without personalization and individuality, natural lighting and plants a facility remains too institutional.

Philosophically most PCHs employed a supportive attitude towards the importance of the physical environment yet the front line translation of this was weak. All of the barriers, with the exception of funding, are easily avoidable with today's technology and means. The strengths of the facilities were really individual with the weaknesses more universal. Improvements to the physical environment were not guaranteed by the newer the facility. In fact it was often the oldest facilities which had the most successful physical environments. Reasons for this are not clear but perhaps the architectural style of these PCHs was less modern and sterile and the longevity of the PCH had allowed the facility the luxury of both renovations and smoothing out the system to adapt to the limitations minimalizing the problems.

It was also my observation, and that of several social workers, that it was the family which was offered more control and choice around the physical environment than the resident in PCH's. Sometimes, because of conditions such as dementia or expressive stroke aphasia, it is the tendency of those working with the elderly to usurp their control, treating them as incompetent. Albeit, perhaps done unintentionally, this inherent patronizing is not always blatant, sometimes working on an insidious level. Infantilizing the elderly because they are cognitively impaired or have in some other respect become disabled may at the outset appear as a separate issue; however, I believe it is closely

linked with concerns around institutional living, working with the elderly, and adapting the physical environment to its optimum for the disabled.

These issues can easily be addressed through implementing control and choice in the physical environment. Translating knowledge of the physical environment into skills for practice includes evaluating the setting, anticipating obstacles and incorporating environmental cues. If nothing tangible can be shifted in the physical environment, then at least knowledge and support can provide empowerment for the resident facilitated by the social worker.

Inadequate visual cues coupled with poor lighting (which most respondents noted as a concern) do nothing to support the visually impaired elderly person towards manouevring confidently in their new home. It is also a potential safety hazard and impairs the information giving function as well as decreasing optimum sensory stimulation (Resnick & Jaffee, 1982; Hoeppner, 1992). Their inability to control their physical surroundings and their mobility within that environment erodes their confidence and self-esteem, decreases independence and this in turn can result in depression, social isolation and in severe cases regression. What began indirectly as an ergonomic oversight has quickly spun into resulting psycho/social issues which are in fact the direct domain of social work. All systems, including the physical environment are interconnected when one discusses human behaviour. "All the environments form a dynamic matrix of interaction that shapes an individual's behaviour" (Weick, 1981, p.142).

There are both internal and external influences on the social and physical environments. Considering all four sets of environmental influences will result in a broader diagnostic base for social work. The physical factors in the shaping of human behaviour cannot be overlooked.

Personal Care Homes should be supplying safe and supportive environments where the elderly can manoeuvre confidently, better equipped through an adaptive physical environment to enjoy life and the abilities they still have.

It is our role as caregivers to educate other staff and remind ourselves of the needed sensitivity when working with the elderly. As an observer it would also appear evident that staff forget that the Personal Care Homes are indeed the residents' home--not just a work place. A general disrespect of privacy was disconcerting to the respondents. The perpetrators, although sometimes wandering patients unaware they are trespassing, were too often impatient or careless staff and family. Interdisciplinary communication is a means to improving this reality, and social work can provide a vehicle for dialogue.

A recurring theme within the issue of privacy, as Keen (1989) divided the different facets, is the area of human sexuality. This can often be an area we neglect to remember with the elderly, as they fall out of the vision of our glamorous, often youthful sexualized societal ideals. The elderly are still sensual human beings with similar needs and desires of their younger counterparts yet here again they are often patronized or infantilized. We tend to think its 'cute' or conversely 'inappropriate' when the elderly, yet alone the disabled elderly, are sexually active to varying degrees.

As social workers there is a place for us to advocate and educate around the need for private spaces and respect around the needs of the elderly, which include sexuality. The findings would indicate a need for such action. Again, the need for heightened sensitivity and space for privacy proves as a symptom identified through the impact of the physical setting which translates into a more complex human behaviour issue, in this case sexuality.

The painter and architect Fiedensreich Hundertwasser's life and art have been "fundamentally influenced by his decades of committed action against the destruction of nature, against totalitarian technologies such as atomic power plants, and against the murderous power of the straight line, the deadly weapon: the architect's ruler" (Koller, 1993; p. 13). Against this background, it becomes clear the artist's goal was to show that radical changes in thinking are necessary, possible and realizable. Hundertwasser's philosophies in both his life and his work are in synch with much of what is considered social work values and an holistic approach to well-being. As people become more and more alienated from nature, we become more and more alienated from ourselves. With the elderly, often far more isolated and immobilized, this becomes an even greater truth. It is a frightening revelation. Here is where Friedensreich Hundertwasser's inspiration can steer us again towards a plausible solution. His architecture also incorporates an element of play and spontaneity which is so needed in the lives of the elderly. Many retain these qualities yet forget the simple joys these traits afford. In a physical space these traits can translate into uneven ground, playful detail, rounded corners, colourful tiles etc.-- details which emulate the profoundness in nature through a more organic use of line. Straight edges and ninety degree angles are strictly a man-made technological understanding of structures.which ignore the needs of the senses and human spirit. Hundertwasser and Gaudi were two architects acutely aware of the sterility of the straight edge. Hundertwasser's architecture found root from his ideas like these,"only those who follow the laws of the plants and vegetation cannot go wrong. The realm of beauty is creativity and life, the realm of the enemy is conformism and death. Between the two stretches the front." (Koller, 1993; p. 13.) The realm of beauty, which encompasses the aesthetic of the environment, style, should not be trivialized as a superficial element. Afterall, "beauty and function in a hospital aids the cure" (Oberlander, 1979), and it is up to us to aid ourselves and the elderly we work with.

A common theme which is fundamental to approaching a holistic view of health is the blatant need for more ecological integration (Christenson & Taira, 1990; Beyond Shelter, 1975; Germain, 1978; Hoeppner, 1992; Koller,1993; The Urban Garden, 1979; Rand, 1991). A few individual facilities had lots of indoor plants and lovely landscaping which was accessible to the elderly. This was rare however, and most lacked plants, especially 'living' plants. It is necessary to have this visual, tactile, living reminder of our connection to nature, as any institution runs the risk of being too sterile. Foliage does more than offer welcome visual relief; it filters the air improving its quality and provides an element for the elderly to care for and feel connected to the earth. 'Gardens' are living spaces in which the interior is constantly changing with the passing of the seasons. This provides versatility as well as a natural rhythm for the elderly to realize a timeframe. There is much therapeutic value in gardening.

The effect of territory, boundaries, space, privacy, and orientation on family functions should be assessed both within and outside of health care institutions. As this is too complex to analyze to its full extent within the scope of this discussion, I will point out only a few examples to heighten awareness. Boundaries, crowding, heat, privacy and noise level are all potential issues for a worker to be sensitive to. Sometimes it may be as blatant as literal health hazards within the clients' living conditions. Within an institution it may be the stresses of congregate living, such as a room-mate disrespecting one's privacy.

As such, it is sensible for social workers to be aware of these factors for their potential psychological impact on clients particularly in their living environments, i.e. does the individual feel depressed when surrounded by pale blue walls?

One social worker pointed out that at their facility, "the PCH was recently painted in garish and bizarre colours chosen in the left over shades that physical plant had

available." This serves as a fitting example of several misguided levels operating simultaneously which have resulted in the needs of the elderly being disregarded. The elderly, after all, are the clientele of the facility. It is the staff that are afforded the luxury of leaving to more pleasant locals. For the elderly, it is their permanent home.

First, in this example,we see physical plant choosing the colours. Then, the walls were painted in unattractive and unsuitable colours for the elderly which were chosen from the left over shades in the shop because of budget restraints, poor organization and oversight. Overall, this example loudly illustrates the facility's inability to acknowledge the impact and importance of the physical environment.

Sadly, the motivation behind most colour choices in PCHs seldom have anything to do with the needs of the elderly. Although colour is a very subjective topic and psychological responses to it are extremely individual, there are tried and true biological/physiological responses to colour that effect humans and particularly the elderly due to the yellowing of their aging lens.

Yet, as with this example, the left over shades, outdated and mismatched, are still chosen. The inherent question of what it is we value and regard creeps up; what quality do we provide our aging population? The senior population have earned their place in the sun and instead find themselves shelved away in dull and dingy corners.

The respondents are aware of the impact of the physical environment yet the degree and details of this impact elude many of them. Their awareness needs an avenue to be voiced as well as advocacy for the residents. Here too is the ideal setting for an interdisciplinary thrust. The importance of personalization is well recognized as well as the difficulty of the transition to the PCH. The stresses of congregate living surfaced, but were not well identified to the residents. These stresses should not be

minimalized. I explore these stresses first hand in the section, 'Final Thoughts'. In combination with these stresses is tied the grieving process of the elderly and their last independent home prior to the PCH. Almost all social workers were sensitive to this issue acknowledging its immense importance. However, the social workers were not always available to explore these issues with the residents, regardless of its importance, due to their work load. Social workers emphasize the functional aspect of the environment at times underestimating the importance and impact of the aesthetic elements. Most integration of environmental issues with the respondents and the residents is at the time of transition to the PCH.

The connection between functional and aesthetic elements seems poorly understood. Form and style can be inseparable. A solid functional (form) design may only accomplish its complete purpose with a successful aesthetic (style). Style, however, is sometimes easier to adjust in terms of simpler implementation. It is easier to paint a wall than to remove it. However, it must be understood that colour serves both a functional and aesthetic purpose. Sometimes this effect can remain unnoticed, absorbed at an unconscious level partially through a physiological response.

Hundertwasserhaus provides an excellent example of the marriage between function and aesthetic. To demonstrate this I will describe in more detail a feature that integrates both form and style in its handling; the chimneys. Chimneys are commonly reduced to pipes which have only a technical function and which no one wants to see (Koller, 1993). As a result, they are usually hidden as well as possible--out of sight, out of mind. Here, on the other hand, a virtue was made out of a necessity. "The chimneys were quite deliberately treated as architectural accents in form and colour. With their colourful glazed ceramics, they give the building part of its characteristic expression" (Koller, 1993; p. 23).

Many environmental adaptations are beyond our immediate financial capability. However, it is important for staff to be aware of these factors, and take those steps which are within our grasp. To be aware of what is needed is the first effort towards progress. There are a range of ways to enhance a life with meaning--start by simply bringing pictures from home, and wearing a bright smile. The elderly are an amazing resource for an inventive mind to tap; we must remember to emphasize their capabilities, encourage them to utilize that which they still can.

Providing enriching experiences for our elderly involves keeping them in contact with the environment; cuddling a kitten or enjoying the outdoors can mean a tremendous amount to the person confined to a wheelchair.

Throughout the literature, as my review indicates, the options for sound, safe and effective 'homelike' environments are documented. There are solutions, aids or alleviated options for sensory deficits, cognitive impairment, orientation, safety, mobility, and the realm of obstacles faced by the institutionalized elderly. Copenhagen, Denmark for example has provided a working model of this success for at least twenty-five years. Hundertwasser, the Austrian architect also demonstrates a successful integration of ecology and the built environment in the low-income housing project (1988) in Vienna, Austria.

The ADARDS Nursing Home in Tasmania serves as a recent modelling of success. The design team, instrumental to its success, consisted of an architect of great skill and insight; Dr. Tooth (1994), a psychiatrist who conceptualized the project, another psychogeriatrician and two experienced dementia nurses. This combination of expertise demonstrates the success of an interdisciplinary approach when each profession is committed to a common goal.

Yet with technology and the means within our grasp we predominantly fail again and again to provide functionally and aesthetically adequate housing for our precious aging population. Is it our inability as a culture to acknowledge their value, both inherent and earned, or is it rather a lack of foresight by planners and committees? It is our physical environment when separated from our psychological, social, spiritual needs which becomes a prison rather than a home. Sadly, our institutions still all too readily accomplish this entrapment.

Policies are born from an intricate meshing of social complexity, and the reasons may not be simple or clear. To me this serves as a poor but common example of rationale for staid thinking and inaction towards change. I fail to understand, when approaching the 21st Century, why we are still building such inadequate facilities for seniors.

Over 20 centuries ago the Romans were bringing fresh water to every household through the use of aqueducts. This they accomplished with manual labour. Today we construct buildings with advanced technology that often realize the needs of no one. Can we deem this as progress?

There is no excuse in this day and age to see such waste in our efforts. It embodies poor communication. Inadequate policy. A passive culture. Misuse of funds and misguided priorities. Our elderly have brought us to where we now are; we owe them everything and what do we offer them in return? Institutions which cater to the convenience of the staff first, preserving the inhabitants second and the residents' spirit an often forgotten third.

We are responsible for caring for more than their physical shell. As social workers and messengers of holistic theory and an interdisciplinary vision it is our responsibility to insure institutions do not deaden our humanity. We have the knowledge,

sensitivity and skills within our reach to empower healthcare teams with a more complete approach to wellness.

The management of difficult behaviours is to a large extent by preventing their occurrence (Tooth, 1994). A safe and supportive environment are crucial to this prevention. Activity programs and a sense of being secure and not threatened are important. It must be clear that however marvellous the environment, "a facility for the elderly will always fail if it does not have staff who are carefully selected for their personality attributes and then well trained in dementia management skills" (Tooth, 1994; p. 4). One respondent also repeatedly emphasized this point throughout our interview. Social workers can serve not only as advocates for a broader knowledge of holism but as the contributors to sensitive, compassionate and well-humoured care within a facility. Understanding the physical environment is an important step towards this achievement.

It is through heightened multidisciplinary action and interaction, (Gutheil, 1992; Hundertwasser, 1991; Christenson & Taira, 1990; Lacy, 1981; Brogan & Douglas, 1980; Germain, 1978) that the incorporation of all environments; physical, psychological, social and biological, can be more efficiently integrated in our health care systems. Holism unites different views and different aspects of ourselves as complex and demanding creatures. For the future, with our extraordinary and rapidly growing knowledge base, it is of necessity that we embrace an interdisciplinary focus.

'Physical factors are potent in the shaping of human behaviour' (Weick, 1981, p.142). This thesis research serves to indicate that the physical environment does indeed impact on the elderly, as well as the staff at PCHs. Integration of this knowledge both with the clients and colleagues needs improvement. Awareness around the effects of the physical setting and its impact on behaviour needs to be heightened, illuminating a gap in knowledge and a need for social work education.

Social workers seem generally aware and sensitive to the effects of the physical environment on the elderly, yet unable to implement much of this knowledge within their social work position. A part of the reason for this is no clear sense of role definition and time restraint for the social worker. The physical environment is often viewed as impenetrable.

Not only should the environment be considered in our private or community based practice, but it should call for specific attention in our larger scale 'health care institutions'. Many studies are cited in the literature around psychiatric wards and the effects of the physical environment, or the changing needs of the elderly geriatric patient. But comfort should also be considered by those social workers seeing individuals with chronic pain or handicaps such as blindness, those restricted to a wheelchair, or disorders such as aggressive personalities. Oncology as well, has recently looked at redesigning cancer treatment areas to decrease anxiety within the patient and supporting family members (Germain, 1978). Facilities for family members, particularly if overnight stays are necessary as in pediatrics, intensive care, or palliative care units, should be made both available and as comfortable as possible. These are important considerations for the social worker both within and outside of health care institutions.

It is very hard to measure happiness or improvement in the quality of life. Yet, what particularly strikes visitors to the ADARDS facility is the atmosphere of calm and even happiness in a unit where all residents have problem behaviours (Tooth, 1994). It can be very striking to those who have visited facilities that are not purpose-designed and built.

> Visitors are surprised that there is no smell of urine in houses where all the residents are incontinent. They are impressed with the homey atmosphere with the smell of food cooking, nursing staff with an arm round a resident, the dog and

the cats. They question whether these people really do have severe problems; it is all so different to the only too common picture of distressed residents in nursing homes which are not designed for this group of people (Tooth, 1994; p. 6).

Clearly, ADARDS residence is a physical, emotional, and fiscal success for administrators, staff, residents and visitors. Caregiver stress cannot be forgotten in the equation of holistic health-care. The family of those with dementia suffer greatly watching the distress and agitation of their elders. This design concept could easily be applied to the less disturbed group who only have a tendency to wander. The staffing could be considerably reduced and hence the cost would be more than competitive with alternative styles of accommodation (Tooth, 1994).

Within our development as humans we can trace our territorial tendencies from the beginning. Even as children we exert control over our environment and create our own 'space'. As a young child I remember being thrilled by building tents out of blankets, furniture and cushions and feeling very proud of my structures. This theme in children's play is recurring; through tree forts, club houses, raking the yard into elaborate leaf floor plans for our fantasy mansion and of course the protective shield of snow forts.

Building shelter, privacy and dividing space are very familiar constructs for the animal kingdom. Beavers build exquisitely successful structures to meet their needs, and similarly do ants, rodents and other species. Humans too are capable of impressive structures. Throughout our history, humans have constructed works of art as shelter. The Vatican, the Louvre, the Taj Mahal and the Pyramids all serve as awe inspiring examples. The list continues with castles, fortresses, igloos, mud huts, rock caves in MatMata, Tunisia and Hundertwasserhaus, in Vienna; all of these built spaces are inventive, elaborate, functional and impressive for their own purpose.

However, when we turn our focus to our institutions we seem to automatically destroy the creativity and inventiveness that defines our uniqueness as humans and has made us successful in the past.

From young children we play with adapting, inventing and controlling our physical space and our hideaways--we create our own ideal home in our minds. As young adults claiming our first apartment we are proud and innovative in arranging our space to express who we are, solely our own territory. First home owners put enormous efforts into redecorating and landscaping their environment--making their own mark, creating their own individual space.

Our home is our castle. It is where we work, play, rest and feel safe and comfortable; our retreat from the public world. It is where we express ourselves and in essence 'nest' and settle in. If we look at our behaviour across a lifetime spectrum it clearly demonstrates how important and necessary developing our own space and shelter is to us as humans. We spend a great deal of time in our homes, and when we are not there it is a comfort to know that we can return back to that safe place with our own identity clearly indicated.

In old age these needs and desires are the same. Our last home must also have significance to us and is in fact perhaps most significant of all. It must be functional, safe, supportive and aesthetically stimulating and pleasing. We are as humans, creatures of habit and we like control over our cubicles, at any age.

It is this last home, often Personal Care Homes, with residents' declining abilities that must be that much more supportive, adaptive, stimulating and safe. The elderly need choices and areas to exert control and express their own individuality. Institutions by their very name tend to drain creativity and life energy. There must be a way that, as

social workers, we can facilitate returning some of that lost energy. To begin we can advocate for the elderly to regain their own signature--simply, their room; respecting their space and privacy.

Our personal defining of space is a theme throughout our lives. As children we use our imaginations and precious little else to create places we want to be. As adults we have other resources to create our own world. The elderly who have to rely on institutions in their declining years need all the imagination and resources we can pool as professionals. As children we lived in environments that were owned and run by other people, just as the institutionalized residents live.

As fellow human beings we need only turn back the clock to remember our favourite twig hut by the river, where we escaped to feel safe and exert our own rules about how things were going to be.

Chapter VII:

CONCLUSION

In conclusion, a summary of the findings indicate that social workers seem to have a sensitive awareness of the impact of the physical environment overall, although knowledge and understanding is sometimes lacking. Their emphasis and awareness is weighted to the form/functional aspect of the environment rather than style/aesthetic. However, the primary implementation of environmental awareness appears to be in personalization of the residents' space, which falls under style and advocacy for environmental improvements on their behalf which entails both domains.

Major themes within the data indicated common concerns among social workers. Most facilities attempted to provide a safe and supportive environment although there is much room for improvement even among the better adapted PCHs. Social workers on the whole were eager to see changes to the physical environment. Among these changes was a high desire for more greenery and hominess within the facility. This emphasizes our need for a connection to nature, holistic theory and more life giving input within an institution.

Other consistent concerns expressed by social workers were a lack of privacy for the resident, family and social worker, a lack of space, too much noise, poor lighting, and a lack of special needs provisions. Visual deficits of the elderly tended to be emphasized instead of minimalized. This was accomplished through poor lighting and inadequate visual cueing both serving to impair the information giving function of the environment.

The environment as a whole was understood to impact on the elderly, but overall, particular issues such as colour and texture were not well understood or emphasized in

importance. Sensory stimulation was acknowledged by social workers but its importance was again often underemphasized. The common problem with this aspect from the respondents' viewpoint and my perspective, was the 'institutional' feel of the facilities' atmosphere and in textures, colours, lighting, noises and smells. A direct appeal by all social workers was the desire for more hominess and comfort within their respective PCHs.

The importance of a multidisciplinary approach to health-care was emphasized however the implementation of this ideal was more difficult to achieve. Frustration was voiced by many interviewees regarding the limitations of the physical setting of their PCH as well as towards the obstinacy on the part of certain professions and or administrators to play a supportive role in this domain.

Obstacles towards implementing awareness are education, knowledge, administration, policies, funding and space restriction. These obstacles embody an inherent lack of power experienced by social workers in the system. Embracing a multidisciplinary approach with a holistic focus towards health and well being are ways to empower the system and the social workers within. The helping professions need a push towards improved 'helping'.

Working together towards this goal we can learn from the elderly population and in turn improve their circumstance, de-institutionalizing their final days with the pursuit of an improved sense of living and a place they can proudly call home.

Chapter VIII:

RECOMMENDATIONS

The following chapter provides a brief summary of recommendations as derived from the findings of this thesis. They encompass current needs of the physical environment of PCHs, implications for social work education and practice, and areas which could be explored further in future studies.

Within the social work education system it would appear from the findings of this exploratory study that there is a need for more training around advocacy and addressing policy change. Social workers are often left with no voice or very little clout. Knowledge around these issues, both policy and advocacy, may provide the necessary leverage for a worker to approach the team and/or administration to create change. Empowering the social worker to empower their client extends to the larger system they work within as well. The intricacies and diplomacy around exerting influence and instigating change need to be emphasized.

In addition, social work education and practice needs heightened knowledge imparted about the physical environment and its enormous effect on people of all ages. All systems are imbedded in one another and as such exert their influence on human behaviour. The duality of the physical environment, its conscious and unconscious influence, must be understood to encompass its complex impact on us.

The inclusion of the physical setting allows for a more complete diagnostic tool for the social worker and a more complete view of the client's world and human behaviour. To accomplish this, even more 'ecological' emphasis is needed in systemic theory. This includes extending the understanding of holism to considering the physical

setting. Ideally, the organic and built environments should be in harmony both in and outside of our architectural spaces. If social workers are aware of the impact of the physical environment on our health and well-being it well greatly enhance our therapeutic understanding for practice in both private and public settings as well as in health-care systems.

A few major points can be identified as recommendations for the PCH facilities. Personal Care Homes need to integrate far more ecology into their design, particularly in our harsh Winnipeg climate. This includes interior plants, a solarium, garden landscaping, window boxes, etc. This provides an organic element to sensory awareness, visual relief, sound absorption and improved air quality. Alienation from nature is one of the biggest problems among the institutionalized.

Despite lack of funding, there is much to be accomplished by pooling resources within a multidisciplinary healthcare team and personalizing institutions with appropriate designs for the elderly. Advocacy on behalf of the elderly can be enhanced by strengthening this multidisciplinary approach. This includes education around residents' need for privacy. Activating preventive measures such as knowledgable planning committees during the conceptualization of a PCH would ensure new facilities are optimally adapted for the elderly.

The complete recommendations for PCH improvement is beyond the scope of this study but there is much to be drawn from the findings detailed in chapter V. Directions for future study could include outlining plans for building renovations, exploring potential gender bias within long-term care settings both through the physical environment and its operation, and looking at issues of ethnicity and cultural sensitivity within healthcare institutions.

Chapter IX:

FINAL THOUGHTS

During the completion of this thesis, I was living in an institutional dormitory with 160 other people as part of my summer job. One Sunday afternoon, as I struggled with proof reading this thesis, I realized part of my frustration and fatigue, was indeed from the experience of congregate living. As I read my literature review, I related to the effects of the physical environment with a new insight. Recognition of my similar situation had illuminated a new perspective.

Waiting in line for a shower, plastic cutlery and mass produced food at meal time, institutional furniture and background noise, being awakened when others are awake, having only a very small personal space with lousy lighting and no view apart from cement pillars and a patch of grass; dingy and or garish colours, long halls, fire doors, and permanent odours: these were a few of the glaring points of institutional congregate living.

I would forget what season it was. Time was difficult to differentiate. I was increasingly agitated and sleeping poorly. I craved fresh air, and the rejuvenating forces of nature. This longing embodied not only my alienation from nature but my need for freedom and solitude; and I, a healthy, young able-bodied person, began to feel the impact of my topic on a more profound level.

It also must be remembered that the elderly coping with limitations and infirmities are especially susceptible to the impact of their physical settings, as it is difficult for them to remove themselves from unsupportive environments.

As one social worker emphasized during the interview, "the environment is important but it is the workers which are most valuable at creating a supportive climate". This point acknowledged, certain supports can only compensate for so much.

For me, there was a sense of community amongst the summer workers which buoyed us through the worst of the congregate, institutional stresses: however, on losing my privacy, my control over aesthetic and functional options, my appetite and my ability to sleep; my empathy reached new heights for the need and pursuit of improved environments for our institutionalized population.

APPENDIX A

Norma Hoeppner

February, 1994

R.
Winnipeg, Mb.

Dear Sir or Madam:

My name is Norma Hoeppner. I am currently a graduate student of the Faculty of Social Work at the University of Manitoba. I am writing you in regards to my Master's thesis research. My topic involves the physical environment and the elderly and as such I am approaching social workers in Personal Care Homes(PCH) across the City of Winnipeg as the potential respondents for my research.

Very few studies have been done in this area. The social work literature on the physical environment and the elderly is sparse. This is why I feel it is necessary to conduct this study and why your input is extremely valuable.

The research will involve approximately one hour long face-to-face interview with questions regarding the physical environment of the PCH facility. This letter serves as a preliminary request for your participation in the study. Participation is completely voluntary. If you agree to participate, you will be interviewed in person and your identity as well as your workplace will be kept completely confidential. Neither your name nor that of the PCH will be disseminated in any way. You are free to withdraw at any time and may refuse to answer any questions without any negative consequences. Providing an interview is the only requirement to participate.

I will contact you shortly by phone to explain further the nature of the study, answer any questions you may have and to request your participation. Again, participation is strictly voluntary and I thank-you for your time and consideration of this matter. Your contribution is extremely valuable.

Please feel free to contact me if you have any questions.

Sincerely,

Norma Hoeppner ph.
graduate student, Faculty of Social Work

APPENDIX B

INFORMANT CONSENT FORM

The study has been explained to me. I agree to participate in the study on the physical environment and the elderly in social work practice being conducted by Norma Hoeppner a graduate student of the Faculty of Social Work at the University of Manitoba. I understand that I will be asked questions about the physical environment of the Personal Care Home (PCH) and my work with the elderly; whether I consciously use the physical environment in my work and how so.

I understand that participation is completely voluntary, and that deciding not to participate will not result in any negative consequences from the University of Manitoba or my employer. In addition, I understand that I will be interviewed in person, that my identity and that of my work place will be kept completely confidential, and that my name will not be disseminated in any way. If I do not object the interview, will be audio-taped to aid data collection. I understand that this tape will be destroyed when the thesis is completed, by January, 1995. I realize that at any time I can withdraw from the study and I may refuse to answer any question(s). Should I withdraw, I may contact by phone or mail Norma Hoeppner at ;, Winnipeg Manitoba, R ( ). I understand this research is conducted as part of the completion requirement of Norma Hoeppner's master's thesis. I will have an opportunity to know the results of the study upon completion if I so desire. I will be in touch by phone or mail.

All of my questions about the study have been answered to my satisfaction.

____________________ ______________

signature date

I agree that this interview can be taped for the sole purpose of this study, and that I understand it will be destroyed when the research is completed, no later than January, 1995.

____

signature

APPENDIX C

Interview Guide

This interview is conducted as my graduate thesis research. The following questions pertain to one's awareness re the physical environment in their work with the elderly. The physical environment in this context refers to the built space. The interview will take approximately one hour. You may feel free to withdraw from the study at any time and you may refuse to answer any questions without any negative consequences. Neither your name nor that of the PCH will be disseminated in any way. The study ensures complete confidentiality and anonymity. On your consent the following interview will be taped by audio recorder. This tape will then be erased at the completion of the thesis, by January, 1995. Upon completion of the study the results will be shared upon request. The first group of questions are a brief demographic collection for data analysis purposes. They are related to your work and education. If you have any questions feel free to ask during any point of the interview.

What degree(s) do you hold?
How long have you been a social worker?
How long have you worked at the PCH?
Are you full-time/part-time?
What hours do you work?
How many social workers work here?
How long have you worked with the elderly?
How large a population are you involved with?
What is the nature of your work? i.e. individual counselling, group therapy, consultation etc.

Time at start of interview: ____________

General Impression: Overview

Date of construction:

1. Do you think the physical environment impacts on the elderly person? Explain, how?

2. Do you agree with the following statement: An individual's behaviour is the result of interacting systems which include the physical setting.

3. What importance do you feel the appearance of the environment plays in the quality of life of the resident?(style)

4. How do you respond to your physical surroundings at work? How do you feel visitors respond?

5. What do you perceive as the largest barrier to an enhanced physical environment in your PCH(Personal Care Home)?

6. What do you think about the physical environment of the overall PCH? (e.g. of corridors? of common areas? of individual rooms? of the grounds?)

Sensory Stimulation and Deprivation

7. What do you think about the colours of the PCH? What would you do about them? Why?

8. Do you think the noise level is disruptive or annoying to the residents? To you in your work? Does it interrupt their sleeping pattern?

9. What is the texture variation and quality of the residents' living quarters? (Variation/fabrics/cold/sharp edges/warm/weave/soft).

10. Do you think the physical environment provides enough sensory stimulation? Is attention to this concern given to those bedridden?i.e. (ceiling pictures; fragrant plant nearby; music; window view).

11. Is the common room appropriate physically for their needs? Is it stimulating? relaxing? functional and/or attractive? Are window coverings adequate for eliminating glare?

12. Is attention given to the view which the elderly watch through their windows? (Often their only source of connection to the outside world) What do they get to see all day, every day?

Interdisciplinary Responsibility and Policy

13. Do you feel your institution implements a strong multidisciplinary approach to health care? Is there an educational exchange between professions?

14. If a new purchase was made, say furniture for the common room, who would choose this? Would there be discussion amongst the staff as to best choices for the elderly? Would the residents be asked?

15.What do you feel to be the attitude of the institution regarding the physical environment?

16. What are barriers regarding your own work in the physical environment? What are obstacles to changing this? (Policies of the institution).

17. What ,most of all, would you like to see changed in the physical environment?

18. Do you feel there is much interdisciplinary understanding of the physical environment needs of the elderly?

19. Is it an area of concern in your work?

20.Do you implement concerns of the physical environment in your work with residents regarding their comfort, dignity, independence and adaptation?

21. What profession do you feel is most responsible for these above concerns?

Choice and Individuality

22. (check list items)Are residents encouraged to personalize their rooms; that is, posters, photos, piece of furniture, bedding, etc.? Do you feel this is important? Do you feel this issue ties into social work?

23. How is the transition to the PCH aided?

24. Are there elements of choice afforded to the elderly re the physical environment? Do residents feel they have control? (opening windows, smoking, do not disturb signs, privacy, pictures, furniture).

25. What about the physical environment inhibits the elderly's transition to the PCH?

Privacy and Symbolism

26. Do you consider the message the environment sends? i.e. furniture arrangement? Closed doors? A lack of personal items?

27. Do you feel there is a general respect for the residents' privacy upheld by the staff? i.e. (knocking before entry).

28. Are privacy provisions adequate? Olfactory/visual/auditory.

29. Do they have their own closets? Drawers which lock?

30. Do you address the issue of grieving their lost home? The meaning of that home for them?

Control and Independence

31. Is their independence enhanced or impaired by the physical environment?

32. Do you think their social activity is impaired or otherwise affected by their physical surroundings?

33. What factors of the environment would inhibit socializing for the residents? (e.g. check list items: acoustics, position of furniture, confidence of mobility, dim lighting).

time completed:________________
total time of interview:__________

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