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A Needs Assessment

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SOCIAL SUPPORT OF ELDERLY NURSING HOME RESIDENTS: A NEEDS ASSESSMENT

By

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ABSTRACT

SOCIAL SUPPORT OF ELDERLY NURSING HOME RESIDENTS:
A NEEDS ASSESSMENT

By

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The main objective of this research was to explore social support of elderly nursing home residents and to examine the relationships between functioning impairment and social support. A structured interview was developed addressing economic resources, physical health, physical functioning, mental health, and mental functioning, as well as social interactions, network size, satisfaction with and need for social support, interest in new programs, and service utilization. A total of 42 subjects between 56 and 97 years of age were interviewed. Results indicated that social ties were maintained after institutionalization and that a significant negative relationship between mental health impairment and satisfaction, and a significant positive relationship between cognitive impairment and need for social interactions existed. Suggestions for future research were made. Finally, implications for program development were discussed.

To Kevin, my Son

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Introduction

It has been repeatedly emphasized in recent years that the elderly, as a whole, are not a poor and forgotten population and that such labels in fact do not apply to the majority of older Americans (Kane & Kane, 1983; Kutza, 1983; National Council on the Aging, 1978). However, the question still remains whether or not this also holds true for the aged confined to a nursing home. A widely held view is that nursing homes serve as a dumping ground for the elderly who are no longer productive members of society (Daniels, 1983; Drummond, 1983; Sherwood, 1975). Others insist that the institutionalized older American suffers from such severe disabilities and/or diseases that he/she simply cannot be cared for in a family or community setting (Brody, Poulshock, & Macioschi, 1978; Brody & Spark, 1966; Green & Monahan, 1982; Kane & Kane, 1983; Smith & Bengtson, 1983). If the latter statement is true, the man or woman in a nursing home should have similar resources as the elderly living in the community and should only rate higher on diagnosed medical impairment. Yet it has been reported that while 15% of the elderly in general are

classified as poor by the U.S. Government, 50% of the elderly in institutions fall into this category (Fackelmann, 1985, January 4; Harrington, 1985; National Council on the Aging, 1978; Schwartz, 1974). The statistics for social isolation of the elderly look similar. Studies have shown that up to one third of the elderly living alone have less than monthly contact with their family while almost one half of the elderly in institutions never have any visitors (Peplau & Perlman, 1982; Pfeiffer, Johnson, & Chiofolo, 1981; Sherwood, 1975). It appears that even when the elderly enter a nursing home solely because of physical disabilities, they soon become a statistic of economic and social disabilities (Pfeiffer et al., 1981). The mere possibility of such a conclusion makes an inquiry into the condition of elderly in nursing homes mandatory.

According to U.S. Census data, 25.5 million people, or 11.3% of the nation's population, were 65 years of age or older in 1980. By 1983, the number had grown to 27.4 million, or 11.7%. It is estimated that by the year 2000, the number of elderly will be 35 million, or 13%; by the year 2030, the number will be 64 million, or 21% of the population in the U.S. (Bureau of the Census, 1983). It is projected that 5.1 million Americans will be 85 years of age or older by the turn of the century, up from 2.2 million in 1980 (Fackelmann, 1985, January

elderly continue to live in a family setting; but one in 20 persons 65 years of age and older, or more than 1.2 million, live in nursing homes. The ratio increases to one in 5 persons 85 years of age and older (Harrington, 1985; Kane & Kane, 1983; Manton, Liu, & Cornelius, 1985; National Council on the Aging, 1978; U.S. Senate Special Committee on Aging, no publication date). Considering that half of the nursing home population becomes a statistic of economic and social disabilities, it may be deduced that the number of individuals affected is at least 600,000, supporting the notion that society indeed strips the physically disabled elderly of economic and social resources and isolates them in institutions (Pfeiffer et al., 1981). Worst of all, the elderly readily accept this fate. Some say this is only fair because the elderly have to make room for a new generation (Daniels, 1983). In Drummond's (1983) words, this is "characteristic of capitalist society . . . to grind down the aged as useless nonproducers" (p. 28). Apparently, it is not a myth that a large number of the elderly end up with little or no financial and social support.

Social support has been the subject of much research in the last decade (Brownell & Shumaker, 1984; Gottlieb, 1981; Rhoads, 1984). Consistent epidemiologic evidence has shown that the most stressful life experiences

involve loss, disruption and/or deterioration of social ties. The presence of social support, however, is claimed to have a buffering effect on stressful life events. The size of one's social network, level of interaction, and one's perception of a purposeful social role have been found to correlate positively with one's mental health (Gottlieb, 1981; Kane & Kane, 1981). With respect to stressful life experiences, the elderly seem to be the most vulnerable people (Heller & Mansbach, 1984). In fact, the old and the young agree: the worst years of life are the seventies and older because of loss of social role, death of spouse, and health deterioration (Drummond, 1983; National Council on the Aging, 1978). To move to a nursing home obviously involves the highest loss in a person's life; it constitutes loss of privacy and independence.

Most studies of social support, though, have dealt with the general population. If old age is addressed at all, the elderly in the community are considered. The most vulnerable of all, the institutionalized elderly, have only been assessed with respect to social network size (Duke University Center for the Study of Aging and Human Development, 1978; Gottlieb, 1981; Heller & Mansbach, 1984). Need for social support among the institutionalized elderly has not yet been explored.

For the investigator of social interaction and social support of old people in nursing homes, the following questions are of interest: Who lives in nursing homes? Who provides social support for nursing home residents? What are nursing homes like? And most importantly: Is social isolation a consequence of functional impairment? To find answers to these questions, first a literature review is presented. Two main journals in gerontology, The Gerontologist and the Journal of Gerontology, have been scanned covering the last ten years. Then cross-referencing and a search for major works on the subject of social support and long-term care have been undertaken. An assessment of nursing home residents with respect to age, economic status, physical health and functioning, mental health and functioning, and social resources has been attempted. A brief assessment of American nursing homes is included. Also, the methodology of the studies covered in the literature review is critiqued and the need for this investigation described. Second, the method of the present research is outlined; third the results are given. Fourth and finally, a discussion of the results with regard to program implications is presented.

Literature Review

The Elderly Nursing Home Resident

Prevalence

Of the total population of nursing home residents, 90% are 65 years of age and older, amounting to 1.2 million, approximately 5% of the elderly. More than one third, or .44 million, of nursing home residents are 85 years of age and older. If the ratio stays about the same, the projection for the year 2000 is that 1.7 million of the 5.1 million nursing home residents predicted for the turn of the century will be 85 years of age and older (Harrington, 1985; Kane & Kane, 1983; Manton et al., 1985; National Council on the Aging, 1978).

Demographics

Of the total number of elderly living in nursing homes, approximately 30% are male and 70% are female; most are widowed, approximately 64%; many have never been married, approximately 19%; and only 12% to 28%, varying with the sample studied, are married (Heller & Mansbach, 1984; National Council on the Aging, 1978; Pfeiffer et al., 1981). No statistics seem to be available with

respect to number of living children or siblings, or with respect to other family ties.

Functioning Disabilities

Economic status. While information on the economic status of the elderly is readily available in U.S. Census data, it is hard to find data on nursing home residents. In general, factors influencing income for people 65 years of age and over are mainly sex, health, and survival of spouse. Many elderly drop below the poverty level for the first time in their lives upon retirement. Classified as "poor" by the government are 15% of the elderly, with females at a substantial disadvantage. Half of the elderly poor are not on any government assistance program, and these individuals are likely to live with their families. The other half of the elderly poor rely on Medicaid, food stamps, and subsidized housing (National Council on the Aging, 1978; Office of Policy, Planning, and Evaluation, 1981; Schmid, 1985). More than half of all elderly in nursing homes are classified as poor, as sources of nursing home revenues reveal. About half of nursing home revenues comes from Medicaid, and most of the remaining half comes from private funds (see Figure 1). Before a nursing home resident can apply for Medicaid to cover his/her institutional care, he/she must have exhausted all

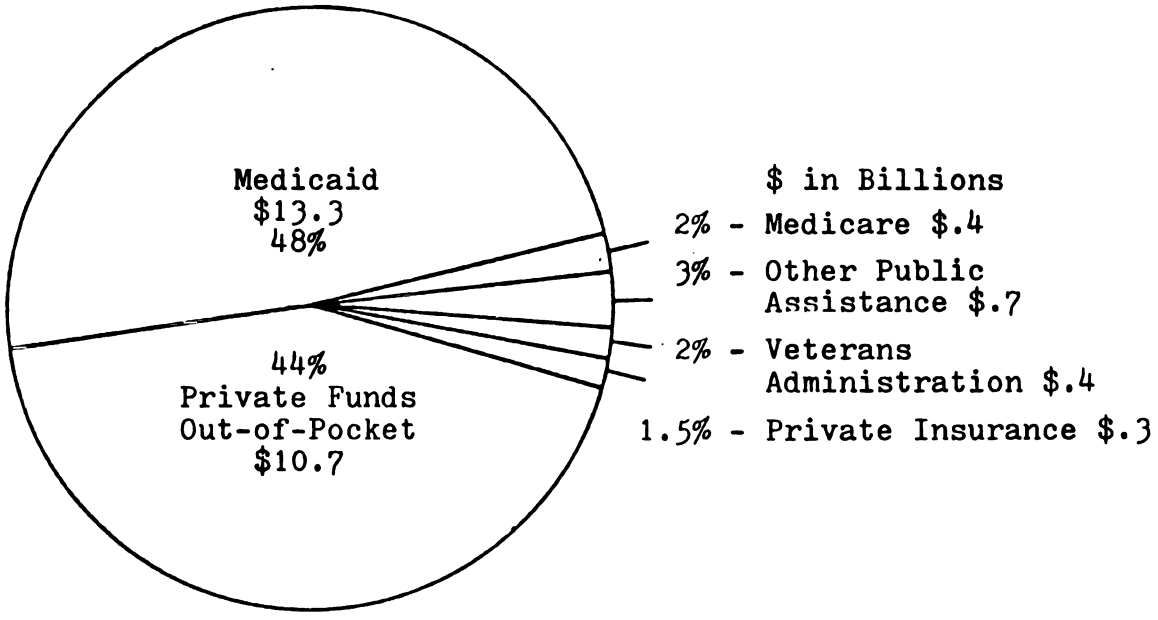


Figure 1. Sources of nursing home revenue, United States, 1981 (Adapted from Gibson, Waldo, & Levit, 1983).

Note. From "Crisis in Long-Term Care: Part 1, The Problems" by Charlene Harrington, 1985, Nursing Economic$, 3(1) p. 18. Copyright 1985 by Anthony J. Jannetti, Inc., publisher, Nursing Economic$. Reprinted by permission (see Appendix A).

private funds. As Harrington (1985) states, "resources must be expended and the individual impoverished before eligibility for Medicaid can be established. Almost half of all nursing home patients receiving Medicaid (48%) were not initially poor" (p. 18). Government officials claim that "although Medicaid originally was intended to provide health care to poor Americans, it has become a nursing home program for the middle class" (Fackelmann, 1985, January 4, p. 25). Indeed, the largest proportion, about 35%, of the Medicaid dollar is spent on long-term care, about 33% on hospitalization for acute conditions, and the remainder on other health care services (Taylor, 1981). These findings confirm that the elderly nursing home residents are very poor; mostly a new breed of poor, though, because of induced poverty.

Physical health and physical functioning. Well over 80% of persons 65 years of age and over are reported as suffering from one or more chronic conditions. The crippling chronic conditions most commonly cited rank as follows: senility, heart conditions, arthritis, diabetes, and asthma. More than half of nursing home residents have three or more chronic health conditions, and one in five has five or more chronic conditions. The chronic conditions may develop in addition to or because of other major medical problems such as stroke, cancer, circulatory disease, and fracture. Consequently, almost

half of nursing home residents have to live with impaired mobility which keeps them in their room or in bed; and many more are at least to some extent limited in carrying out major daily activities (Manton et al., 1985; National Council on the Aging, 1978; Reisberg, 1983; Sherwood, 1975). These data emphasize that nursing home residents are seriously ill and very limited in their physical functioning.

Mental health and mental functioning. Turning to mental health and mental functioning, the picture becomes even worse. Statistics indicate that the incidence of mental illness increases with age; and it is estimated that 15% to 25% of the population 65 years of age and older are affected (U.S. Senate Special Committee on Aging, no publication date). According to the National Council on the Aging (1978), the mental health conditions of the elderly can be divided into three categories: (1) Life crisis reactions include common emotional problems such as depression, anxiety, and frustration due to losses of old age. (2) Functional disturbances of psychiatric nature without presence of brain damage include schizophrenia, depression, paranoid reactions, and alcohol abuse. (3) Organic disorders in which brain cells have been either impaired or permanently damaged include Senile Dementia, Alzheimer's Disease, Parkinson's

Disease, as well as brain damage due to stroke, alcohol and drug abuse.

With regard to life crisis reactions, it is estimated that 15% of the elderly experience severe transitional difficulties. More than any other stage in life, old age brings with it very stressful life experiences due to loss of spouse, loved ones, social role, income, health, functioning, and independence. Instead of setting goals for achievement, the aged have to adjust to ever increasing losses. For the second condition, psychiatric disorders, the American Psychological Association suggests that about 15% of the elderly need mental health services. The third condition, organic disorders, is mainly due to circulatory difficulties (National Council on the Aging, 1978). Up to 7% of the population 65 years of age and older are affected and the percentage increases with advancing age (Cohen, 1981; "Slow Death," 1984). This condition is the primary diagnosis for institutionalization (Manton et al., 1985; National Council on the Aging, 1978; U.S. Special Committee on Aging, no publication date).

Even though the above named conditions do occur with high frequency in late life, there are problems with accurate diagnosis. Many professionals see old age in itself as the cause of mental and emotional difficulties

and readily use symptoms such as memory impairment and confusion to diagnose the aged with Senile Dementia without further investigation, as some researchers suggest. Poverty, physical limitations, hearing impairment, grief, and fear may in many instances explain the behavior and condition of the elderly (Butler, 1975; Butler & Lewis, 1973; Levy, Derogatis, Gallagher, & Gatz, 1980; National Council on the Aging, 1978).

Mental illness ranks high among nursing home residents; U.S. Government statistics set the figure at 58% (Reisberg, 1981). Sherwood (1975) reported that slightly more than half of the residents studied were mentally confused at least part of the time, 20% all or most of the time. One reason is the readiness of professionals to label any symptoms of confusion in the aged dementia. Another reason is the pressure the U.S. Government puts on deinstitutionalizing mental patients from state hospitals to the community. The mentally ill elderly needing custodial care are merely transferred to nursing facilities in the community (Douglass, 1983; Manton et al., 1985). This practice was most pronounced in the early 1970s. The number of the aged in state mental hospitals decreased by 56% between 1969 and 1974 (National Council on the Aging, 1978). For the years since then, U.S. Government statistics show a steady decline of the number of patients in state operated

mental health facilities while the number of beds in nursing facilities show a steady rise (Statistical Abstracts of the United States, 1985).

A further contributing factor to the high incidence of mental illness in nursing homes might simply be the debilitating effects of institutionalization itself, robbing the individual of privacy and inducing dependence to the highest degree (Goffman, 1961; Seligman, 1975).

Social Resources

Research has shown that many elderly continue to live in a family setting (National Council on the Aging, 1978; Kane & Kane, 1981). Of the 5% of the aged residing in nursing homes, 4 out of 10 were living in a family setting prior to the time of institutionalization; 6 out of 10 were living either alone, with nonrelatives, or had been transferred from a hospital (Sherwood, 1975). Kramer (1970) suggested that the availability of a family unit significantly lowered the risk of institutionalization. However, by more closely scrutinizing the statistics provided by the National Council on the Aging (1978), one finds that most older persons prior to entering a nursing home had lived with their spouses which, for the U.S. Government Statistics, falls under the category of "two-person family unit." The occurrence of widowhood seems to be the most likely

prompt for institutionalization. Other indications to this effect are reports that individuals most likely taking care of a disabled elderly person in the community tend to be aged females. It is also interesting to note that males applying for admission to nursing homes tend to be in better functional health than female applicants and more often widowed (Binstock & Shanas, 1976).

Next to a spouse, adult children are the major care takers of the sick elderly (Sherwood, 1975; Smith & Bengtson, 1983). The available statistics, however, cannot be clearly interpreted. Data from a national survey show that 9 out of 10 older persons with a child would turn to the child in a health crisis (National Council on the Aging, 1978); but the intent to turn to one's child, or even actually turning to one's child, does not necessarily mean the child would indeed help. A study of three-generation families in Minnesota found that almost half of the families surveyed stated that they would find it difficult to care for a sick member of the family at home, one third stated that they would be unable to care for a sick member at home under any circumstances (Litman, 1971). Furthermore, families tend to leave the decision to institutionalize an aged member to physicians. Interviews with a sample of physicians revealed that physicians often saw the disrupted family as needing help (Habenstein & Biddle, 1974).

The findings so far suggest that the presence of a spouse means social support; but the responsibility which adult children take for the care of their disabled aged parents appears to be somewhat diffused. Institutionalization is readily considered as an alternative to home care. However, there are indications that family ties are maintained with families that had no problems with the relationship prior to institutionalization (Shanas, 1979; Smith & Bengtson, 1983). Where family connections were broken, relationships tended to have been strained for a long time before placement in a nursing home (Spark & Brody, 1970). In addition, the nursing home might be responsible for some breakdown in family ties. It seems that the regulations of the facilities systematically exclude family members through fixed daily routines and thus not tap the social support that might be available to nursing home residents from this source (York, 1976). Still, the number of elderly in nursing homes who never receive visitors is extraordinarily high, almost half of the nursing home population (Pfeiffer, et al., 1981; Sherwood, 1975). A combination of reasons might be responsible for this. There might be some elderly who have outlived all other family members and some whose grown children live in different states or countries.

However, no statistics with regard to these situations seem to be available.

With respect to social interaction within the nursing home, Halbfinger (1976) found that residents did not form close relationships with other residents very often. The elderly felt that the home provided little opportunity or support for establishing and maintaining close relationships. Relationships with staff and volunteers also seemed difficult to develop. Residents complained that they were hardly given a chance to get to know others. An interesting observation was reported by several investigators, namely patients who were visited by relatives and friends also got more attention from staff and other residents (Glaser & Strauss, 1968; Gottesman & Bourestom, 1974; Kosberg, 1973). Kosberg (1973), furthermore, noted that the poor elderly were not visited as often by friends and relatives as were the more affluent nursing home residents, which points out the interaction of economic status and social support.

Turning now to participation in social programs offered in nursing homes, Binstock and Shanas (1976) reported that those residents who participated had been life-time joiners of social groups, whereas those residents who did not participate had also not been inclined to join social groups all their lives. Evidently, differences in lifestyles in the 65 plus years

prior to entering a nursing home have to be taken into consideration. The present situation indicates the need for proper training of nursing home staff.

The Nursing Home

The development of nursing homes is mainly the result of Social Security legislation. In the 1960s, when Medicare and Medicaid extended support to all citizens, the nursing home boom began. While taking advantage of government aid towards health care, private investors financed construction of nursing homes by FHA loans and "guarded themselves against government and medical controls" (Barney, 1974, p. 266). Presently, a facility must be licensed by the State Department of Public Health only when claiming provision of "skilled" nursing care for the seriously ill patient. When Medicare and Medicaid eligible patients are admitted to a nursing home, the home must also obtain certification from state and federal government; this certification indicates whether the facility provides "intermediate" or "skilled" nursing care. By 1970, there were about 22,000 nursing and related care facilities with 1.2 million beds; 4,646 were skilled nursing facilities with .333 million beds. Up to 1978, the number of these facilities declined to 18,722; but the number of beds steadily climbed to 1.349 million. After 1978, the number of

facilities started to grow again. The last available statistics for all nursing and related facilities were for 1980, reporting 23,065 facilities with 1.537 million beds. The total number of skilled nursing facilities reported for 1970 also declined until 1976 to a low of 3,922 skilled nursing facilities with .309 million beds. After 1976, a steady rise began. As of 1983, the last statistics available for skilled nursing facilities, the number had grown to 5,632 skilled nursing facilities with .512 million beds (Statistical Abstract of the United States, 1985).

From the investor's point of view, business is expected to keep on growing. The number of elderly is increasing and cost-conscious hospitals are discharging patients early to nursing homes. Those homes that attract patients who are able to pay out of private funds are already making large profits. However, Medicaid ends up paying almost half of all nursing home revenues; private insurance for long-term care so far is rare (see Figure 1). Nevertheless, private insurance companies are starting to show interest and the elderly are eager to buy long-term care coverage not only because cuts in Medicare and Medicaid are inevitable, but also because it is generally known that the quality of care varies with the degree of Medicaid reimbursement a nursing home receives (Fackelmann, 1985, Jan. 4 & Feb. 15).

Recently a few nursing home chains have sprung up operating more than 100 facilities each nationwide. These chains are able to report high profits because their facilities have been built selectively in suburban areas where private-paying patients can be attracted. Already these chains have been criticized for not taking their share of Medicaid dependent elderly. However, the surroundings and services they provide are excellent compared to the average nursing home built a decade or two earlier (Fackelmann, 1985, Feb. 15). It is questionable, though, whether these chains can keep up superior service over time when private funds of their residents might be running out and Medicaid dependency setting in. Unfortunately, there is nothing at the moment that can stop these chains from backing out when their project is not profitable any longer.

Most nursing homes, though, have been built on a limited budget. Residents are forced to share space for sleeping, personal hygiene, dining, and general activities. Opportunities for privacy are rare. Especially crowded facilities place much emphasis on strict schedules to ensure smooth running of daily activities (Butler & Lewis, 1973; York, 1976). Staffing is kept to a minimum and the ratio has not changed much over the last decade (Statistical Abstract of the United States, 1985). Furthermore, nursing home employees

receive the lowest pay in the health care profession resulting in less than desirable qualifications and an enormous turn-over rate (Schwartz, 1974). The escalating cost of institutional care forces the average nursing home to operate on an ever more stringent budget, and thus these conditions have not improved over the years (Fackelmann, 1985, Feb. 15; Harrington, 1985).

Even though administration considers nursing care primary, one team of investigators found that only 2.1% of residents' time was spent in medical or nursing activities, 55% in doing absolutely nothing (Gottesman & Bourestom, 1974). Other researchers reported that speech and hearing therapy, as well as physical and mental health care were negligible; only a few social programs were offered and often lacked the enthusiasm of a good planner, thus adding almost nothing to the residents' social life (Brody, 1973; York, 1976). It has been reported that nursing homes put most of their energy into convincing adult children that their parents were well cared for and then did hardly anything more (Smith & Bengtson, 1983). Tobin and Lieberman (1976) reported that passivity was the primary adverse effect of institutionalization. The residents' passivity is to some extent advantageous to staff and institutional routine and, therefore, encouraged (Gresham, 1976; Spasoff et al., 1978). At the same time, clinicians have

been lamenting the high incidence of depression (Blazer, 1980) and dependency (Baltes, Honn, Barton, Orzech, & Lago, 1983) among residents. According to Seligman (1975), the elderly are slowly being killed simply by being made helpless. George (1980) described entry into a nursing home as follows:

> The individual no longer controls his or her immediate surroundings or personal schedule. Many personal possessions must be left behind. Simple decisions such as what to eat and when are no longer a matter of personal choice. Privacy is often severely limited; one must adjust to smaller quarters and a roommate (p. 155).

Summarizing the findings of the literature review, the following picture emerges: The elderly nursing home residents are, as a subcategory of the population of individuals 65 years of age and older, a group which is dramatically increasing in number. They comprise persons most advanced in age, and most are female. Widowhood is prevalent; and the majority is completely dependent on financial aid from the government to stay alive. The physical health of the aged in nursing homes is very poor. Generally they suffer from 3 or more chronic health conditions in addition to other life-threatening medical problems. Consequently, their physical functioning is at a very low level. More than half of elderly nursing home residents are also at a very low level with regard to mental functioning; 58% are diagnosed with senile dementia. Furthermore, they are

very isolated. For social support they can only count on their adult children, if any, and the staff of the nursing home. The setting to which they are confined has, in the view of many, further incapacitating effects and promotes higher dependency. It is hypothesized that these dimensions, because they affect social life, result in the low number of social interactions found among residents. However, how valid are the reports on which these assumptions are based?

Methodological Critique of Previous Research

As found in this literature review, interest in the elderly in general is abundant among researchers, and multitudes of statistics are provided by government surveys. However, statistics specifically for nursing home residents as a subcategory of elderly in America are scarce. Most of the data stem from a national nursing home survey which the National Center for Health Statistics conducted during the period from August, 1973 to April, 1974. The qualitative data about life in a nursing home was provided by many different studies, and it cannot be determined how comparable setting, sample, and methods were in these studies. The settings differed in many ways, from small to large institutions, from urban to suburban and rural nursing homes, from state to

private facilities and sometimes mental hospitals, from homes with religious orientation to homes with non-religious orientation, and from facilities with minimum care to facilities with holistic or social health approach. With the settings, the samples also varied and cannot be described as a homogeneous group. For data collection, the interview format was applied most often, but in many cases did not address the subjects themselves but significant others such as family members or staff. Most of the time no reason was given for this practice, sometimes the high rate of mental confusion among nursing home residents was mentioned. But the most problematic issues in the studies reviewed here were the measures. First of all, numerous measures applied to the population of elderly were found, including instruments assessing physical functioning (Goga & Hambacher, 1977; Katz, Hedrick & Henderson, 1979), subjective well-being (Larson, 1978; George, 1979), and mental functioning and depression (Gallagher, Thompson, & Levy, 1980; Raskin & Jarvik, 1979). However, often the measures were not thoroughly tested. Constructs of subjective perception were mixed with objective quantification and clinical diagnoses for physical health and functioning and for mental health and functioning. In many instances, the instruments were developed for young people or for specialized populations such as psychiatric patients, and

then simply applied to the elderly. Some investigators designed their own instruments without much regard to reliability and validity.

Nonetheless, some measures of physical health and functioning and some measures of mental health and functioning seemed to have adequate reliability and validity. These tests were standardized on the population of elderly as a whole, though, but seemed appropriate to be applied to nursing home residents; test-retest reliability, interrater reliability and alpha coefficients were given. However, this could not be stated about measures of social interaction and social support. Here many overlapping aspects were tapped. Dissimilar items were often included in the various tests which supposedly assessed the same construct. Most frequently measured was the size of one's social network; but without an indication of subjects' satisfaction, size alone is not a useful concept, especially when someone other than subject makes the appraisal. Even frequency of contact is no indication of satisfaction, as studies quantifying interactions with family indicated (Arling, 1976; Lee, 1979; Lee & Thinger-Tallman, 1980; Mancini, 1979). Therefore, even though social interactions can be counted, classified, and empirically described, the meaning to the individual is necessarily subjective. It seemed that nobody had yet considered asking the nursing

home residents themselves how satisfied they are with their social interactions and the social support they have, or how much they need social interaction and social support.

Justification for Present Research

Systematic research into social interaction and social support of nursing home residents seems to be scarce; yet it is vital for social policy development. Neglecting it is a reflection of society's attitude towards the aged. If found to be true that decline in physical functioning, mental functioning, and financial resources is accompanied by decline in social interaction and social support, then society needs to publicly examine its social policies towards individuals affected this way. Kane and Kane (1981) urged researchers to look at mental health and functioning, and physical health and functioning as variables affecting social interaction of the elderly. They gave the following reasons: (a) Changes in social interaction are known to affect physical and mental health. (b) Social support enhances the ability to cope with health problems. (c) The health care system has to take responsibility for the effects of changes in social functioning of patients. (d) Increase in social functioning positively affects implementations in long-term care plans. The conclusions that can be

drawn from the literature review presented earlier in this paper are in line with recommendations by Kane and Kane (1981): (1) The number of elderly and especially the number of elderly in nursing homes is growing. (2) The elderly in nursing homes tend to rate much lower than the elderly in general on measures of economic status, physical health and functioning, mental health and functioning, and social resources. (3) There is evidence that old age is the most stressful stage in life and that nursing homes tend to contribute to this effect. (4) It has been established that low economic status correlates positively with poor health (National Council on the Aging, 1978), that social isolation correlates positively with poor health (Binstock & Shanas, 1976), and that physical as well as mental functioning correlate positively with social support (Gottlieb, 1981). A review of 30 years of research among older Americans on subjective well-being and similar constructs (Larson, 1978) found that socio-economic factors, health, marital status, and social interaction correlate positively with subjective well-being. The results suggested that health, wealth, and love were the foundation of happiness.

The present study addressed nursing home residents who were at least 56 years of age and alert enough to participate in an interview. The interview was designed

to collect data concerning demographics, physical health, physical functioning, mental health, cognitive functioning, economic resources, social support, service utilization, and interest in new programs. The major variables are outlined in Table 1. The wording of the questions for each variable is shown in the Interview Schedule (see Appendix F).

The first objective was to describe the nursing home residents comprising the sample. It was hypothesized that the description which emerged from the literature review would also hold true for the sample of this study; only level of cognitive functioning was expected to have a truncated range due to selection bias. As revealed by the literature review, 90% of all nursing home residents are 65 years of age and older, and more than one third are over 85 years of age (Harrington, 1985; Kane & Kane, 1983; Manton et al., 1985; National Council on the Aging, 1978). Furthermore, 70% of nursing home residents are female, 64% widowed, approximately 19% have never been married, and only 12 to 28%, varying with the sample studied, are married (Heller & Mansbach, 1984; National Council on the Aging, 1978, Pfeiffer et al., 1981). More than one half of all nursing home residents are on Medicaid (Fackelmann, 1985, January 4; Gibson, Waldo & Levit, 1983; Harrington, 1985). More than one half suffer from 3 or more chronic health conditions; and

Table 1

Major Variables

Age

Months in Nursing Home

Functioning Impairment
- Economic Resources
- Physical Health
- Physical Functioning
- Mental Health
- Cognitive Functioning

Social Support
- Family Size
- Network Size
- Social Interaction
- Satisfaction
- Need

Service Utilization

Interest in New Programs

almost one half suffer from functional impairment that keep them in their rooms or even in their beds (Manton et al., 1985; National Council on the Aging, 1978; Reisberg, 1983; Sherwood, 1975). Furthermore, over one half of nursing home residents suffer from some kind of cognitive impairment (National Council on the Aging, 1978; Sherwood, 1975; Reisberg, 1983). Losses of old age plus the debilitating environment of the institutions additionally undermine the mental health of the elderly nursing home residents (Goffman, 1961; National Council on the Aging, 1978; Seligman, 1975). According to the above data, the first hypothesis with respect to descriptive variables was: Most of the nursing home residents in the sample will be female, widowed, on Medicaid and/or Medicare, in poor physical health, low in physical functioning, in poor mental health, and moderate in cognitive functioning.

The literature review has revealed nothing specific regarding the social support network of nursing home residents; though spouse and adult children were mentioned as major care takers of the elderly. Consequently, the second hypothesis with respect to descriptive variables was: Social Support Network Size of the nursing home residents in the sample will be limited to spouse and number of adult children.

With regard to social interaction of nursing home residents, York (1976) and Brody (1973) reported that only a few social programs were offered in nursing homes which add almost nothing to the social life of residents. Gottesman and Bourestom (1974) found that 55% of residents' time was spent in doing absolutely nothing. According to Smith and Bengtson (1983), nursing homes put their energy into convincing adult children that their parents were well cared for, and then did hardly anything more. In line with these reports, the third hypothesis with respect to descriptive variables was: Social Interactions of the nursing home residents will be low in number.

The second objective of this study was to explore the relationships between functioning impairment and social support. As outlined earlier, Kane and Kane (1981) suggested that research in this area was needed. From previous studies it was known that economic resources and social resources were positively correlated (Pfeiffer et al., 1981), that poor health and social isolation were positively correlated (Binstock & Shanas, 1976), and that physical functioning and social support as well as mental functioning and social support were positively correlated (Gottlieb, 1981). It has to be emphasized that in this study, Social Interaction, Network Size, Satisfaction, and Need were perceived as

distinct facets of Social Support; and with regard to correlations between facets of Social Support, the hypotheses were:

(1) There will be a significant negative relationship between Social Interaction and Social Support Need.

(2) There will be a significant negative relationship between Network Size and Social Support Need.

(3) There will be a significant positive relationship between Social Interaction and Social Support Satisfaction.

(4) There will be a significant positive relationship between Network Size and Social Support Satisfaction.

For the hypotheses with regard to correlations between Functioning Impairment and Social Support, it has to be kept in mind that the 5 Functioning Impairment variables (Economic Resources, Physical Health, Physical Functioning, Mental Health, and Cognitive Functioning) were scored on an impairment scale (0=low impairment, 4=high impairment). The specific scoring is given with each question in the Interview Schedule (see Appendix F). The hypotheses were:

(1) There will be a significant negative relationship between each of the 5 Impairment variables and Social Network Size.

(2) There will be a significant negative relationship between each of the 5 Impairment variables and Social Interaction.

(3) There will be a significant negative relationship between each of the 5 Impairment variables and Social Support Satisfaction.

(4) There will be a significant positive relationship between each of the 5 Impairment variables and Social Support Need.

The third objective of this study was to provide program developers with directions towards enhancement of social support for elderly nursing home residents; and, therefore, relationships between Interest in New Programs and Functioning and Social Impairments were also explored.

Method

Sample

Social Setting

An administrative agreement for the study was reached between the researcher and the administrator of a nursing home in the suburbs of Detroit. A copy of the signed agreement can be found in Appendix B. The home had been licensed by the Michigan Department of Public Health as a skilled nursing facility since 1966, had 185 beds with either 2 or 4 residents per room, and generally operated to capacity. Private patients as well as patients covered by Medicare and Medicaid were accepted. Approximately 20% of the residents were male and 80% female; the residents were almost exclusively white and of an ethnic background as the population of Detroit was in the first decades of this century: predominantly German, Polish, and Italian.

In addition to the staff attending to daily hygiene, food service, and nursing care, the home had a Recreational Therapy staff consisting of a Director and 4 Recreational Aides who planned and provided social activities. Volunteers offering a few hours per week to the residents were assigned to the Recreational Therapy

Department; they then assisted the staff in their daily routine. During the week two events were scheduled for each day: one in the morning and one in the afternoon, ranging from crafts, games, sing-a-longs, rosaries and movies to history and geography classes. For those who could not leave their rooms, the Recreational Therapy staff had incorporated a bed-side visit twice a month in the social calendar. On week-ends one social activity was offered per day: an hour of exercise on Saturday morning and church service on Sunday morning. Visiting hours stretched from 1:00 p.m. to 8:30 p.m. every day; and family and friends were invited to join in the afternoon events. Evenings were not considered for social activities since no staff was available. Except for one telephone and one television in the front lobby, nothing was left for entertainment in the evening hours, unless residents had their own radio and television in their room; private telephones were against administrative policy.

The interviewing period for the study centered around the Christmas season. The first interview took place on November 23, 1985 and the last one on January 29, 1986. One concern would be that the holidays affected the number and duration of social events available to residents. However, no such effects were detected. Any changes seemed to have been confined to

decorations. In fact, the number of Social Interactions subjects reported for the past week had a correlation of r = .97 with the number of Social Interactions reported for the past year. However, a holiday effect on the responses to the items of the Mental Health scale could not be ruled out. Details are given in the results section.

Subjects

The Director of Nursing of the facility provided the researcher with a list of 88 names of residents who, as she judged, were able to participate in an interview, had been living in the nursing home at that time for at least one month, and were 56 years of age or older. A letter authored by the Director of Recreational Therapy introduced the researcher and the study to the 88 residents on the list. A copy of the letter is included as Appendix D. A designated Recreational Aide handcarried this letter to the residents named on the list with the following statement:

> We have someone here who would like to have an interview with you. We are sure you will find it interesting and would like to encourage you to participate. If you have any questions, please direct them to Edith Letzel. She will stop by to see if you are interested.

The aide did not know more about the study than given in the letter and, therefore, did not give more information than contained in the above statement. Starting the day

after the distribution of the letter, the investigator personally visited each resident. When the resident showed no interest in an interview, no further attempt for recruitment was made. When the resident did express interest, the researcher took time to explain the study, answered questions, and presented those who volunteered for an interview with the consent form outlining the rights of the participants. Appendix E contains a copy of the consent form. The items on this form were then discussed, and when the resident indicated that he/she understood and agreed with the items, he/she was asked to sign the consent form. After the signature was obtained, a time and place most convenient for the resident was selected for the interview. The times fell somewhere in the frame from 10:00 a.m. to 8:30 p.m. The places were mostly the subject's room; but also used were the dining room, the day room (a much smaller area than the dining room), the lobby, and the hallway. Interviewing time ranged from 35 to 110 minutes; the mean was 60 minutes, mode 55 minutes. From the list of 88 possible subjects, 30 females and 12 males from 56 to 97 years of age completed the interview; their residence in a nursing home ranged from one month to somewhat more than 15 years.

Interviewer Training and Inter-Rater Reliability

The investigator and one research assistant, a gerontology student from a local university, conducted the interviews. Training in interview procedure and in recording of responses had been undertaken in regular 2-hour meetings twice a week during the 2 months prior to the interviewing phase of the project. These meetings covered the following topics: overview of research, subject's rights, establishing rapport, using questionnaire, recording responses, keeping subject on topic, probing, closing the interview, and role-playing. Problems were immediately investigated and specific instructions incorporated in the Interview Schedule (Appendix F). During the last month prior to interviewing the first subject, a total of 8 role-played interviews were completed, 4 by each person in each of the 2 roles. The person in the role of the nursing home resident coded her own responses while being interviewed; the person in the role of the interviewer also coded the responses. Inter-rater reliability was checked after the first 2 role-played interviews, then after the next 2 role-played interviews, and after all 8 role-played interviews. The percent agreement averaged 94%.

After approval for the proposed research had been received from the University Committee on Research Involving Human Subjects (see Appendix C), the two

trained interviewers field-tested the Interview Schedule in a nursing home other than the study site to establish ease of administration. A total of 4 nursing home residents were interviewed, 2 by each interviewer. Both interviewers were present at each interview and both recorded the responses. The inter-rater reliability averaged 92%. The field-test necessitated the following changes: The item of the sample question explaining the satisfaction scale was changed from "weather" to "food"; the weather had not much meaning for the residents who spent virtually all their time inside. In the sociodemographic section the term "ethnic background" was not generally understood; the question was rephrased to ask for birth place of parents or grandparents.

During the interviewing phase data collection constancy was established in the following way: The first 3 interviews were conducted with both interviewers present. While one posed the questions and recorded the answers, the other only listened and recorded the answers. The same procedure was followed for every 8th interview. After each interview, percent agreement was calculated. A total of 7 interviews were coded by both interviewers throughout the interviewing phase; percent agreement ranged from 90% to 97%, the average was 95%.

Measures

Scale Construction

The first part of the Interview Schedule for this study, measuring functioning disabilities, was based on the OARS (Older Americans Resource and Service) instrument, a multidimensional assessment tool widely used in geriatrics. It was developed by the Duke University Center for the Study of Aging and Human Development (1978). The OARS instrument and a shortened version, the Functional Assessment Inventory, proved to discriminate between elderly residing in different settings, from community to institution (Kane & Kane, 1981; Pfeiffer et al., 1981). The condensed version provided items for the functioning disability scales of the Interview Schedule. The items of the Cognitive Functioning scale and the Mental Health scale are very similar to the respective subcategories of the Functional Assessment Inventory. For the remaining variables addressed in this study, specific information on nursing home residents was sought and, therefore, many items were adjusted or new ones added. These items were rationally developed by the author in collaboration with several residents and staff in nursing homes other than the study site. The items in the Economic Resource scale of the Functional Assessment Inventory seemed inappropriate for institutionalized elderly and were not used. Only one

item, Method of Nursing Home Payment, was used to measure Economic Disability in this study. The Social Resource items of the Functional Assessment Inventory also were not adequate for the purpose of this investigation and were omitted. Instead, the Social Support Scale of this study was modeled after the Arizona Social Support Interview Schedule or ASSIS (Barrera, 1981) and addressed Family Size, Network Size, Social Interaction, Satisfaction with, and Need for Social Support. While the items of the ASSIS deal with social situations in the life of young people, the items of the Social Support scale used in this project deal with social situations of the elderly in the environment of the nursing home and were rationally selected by the author. Whether or not these items actually mean social support to elderly nursing home residents was not addressed in this study. The complete Interview Schedule for this study contains 60 items which cover the following dimensions: Sociodemographics, Functioning Disabilities, Social Support, Service Utilization, and Interest in New Programs. The major variables are given in Table 1; the exact wording of the questions and the scoring values are given in the Interview Schedule (see Appendix F); the Coding Guide (see Appendix G) provides the details for entering the interview data into the computer.

Validity and Reliability

Since the Functioning Disability scales of the Interview Schedule were based on the OARS instrument, data on this measure is reviewed here. The developers of the OARS instrument claimed that the best available measures were taken as the basis for the categories addressed therein, and that these measures were then refined for the population of elderly. The mental health scale was derived from the MMPI and the physical functioning scale from the Katz Activities of Daily Living Index (Katz, Ford, Moskowitz, Jackson, & Jaffe, 1963) which has been widely used in geriatrics for the last 20 years. Furthermore, the physical health scale of the OARS instrument was recommended by Kane and Kane (1981) as the most comprehensive physical assessment for the aged without actual physical examinations. The OARS instrument contained 240 discrete items. Since only items on which experts agreed upon were retained in the OARS instrument, face and consensus validity were claimed for this measure. Concurrent validity was based on t-tests between OARS scores and results of clinical interviews of 22 cases. A significant statistical difference based on the ADL scale was found only between the ratings of clinicians and the self-ratings of subjects; clinicians rated subjects more poorly than the subjects rated themselves. Predictive validity was

claimed on the basis of significantly different means for elderly living in different settings (Kane & Kane, 1981; Pfeiffer et al., 1981). Test-retest reliability was obtained from a sample of 30 residents in the community of Durham, NC. These subjects were judged to be representative of the population age 65 years and older; selection was not specified. Retests were taken at 3 to 6 week intervals, the mean interval being 5 weeks. During this time, one third of the subjects had experienced a major event, but events were not specified; 92% of responses were reported as being identical, change was noted in 11% of subjective responses and in 7% of objective responses. The test-retest correlation for mental health was .32, for physical health .82, and for ADL .82. For the remaining categories, test-retest correlations fell within the range of .32 to .82 (Kane & Kane, 1981). As for the shortened version, the Functional Assessment Inventory, validity and reliability were claimed to be similarly satisfactory based on data obtained from patients residing in a domiciliary facility and a nursing home of a Veterans Administration complex. The economic resource and social resource scales were reportedly less stable than the physical health, physical functioning, mental health, and cognitive functioning scales (Cairl, Pfeiffer, Keller, Burke, & Samis, 1983).

A drawback in the OARS instrument or in the shortened version, the Functioning Assessment Inventory, was the lack of a standardized scoring system. The scoring of the Interview Schedule of this study, however, did not depend on subjective interpretation of raters; scoring and coding were incorporated in the questionnaire (Appendix F). Internal consistency of the Functioning Disability scales of this study was checked by SPSS Reliability program. Alpha coefficients for the 5-item disability scales ranged from .61 to .79. Matrices showing inter-item and item-total correlations for these scales are shown in Appendix H to Appendix K.

The Social Support scale of the Interview Schedule was modeled after the Arizona Social Support Interview Schedule (ASSIS) and, therefore, validity and reliability of this measure are reviewed here (Barrera, 1981). The ASSIS intended to quantify and qualify socially supportive behaviors defined in previous research. These behaviors, for the general population, were classified as follows: giving material aid, physical assistance, intimate assistance, guidance, feedback, and social participation. Considering the restricted and dependent life style of institutionalized elderly, the social support scale used in this study focused on social interactions: visits, outings, friendships within the nursing home, and social events. To validate this

concept, future research should address the issue how the aged in nursing homes conceive social support. The main variables in the ASSIS and the Social Support scale of the research presented here were: Total Network Size, Social Interactions, Satisfaction with, and Need for Social Support. Data for the ASSIS was obtained from a sample of 43 university students (Barrera, 1981). Test-retest reliability for Total Network Size was .88. Support Satisfaction had a markedly positively skewed distribution indicating that Satisfaction scores tended to be high; test-retest reliability was .69, and alpha .33. For Support Need test-retest reliability was .80, alpha was .52. According to Barrera (1981), these data suggested that the subscales of the Social Support measure addressed unique facets of social support. The alpha coefficients for the Satisfaction scale, the Need scale, Network Size, and Social Interaction scale of the Social Support measure of this study, obtained via SPSS Reliability program, were .54, .61, .50, and .32 respectively; the matrices showing inter-item and item-total correlations are shown in Appendices L to O.

The data in this investigation was obtained by self-report. For the purpose of verification, the Director of Recreational Therapy supplied the data for the following items from the records of the nursing home: date of birth, diagnosis, date of admittance to this nursing

home, and method of payment. The formal data sheet used for this purpose is attached to the last page of the Interview Schedule (see Appendix F). Date of birth percent agreement with self-report was 83%. Diagnoses on record varied widely from number and kinds of major illnesses reported by residents, indicating that subjects were not aware of their medical status on record. Time in nursing home could not be compared because some residents had been transferred from other nursing homes. However, for three subjects who reported not knowing how long they had been living in a nursing home, record data was substituted for self-report. For these cases time in nursing home was 27, 43, and 73 months. Method of payment was not known by 36% of subjects. Therefore, for method of payment -- the only item in the Economic Disability scale -- archival data was substituted for self-report data. Here it has to be emphasized again that, with the exception of Economic impairment, the data obtained reflects self-perception; and the relationships explored concern relationships between self-perceived functioning and social support.

Results

In this section, the findings relative to the research questions posed for this study are presented. The first part outlines in descriptive statistics the characteristics of the elderly nursing home residents who volunteered for the study. The second part looks at the results of the correlational analyses, first examining the intercorrelations between the independent variables and the intercorrelations between the dependent variables, and then examining the relationships between Age, Months in Nursing Home, and the Functioning Disability scales (Economic Resources, Physical Health, Physical Functioning, Mental Health, and Cognitive Functioning) with the facets of Social Support. The final part explores the relationships of Age, Months in Nursing Home, the Functioning Disability scales, and the facets of Social Support with Interest in New Programs.

Characteristics of Sample

Demographics

Age. The 42 subjects of this study ranged in age from 56 to 97 years; 93% were 65 years of age and

older, 48% were 85 years of age and older, 24% were 90 years of age and older. Mean age was 80 years (SD=10.50), mode was 90 years.

Sex. Somewhat more than seven tenths of the sample were female (71%); a little less than three tenths were male (29%).

Ethnicity. The majority of the subjects were of German descent (40%), followed by British (19%), and Polish (17%) descent; 14% were of either Austrian, Dutch, French, Italian, or Russian descent. Many subjects remembered coming to this country when they were children or stated that their parents came. The remaining 10% of subjects did not know their ethnic background.

Occupation. The occupations subjects had worked in ranged from housekeeping, service delivery, and machine operation to office work and engineering. The socioeconomic status, measured on a scale ranging from a low of 0=no occupation to a high of 100=highly trained professionals, as developed by Duncan in the 1950s (Reiss, 1961), yielded for the subjects in this study a mean of 30.88 (SD=21.23), a mode of 10, and a range from 2 to 85 (see Table 2).

Marital Status. The majority of subjects were widowed (69%); 14% were divorced or separated, 10% still had a spouse, and 7% had never married. With

Table 2

Occupation Groupings

Percentage of Sample	Occupations	Duncan Socio-Economic Index %-Rank*
2	Cigar maker	2
2	Construction worker	7
15	Housewife	10
5	Automobile assembly worker	11
5	Live-in maid	12
2	Cook	15
5	Farm worker	17
5	Auto mechanic	19
7	Telephone operator, Factory seamstress	21
7	Machine operator, Practical nurse	22
5	Truck delivery man, Tile layer	32
2	Restaurant owner and operator	37
5	Salesperson	39
10	Office worker	44
5	Dental technician, Dry cleaning technician, Business owner	48
7	Accountant, Bookkeeper, Stenographer	51
2	Foreman	66
2	Commercial artist	67
5	School teacher	72
2	Engineer	85

* 0 = No Occupation
100 = Highly Trained Professional

regard to children, 29% had none, 57% had 1 to 3 children, and 14% had 4 to 7 children.

Time in nursing home. Almost half of the subjects had been living in a nursing home less than a year (47%), 24% for 1 to 4 years; the remaining 29% had been living in a nursing home more than 4 years and up to somewhat more than 15 years. The range was from 1 to 184 months, with a mean of 33 months (SD=42.53).

Summary. The hypothesis with regard to demographic variables stated: Most nursing home residents in this sample will be female and widowed. The results were consistent with the literature and supported the hypothesis. Ethnicity and occupations were added as variables because of the interesting cultural history of the area in which the study site was located.

Functioning Disabilities

Economic disability. Impairment in economic resources was measured by only one item: method of nursing home payment as documented in nursing home records. Exactly 50% of the subjects paid for their nursing home stay out of their own funds and 5% were covered by private insurance; Medicare covered 2% and Medicaid 43% of subjects according to nursing home records. These statistics resemble the national

statistics given in Figure 1, except that U.S. statistics provided percentage of dollars from nursing home revenue sources, whereas in this study the percentage given was for number of individuals dependent on each source. It was not verified whether or not equal payment per individual was required by each source. Self-report data indicated that only 19% of residents were aware that they were paying out of their own funds; another 19% thought they were covered by private insurance; and 26% thought they were covered by Medicare and/or Medicaid. The remaining 36% of the sample did not know how their stay in the nursing home was paid. Both nursing home record data and self-report data did not mention family funds covering nursing home payment. The discrepancy between nursing home records and self-report suggested that most subjects were not handling their own financial matters.

Physical health. Ill health was measured by how subjects rated their own health, how often they suffered from pain, how often they needed medical monitoring, how many days they were hospitalized during the past 6 months, and how many major illnesses they reported. The majority of subjects rated their health good to fair (57%); exactly one third rated their health poor or very poor, 10% even rated their health excellent. Mean and mode both indicated "fair." With

regard to pain, 29% did not have a problem all year long; another 29% reported having pain once a week or once a month, 42% were in pain every day or almost every day. The mean accordingly fell at a rating of "being in pain once a week." Special medical monitoring was not needed by over one half of the sample (60%); 9% needed medical monitoring about once a month, 31% needed medical monitoring daily or almost daily. When asked what was to be understood by "medical monitoring," subjects reported: oxygen, insulin shots, heart and diabetes medication, and pain shots. Checking for hospital days, more than half (55%) reported no hospitalization during the past six months; 10% spent a week or less in the hospital, 21% spent 10 to 21 days in the hospital, and 14% spent 28 to 36 days in the hospital during the preceding half year. Mean fell at about 8 hospital days (SD=11.374). The number of major illnesses reported ranged from 1 to 6. Every subject reported at least one illness, and the percentage reporting only one was 31%; 40% reported 2 to 3 illnesses; and 29% reported 4 to 6 illnesses. Record data showed a range from 1 to 7 illnesses; but only 10% of subjects had only one illness mentioned in their diagnosis, 45% had 2 to 3 illnesses, and another 45% had 4 to 7 illnesses mentioned in their diagnoses. There were problems with respect to agreement of

illnesses on record and illnesses stated in self-report. The question to subjects was to report major illnesses of which their doctor had informed them. For 5% of the sample there was complete agreement; for 40% there was major agreement, and for 29% there was somewhat of an agreement with the items on record; but for 26% there was no agreement at all. The kinds of illnesses given in record data and in self-report data can be found in Table 3. It appeared that subjects reported more of what was giving them difficulties in their daily lives. The high percentage of disagreement seemed to indicate that the complete medical picture of their health was not discussed with elderly nursing home residents. Overall, on the 5-item Physical Health scale, no one rated excellent, but also no one rated very poor; 24% were in good physical health, 55% were in fair physical health, and 21% were in poor physical health. It has to be emphasized that the self-report data reflects subjects' perception about their own health.

Physical functioning. Disabilities in physical functioning were measured in how much assistance subjects needed in walking, getting in and out of bed, getting dressed, taking a shower or a bath, and how often they had difficulties getting to the bathroom in time.

Table 3

Major Illnesses

Illnesses Found in Nursing Home Records and in Self-Report:

- Angina
- Arthritis
- Asthma
- Bladder Infection (Urinary Tract Infection)
- Cancer (Bone)
- Cataract
- Circulatory Problems
- Confusion
- Diabetes
- Edema
- Effects of Stroke
- Emphysema
- Fracture (Hip, Leg)
- Gall Bladder Problems (Cholecystitis)
- Glaucoma
- Hardening of Arteries (Arteriosclerosis)
- Heart Disease
- High Blood Pressure (Hypertension)
- Kidney Problems (Renal Failure)
- Multiple Sclerosis
- Osteoporosis
- Paralysis
- Pneumonia
- Rheumatism
- Ulcers

Illnesses in Record Only:

- Anemia
- Bed Sores
- Brain Tumor
- Cancer (Prostate)
- Cerebral Thrombrosis
- Cirrhosis of Liver
- Colitis
- Dehydration
- Diverticulitis
- Gout
- Intestinal Bleeding
- Lung Disease
- Metabolic Problems
- Obesity
- Organic Brain Syndrome
- Parkinson's Disease
- Paranoia
- Ulcers

In Self-Report Only:

- Backache
- Blackouts
- Constipation
- Cramps in Arm and Leg
- Dizziness
- Hernia
- Loss of Hearing
- Loss of Sight
- Seizures
- Sinus Problems

Only 17% of subjects needed no assistance in walking; exactly one third of subjects needed a little to a moderate amount of assistance; 21% needed a lot of assistance; and 29% were unable to walk. When asked what kind of assistance was needed for walking, subjects indicated that "a little" meant walking near walls, with another person, pushing a wheelchair, or using a cane or walker; "a moderate amount" meant using a walker and not going very far, or the need to lean on another person; "a lot" meant wearing special shoes with braces plus walker, or two other persons to hold up weight; "unable to walk" meant subject was in a cast because of fracture, or legs would not hold up weight, and also amputation of legs or paralysis.

To get in and out of bed, almost one half of subjects (48%) required no help; but the remaining 52% did require assistance. Specifically, 24% needed the assistance of one other person, and 28% even needed the assistance of two other persons. When asked what kind of assistance was needed to get in and out of bed, subjects reported that "a little assistance" meant having another person nearby because they were simply afraid of falling, or because someone else was needed to put rails up or down; "a moderate amount" meant another person was needed to lean on or to help push in or pull out of bed; "a lot" meant two persons were

needed to lift out of bed because of a cast or amputation, but subjects could still self-direct their body weight; "unable" meant no self-direction could be offered because of total loss of control over body due to paralysis.

With dressing, slightly more than one half (57%) of subjects required no help; 17% needed only a little assistance; 17% needed a moderate amount or a lot of assistance; and 9% were unable to dress or undress on their own. When asked what kind of assistance was needed, subjects explained that "a little" meant some help with closing buttons and undoing ties; "a moderate amount" meant someone had to pull pants up or pull tops over head; "a lot" meant that subjects were restricted in their reach because of pain, a cast, or paralysis; "unable" meant as before that subjects had no control over their body and needed someone to dress and undress them.

Much more assistance was needed to take a bath or shower because of fear (either by subject or by administration) of slipping and suffering fractures. Only 7% stated they received no assistance; 24% received a little or a moderate amount of assistance; 29% received a lot of assistance; and 40% were unable to take a bath or shower and required the assistance of two persons. When asked what kind of assistance was

needed when taking a bath or shower, subjects reported that "a little" meant another person was needed to turn hot water on and off and to hand towels and soap; "a moderate amount" meant the same plus help position subject in tub and wash back and hair; "a lot" meant all items mentioned before plus wash certain areas of the body because of restricted reach (cast, amputation, paralysis); "unable" meant two persons were needed to give a bath or shower because subject had no control over body.

With respect to continence, exactly two thirds did not use diapers, catheter or ostomy; 21% used diapers; the remaining 12% had either a catheter or an ostomy. Not getting to the bathroom in time was reported as an "accident." Reasons for an "accident" were that bathrooms were occupied too long, that restricted mobility was to blame for not getting to the bathroom in time, that waiting for assistance took forever, that the urge came too quickly, and that medicine or food caused diarrhea. Close to one half (45%) of subjects reported having not more than 2 "accidents" in a year; 12% reported having 1 to 4 "accidents" in a month; 10% had several "accidents" per week; and one third reported daily "accidents."

Overall, just as on the Physical Health scale, none of the subjects fell into the group of either

"excellent" or "very poor" on the 5-item Physical Functioning scale. The majority (48%) of subjects rated "fair," 28% rated "good," and 24% rated "poor" in physical functioning. Again these ratings reflect the functioning ability as perceived by subjects themselves.

Cognitive functioning. Impairment in cognitive functioning was measured by self-rating memory, knowing the day's date, name of the nursing home, own age, and date of birth. The exact ordering of items in the questionnaire is given in Appendix F. The rating "excellent" for memory was given by 31% of subjects and "good" was given by 22%; one third rated their memory "fair;" and 14% rated their memory "poor;" but "very poor" memory was reported by none of the subjects. The subjects who knew the exact date of the day comprised 38%; 24% were only off a few days. However, 2% (n=1) could only give the right year, 17% only the right month, and 19% did not know day, month, or year when asked for the day's date. This meant that almost one third of subjects had lost track of time going by. The name of the nursing home was known by 60% of subjects; but the remaining 40% did not know the name of the nursing home they were living in, which may indicate that they did not play an active part in choosing a nursing home for themselves. However, with regard to

their own age, almost three quarters (71%) of subjects gave the exact figure, 17% were off by not more than 2 years, but 12% were off by 2 years and more. Similarly with respect to knowing date of birth, 84% gave the exact date that was on record; another 2% (n=1) were off only by a few days; but 14% were correct only by the month -- day and year was lost to them. However, there was no one who could not at least give the month in which she or he was born. Overall on the 5-item Cognitive Functioning scale, again none of the subjects rated "excellent" or "very poor;" 38% rated "fair;" 31% rated "good," and another 31% rated "poor."

Mental health. Impairment with regard to mental health was measured with 5 questions on affective functioning, namely how often subjects had something to look forward to, had days when they did not want to get up, had trouble keeping their mind on what they were doing, had problems shaking off the blues, and how often they felt a sense of helplessness or hopelessness. Indeed, 80% found something to look forward to every day or at least several times a week, 10% at least 1 to 4 times a month; but the remaining 10% only 2 times a year or less. When asked how often subjects felt like not getting up, 55% reported it happened not more than twice a year if at all; 26% experienced this 1 to 4 times a month; 19% felt like

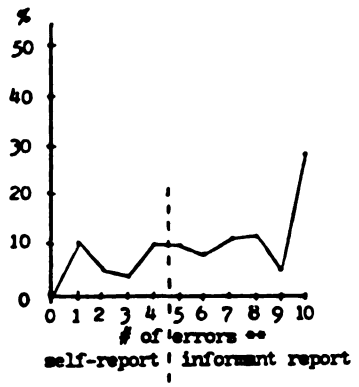
that several times a week or even daily. With regard to problems in keeping their mind on what they were doing, 69% reported this happened rarely, twice a year or less; 19% had this problem 1 to 4 times a month; 12% had experienced it several times a week or daily. Shaking off the blues was no problem for almost half (48%) of subjects; 21% had problems 1 to 4 times a month; and 31% fought with it several times a week or even daily. A sense of helplessness or hopelessness was a rare experience for 43%; 19% had this kind of feeling 1 to 4 times a month; but 38% reported feeling helpless or hopeless several times a week or even daily. As on the other functioning scales, no subject fell under the rating "excellent" on the 5-item Mental Health scale; but in contrast to the other functioning scales, some subjects (4%) fell under the rating "very poor." In good mental health were 38%; in fair mental health 36%; and in poor mental health 22% of the subjects. It has to be remembered here that the interviews took place during the Christmas season, which might have had an effect on the responses to the items of the Mental Health scale.

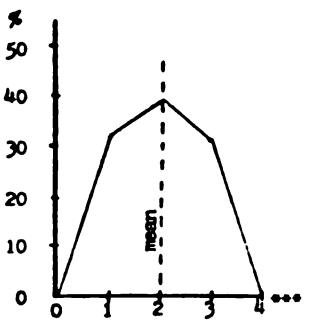
Summary. The hypothesis with respect to descriptive variables concerning functioning stated: Most of the nursing home residents in this sample will be on Medicaid and/or Medicare, in poor physical

health, low in physical functioning, in poor mental health, and moderate in cognitive functioning. Close to half of the subjects (45%) depended on Medicaid and/or Medicare resembling the national statistics (see Figure 1). The data obtained on the other functioning disability scales, with the exception of the Cognitive Functioning scale, did not support this hypothesis. The results showed that the majority of subjects fell under the rating "fair" or better in functioning. One reason for these results might be that the data reflected self-perception of functioning and subjects tended to give themselves more favorable ratings than objective data might have produced. This tendency was revealed in the data of the Cognitive Functioning scale which included one subjective item with four objective items. Another consideration might be that participation in an interview required a better than "poor" rating in functioning. Those who perceived themselves poor in physical and mental health and low in physical and cognitive functioning might have chosen not to participate more often than those with better functioning abilities. A comparison to another sample of nursing home residents tended to support this (see Figure 2).

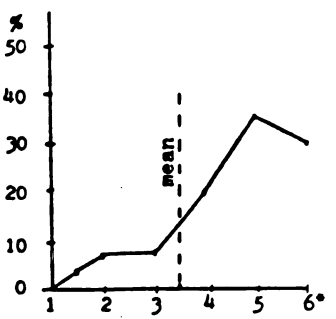
Since no standardized data on functioning abilities of elderly nursing home residents were

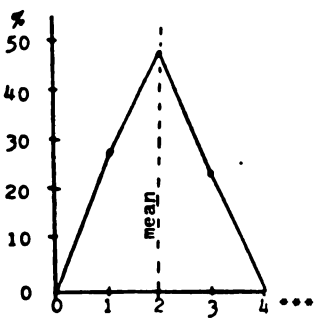
Cognitive Functioning





Physical Functioning





PAI (Functional Assessment Inventory)
(Pfeiffer et al., 1981)

N = 63
Mean Age = 83
Male/Female Ratio = 26/74

* 1 = Excellent
2 = Good
3 = Mild Impairment
4 = Moderate Impairment
5 = Severe Impairment
6 = Total Impairment

** # of errors on SPMSQ
(Short Portable Mental
Status Questionnaire)

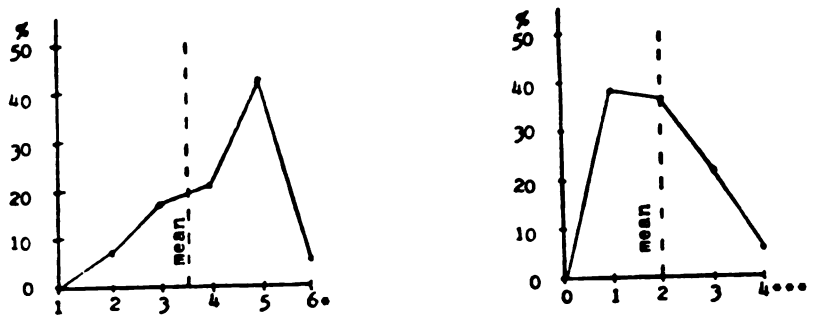
Interview Schedule
(Present Study)

N = 42
Mean Age = 80
Male/Female Ratio = 29/71

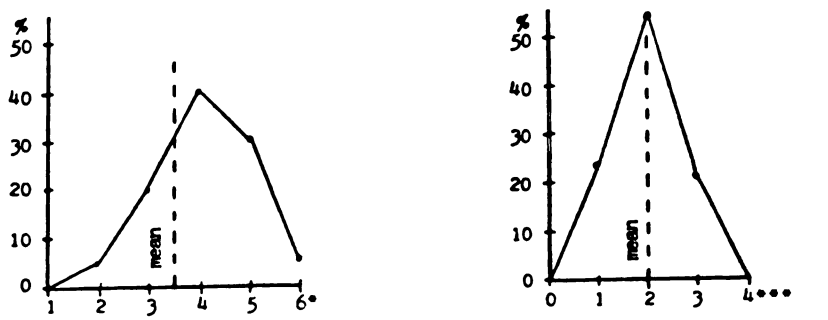
*** 0 = Excellent Functioning
1 = Good Functioning
2 = Fair Functioning
3 = Poor Functioning
4 = Very Poor Functioning

Figure 2. Comparison of functioning impairment between 2 samples of elderly nursing home residents (continued).

Mental Health



Physical Health



FAI (Functional Assessment Inventory)
(Pfeiffer et al., 1981)

N = 63
Mean Age = 83
Male/Female Ratio = 26/74

• 1 = Excellent
2 = Good
3 = Mild Impairment
4 = Moderate Impairment
5 = Severe Impairment
6 = Total Impairment

•• # of errors on SPMSQ
(Short Portable Mental
Status Questionnaire)

Interview Schedule
(Present Study)

N = 42
Mean Age = 80
Male/Female Ratio = 29/71

••• 0 = Excellent Functioning
1 = Good Functioning
2 = Fair Functioning
3 = Poor Functioning
4 = Very Poor Functioning

Figure 2 (continued). Comparison of functioning impairment between 2 samples of elderly nursing home residents.

available, data obtained by the Functional Assessment Inventory in a study designed to distinguish between functional disabilities by service settings (Pfeiffer et al., 1981) are represented in Figure 2. A direct comparison was not warranted, mainly because (a) the Functional Assessment Inventory addressed elderly in general and contained about twice as many items as the Interview Schedule of this study which was developed from the Functional Assessment Inventory but then adjusted specifically for elderly nursing home residents; and (b) the Functional Assessment Inventory required trained raters for scoring whereas the scoring, of the Interview Schedule was incorporated in the questionnaire.

The total sample of the study utilizing the Functional Assessment Inventory comprised 244 subjects of which 63 nursing home residents were a subsample by setting; stratification was not specified. Furthermore, only 25% of the subsample were judged to be competent for participation in a direct interview; for the remaining 75% of subjects, informants (relatives, staff, other) were interviewed. A comparison of the data represented in Figure 2 tends to support the notion that the sample of the present study fell into the lower end of the impairment range.

Social Support

Family size. As reported in the demographics section, 90% of subjects had no spouse, and 29% also had no children. Therefore, it is not surprising that 26% of subjects had no immediate family; another 26% had only one member of immediate family, 31% had 2 to 3 members; and the remaining 17% had 4 to 7 members of immediate family. Since only about 10% of subjects were married, immediate family meant almost exclusively subjects' children.

Network size. Size of network was measured by number of persons available to subject for social interactions, i.e. persons who came to visit, took subject on outings, friends subject made within the home, and persons subject liked to see at social activities during the last year. The same person available for more than one of these social interactions was counted as one network member for each interaction but only once in the total network. So it was possible to have a network available for visits, outings, and social activities, but only have one member in one's total network.

Only 2% of subjects (n=1) had no one to come and visit; 15% had one person, 45% had 2 to 4 persons, and 38% had 5 to 14 persons to come and visit.

For outings, no one was available to 40% of subjects; 29% had one person, 21% had 2 to 4 persons, and 10% had 5 to 8 persons who took them on outings.

With regard to friends within nursing home, 26% of subjects stated outright that they did not have any friends within the nursing home. When asked for the name of a person subjects considered a friend, exactly one half of subjects could not provide a single specific name; 14% named one friend, and the remaining 36% named 2 to 4 friends within the nursing home.

To socialize with certain people at social activities was of no interest to more than three quarters (76%) of subjects; 10% liked to see one particular person at social activities; the remaining 14% named 2 to 6 persons they liked to see at social activities.

Total network size available for the social interactions considered in this study was zero for only 2% (n=1) of subjects, one for another 2%, 2 to 5 for 41%, and 6 to 22 for the remaining 55% of subjects. Network members included relatives, people from within the nursing home, and people from the community. Family members of the network included: spouse, mother, daughters and sons, sisters and brothers, in-laws, cousins, nieces and nephews, grandchildren, and great-grandchildren. People from within the nursing

home included: roommates, other nursing home residents, staff, volunteers, and even people who came to visit another nursing home resident. People from the community included: old friends, neighbors, ministers or priests, people from church, people from workers' union, and guardians.

Social interactions. Interactions with others for social occasions were measured by number of visits subjects received, number of outings subjects went on, number of times subjects talked to friends within nursing home, and number of social activities subjects participated in during the last year.

The range of number of visits received during the past year was extremely wide (0-780). On the one extreme, 2% (n=1) of subjects had no visits at all; on the other extreme, 4% (n=2) had two visits a day and occasionally more. Inbetween, 13% received visits from one every other month to one per month plus occasionally more; 15% received visits from two per month to one per week; 17% received visits from one per week plus occasionally more to two per week; 39% received visits from two per week plus occasionally more to one per day; and 10% received visits from one per day plus occasionally more to two per day. While 21% of subjects received less than one visit per week,

79% received at least one visit per week up to two visits per day and occasionally more.

Compared to visits, outings for the past year were quite rare, but the range was also very wide (0-104). Slightly more than one half (52%) of subjects never went on an outing; 12% had 1 to 3 outings; 15% had 4 to 8 outings during the past year; 17% went on outings from once a month to once a week; and 4% went on outings about twice a week during the past year.

Talks to friends within the nursing home were not as common as one might have thought; but after considering that 50% of subjects could not provide a specific name of a friend within the nursing home, this was easier to understand. The range again was wide: from no talk at all during the past year to daily talks. The average was about one talk every other day, mode was a daily talk. Slightly more than one quarter (26%) of subjects reported that they did not consider anybody within the home a friend and consequently never talked to a friend within the nursing home; 17% talked to a friend within the home from once a month to about once a week; 21% talked to a friend within the home from about twice a week to six times a week; 36% talked to a friend within the home daily during the past year.

With regard to participation in social activities offered in the nursing home, the range once more was

from not at all to daily for the past year; mean was about twice a week, mode was 0. Percentagewise, 17% of subjects did not participate in social activities at all during the past year; another 17% participated from twice a year to once a month; 28% joined in social activities once or twice a week, and 38% from more than twice a week to every day.

Considering the four areas of social interactions addressed in this study and assuming total number of interactions spread evenly throughout the year, no subject participated less than once per week in one interaction; 12% participated in one or two per week, 28% in somewhat more than 2 per week to one every day; well over half (60%) of subjects participated in interactions often more than once a day to more than three times a day. Figure 3 compares the relative frequencies of the four categories of social interactions.

Satisfaction. Subjects were asked to report their satisfaction with each of the four areas of interactions. However, without being directed to do so, they made a distinction between quantity and quality of interactions. Future research should be directed at these two different aspects of satisfaction. Since this distinction was not

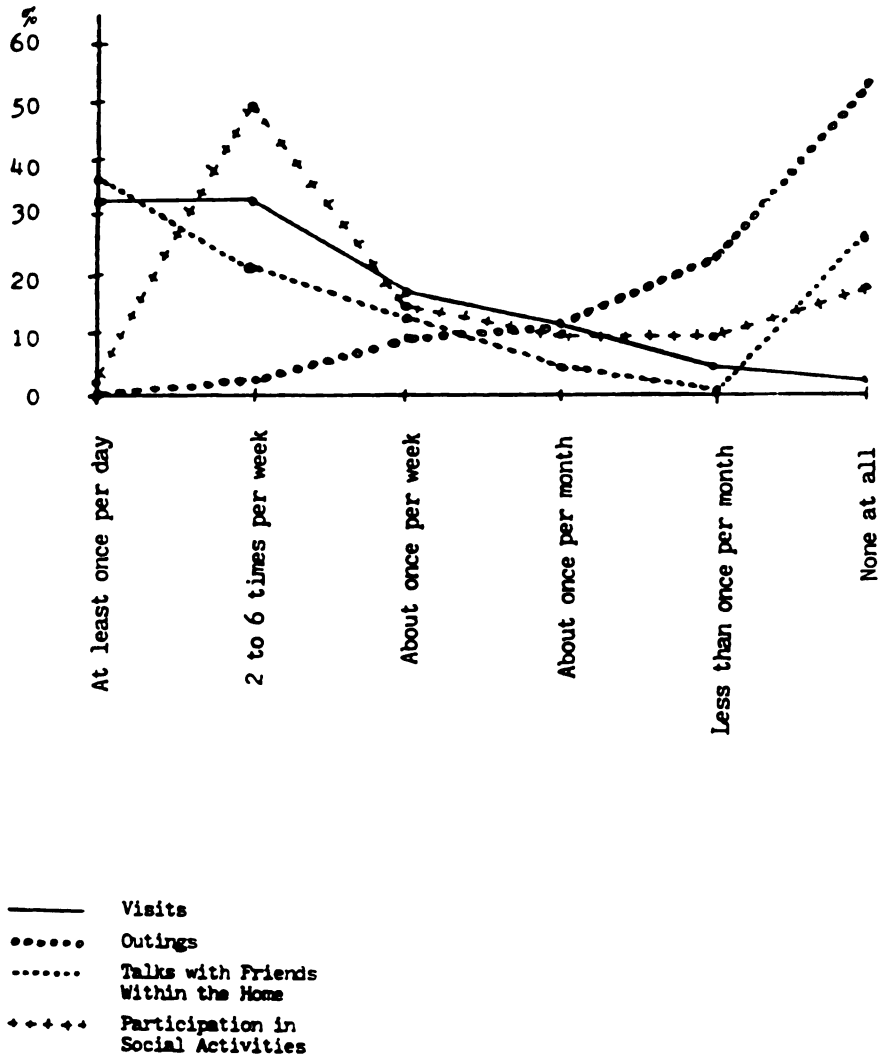


Figure 3. Frequencies of social interactions in a sample of nursing home residents.

incorporated in this study, subjects were instructed to give a combined rating.

Satisfaction with visits was the only one of the four areas of interactions that produced a markedly negatively skewed distribution which seemed to indicate that visits were more important to subjects than other interactions. More than half (55%) of subjects were greatly satisfied, and 17% even reported that visits could not be better; another 17% were moderately satisfied; 7% were slightly satisfied; but 4% were not satisfied at all with their visits.

Satisfaction with outings was nil for 10% of subjects; another 10% found only slight satisfaction with their outings; 40% were moderately satisfied; 28% were greatly satisfied; and 12% of subjects said that their outings could not be better. It should be kept in mind here that this included satisfaction with having no outings at all; outing was the only item where some subjects reported satisfaction with none at all.

With regard to satisfaction with friends within the nursing home, 4% were completely unsatisfied; 22% were slightly satisfied; 43% were moderately satisfied; 29% were greatly satisfied; and 2% (n=1) even said it could not be better.

Satisfaction with social activities in the nursing home received a rating of zero from 4% of subjects; slight satisfaction was reported by 19%, moderate satisfaction by 60%, and great satisfaction by 15%; 2% (n=1) even stated social activities could not be better.

Overall satisfaction with the four areas of social interactions addressed here was as follows: 4% of subjects were not at all satisfied; 17% were slightly satisfied; 60% were moderately satisfied; and 19% were greatly satisfied; but no subject reported that social interactions on the whole could not be better.

Need. Subjects were asked to report their need in the four areas of social interactions under study. Once more they found difficulty with giving a rating without further direction as to quantity and quality. Future research should also address the two different aspects of need for social interactions.

No need for any visits was reported by 10% of subjects; 17% had a slight need; 26% had a moderate need; 45% had a great need; and 2% (n=1) even reported a desperate need for visits.

Need for outings had a bimodal distribution and seemed related to a factor other than opportunity which might be incontinence. Almost three tenths (29%) of subjects had no need at all for outings, another three

tenths (31%) had a great need; 19% had a slight need; and 21% had a moderate need. No one was desperate for outings.

Need for friends within the nursing home was nonexistent for a large percentage (40%) of subjects; 17% had a slight need; 24% had a moderate need; 19% had a great need; but no one reported a desperate need for friends within the nursing home.

With regard to social activities, 31% of subjects had no need at all; 26% had a slight need; 36% had a moderate need; 7% had a great need; and again no one was desperate for social activities in the nursing home.

Overall need for the four areas of social interactions addressed in this study was as follows: None of the subjects reported not having any need at all or having a desperate need; 14% had a slight need; the majority of subjects (69%) had a moderate need, and 17% had a great need for social interactions. Some problems were encountered with the social interactions discussed here, and those problems are outlined in Table 4.

Summary. The hypothesis with respect to descriptive variables concerning social support stated: Network Size of nursing home residents in the sample will be limited to spouse and number of children, and

Table 4

Problems with Social Interactions

Visits	Too few visitors
	A family member does not come
	On special occasions, too many come and forget why they are here and just talk to each other
	Nobody cares
Outings	Too few
	No one to take me where I want to go
	Don't like the look of charity
	Get too nervous with preparations for outings
	Too uncomfortable physically
	Too difficult a routine to go to bathroom elsewhere
	Too much commotion at children's home: radio and TV going, children screaming, talking, drinking
Friends within Home	Others keep to themselves
	No one with similar interest here
	No opportunity to keep connections
	Everyone has too many problems
	Cannot bear to know more of other's suffering
	Great age difference in staff
Social Activities	Nothing to my interest
	No people I want to be with
	Hearing problems
	Too uncomfortable physically
	Make me look like a fool

Social Interactions will be low in number. The result did not support this hypothesis. Even though 26% of subjects had neither spouse nor children, Network Size was nil for merely 2% (n=1) of the sample; and Network Size was only 1 for another 2% (n=1) of the sample. Size of immediate family correlated significantly with Network Size ($r = .51$ $p < .001$); as the results of the study indicated, Network Size was not limited to spouse and children. Similarly, the number of Social Interactions could not be termed "low" for the sample in this study. As reported in the literature (Pfeiffer et al., 1981; Sherwood, 1975), almost half of the elderly in institutions did not receive any visits. The results of this study indicated that 79% of subjects received at least one visit per week. While the total number of Social Interactions might appear low compared to some other age group, it was not low compared to the elderly living alone. Peplau and Perlman (1982) described the elderly living alone as very lonely with often no social contact for weeks. In this study, no one had less than one social interaction per week (a visit, an outing, a social activity, or a talk with a friend within the nursing home). An explanation again might be a restricted range of impairment because of selection bias (study site and/or ability to participate in an interview).

Service Utilization

A number of agencies in the community offering services to the aged were contacted by the researcher to verify if elderly in nursing homes were included. The agencies in Table 5 confirmed the inclusion of nursing home residents; and consequently subjects were asked about their knowledge of the existence of these agencies and to what extent they might have used them. Added to this list of agencies was the Residents Council which was operated by residents of the nursing home that served as the study site.

As became obvious from Table 5, generally known agencies were also known by elderly nursing home residents. However, the number of residents who made use of the agencies' services was negligible and so was the usefulness of their services to residents. Surprisingly, even the existence of the Residents Council of the nursing home subjects resided in was not known to many, and participation was even less. Cooperation and assistance of nursing home administration and of residents network members were definitely required.

Services to the elderly are becoming more and more available, but the results of the survey of this study indicated that the aged in a nursing home so far have

Table 5

Service Utilization

Program:	Percentage of Subjects: Heard of	Used	Useful
1. Council on Aging Outreach Program	7	2	0
2. County's Geriatric Mental Health Services	0	0	0
3. County's Family Services	5	2	0
4. County's Community Services	7	2	2
5. Citizens for Better Care - Ombudsman	0	0	0
6. Community Council Association	2	0	0
7. Lakeshore Legal Services	0	0	0
8. Society for the Blind	24	2	2
9. Society for the Hearing Impaired (MAEDHI)	7	0	0
10. Catholic Social Services	17	2	0
11. Project Compassion Outings	7	2	2
12. Red Cross Volunteers Visitors Program	41	7	2
13. Residents Council of this nursing home	24	5	5

not been included. When asked about assistance to nursing home residents, the agencies addressed in this study seemed to be willing to be available to nursing home residents; but nursing home residents themselves seemed not to be aware of this. Also the needs of nursing home residents were not considered in the agencies agenda. Special coordinating efforts are needed so that those who want to offer assistance and those who need it get to know each other. Social policy has to directly address this issue or the subgroup of institutionalized elderly will remain unserved.

Interest in New Programs

At the end of the interview, 12 programs that could be started (a product of a survey of programs in other nursing homes plus brainstorming with residents and staff of a nursing home other than the study site) were suggested. First, subjects were asked how many of the 12 suggested programs were of interest to them; then they were asked to pinpoint the program that they would choose to participate in. Almost half (48%) of subjects were not interested in any of the suggested programs; 31% were interested in one, and 21% were interested in 2 to 5 suggested programs. Table 6 outlines the suggested programs and gives the

Table 6

Interest in Suggested Programs

	Chosen* %	Interest %	Programs Suggested by Study:
1.	5	10	Group discussions for residents to share feelings and give each other support
2.	0	2	Matching residents one-to-one and training in daily support for each other
3.	0	7	Classes on self-care taught by a nurse
4.	0	2	Project planning sessions with other residents who have similar interests
5.	5	14	Match volunteers one-to-one with residents to develop relationships and interests
6.	0	7	A cooking and baking hour where residents try out recipes and menus
7.	2	14	Discussion group where the daily news is presented and discussed
8.	0	7	Job Club - procuring small projects in the community and doing these for profit
9.	12	19	Travel Club - planning outings and procuring necessary resources from community
10.	0	2	Library Connection - residents and volunteers procure reading material from libraries
11.	5	14	Film Club - residents and volunteers procure films for regular showings
12.	0	2	Planned activities within the nursing home that involve family and friends.

*"Chosen" indicates that subjects chose to participate in that particular program out of several programs they expressed interest in.

percentage of subjects interested in each and also the percentage of subjects who chose a particular program to participate in. Subjects were also asked for their own ideas for new programs, and Table 7 gives subjects' suggestions. Exactly half of the subjects did not offer any suggestions of their own; 38% had one, and 12% had 2 to 3 ideas of their own for new programs. When the ideas offered by this study and the ideas suggested by subjects were put together, the number of new programs subjects were interested in had a range from 0 to 7. Still, one third of subjects were not interested in any new programs; 24% were interested in one; 29% were interested in 2 to 3; and 14% were interested in 4 to 7 new programs.

After reviewing the programs that were suggested to nursing home residents, it became evident that this researcher, too, did not know much about the living situation and special needs of nursing home residents when the programs were compiled. Comparing the suggested programs to subjects' own ideas for new programs, one cannot help but get the feeling that basic routines of a regular day become a big issue for persons who have lost their independence. The best suggestion to administrators, staff, and program developers of a nursing home might be to listen to their residents and together with residents' family and

Table 7

Ideas for Programs Suggested by Subjects

Percent	Idea for Program:
17	Find a way to get out of here
14	Bring a special friend to visit me
5	Get something eatable and enough food in here
5	Make alcoholic drinks available
5	Bring someone to read to me
5	Bring someone to sing with me
2	Bring someone to whom I can talk my heart out
2	Bring someone to take me to a store
2	Have painting classes
2	Get partners for a good poker game
2	Find something that we can do that gives a feeling of independence
2	Find a way in which I still can realize my dream of sailing around the world

friends support any move towards independence, regardless how small. Otherwise, as Seligman (1975) stated, society might indeed be killing the elderly simply by contributing to their helplessness.

Correlational Analyses

In addition to descriptive and reliability statistics, a complete correlation matrix was computed. To derive at comparable scores, the raw scores of the items within the Functioning Disability scales plus the Need and Satisfaction scales of the Social Support Inventory were converted to z-scores. The average of these items in each scale was used as the final score of the scale.

Intercorrelations of Disability Indicators

The first task in the correlational analyses was to examine the intercorrelations of the main independent variables checking for multicolinearity. Positive correlations were presumed and generally obtained though not to a significant level. The correlation between Physical Health impairment and Physical Functioning impairment was positive and significant ($r = .34$, $p < .05$), and so was the correlation between Physical Health impairment and Mental Health impairment ($r = .44$, $p < .01$). However,

as can be seen in Table 8, the Cognitive Functioning impairment scale yielded negative correlations with all but the Mental Health impairment scale. The correlation between Cognitive Functioning impairment and Physical Functioning impairment was negative and also significant (r = -.34, p < .05). But the correlation between Cognitive Functioning impairment and Mental Health impairment was positive and significant (r = .48, p < .01). These results were not consistent with the hypotheses of this study. Considering that the data were obtained by self-report and reflected self-perception, an explanation might be that subjects with better cognitive functioning were more critical of their functioning impairments than subjects with worse cognitive functioning. While self-report might be an appropriate method for assessment of need and satisfaction of Social Support, it seemed not to be an appropriate method of data collection for testing actual relationships between functioning impairment and social support. When reviewing the results, it has to be kept in mind that the data reflects subjects' self-perception of functioning and not actual functioning. Therefore, direct assessment such as unobtrusive observation of a large representative sample would have to be done before a

Table 8

Pearson Correlation Matrix of Major Variables

				Impairment					Social Support				
		Age	Months in Nursing Home	Economic Resource	Physical Health	Physical Function	Mental Health	Cognitive Function	Network Size	Social Interaction	Need	Satisfaction	Interest in New Programs
	Age	1.0000											
	Months in Nursing Home	-.0112	1.0000										
Impairment	Economic Resource	-.2640***	.2278	1.0000									
Impairment	Physical Health	-.1530	-.1002	.0529	1.0000								
Impairment	Physical Function	-.4150*	.3400**	.0984	.3410**	1.0000							
Impairment	Mental Health	.0846	.0003	.1207	.4381*	.1812	1.0000						
Impairment	Cognitive Function	.4112*	.0173	-.0627	-.1351	-.3352**	.4795*	1.0000					
Social Support	Network Size	-.0125	-.1543	-.2383	.1386	-.0406	-.0587	-.1404	1.0000				
Social Support	Social Interaction	.0531	-.0525	-.1165	.1664	.0707	.0573	-.0422	.1622	1.0000			
Social Support	Need	-.0008	.1426	.0470	-.1259	-.2344	.1974	.4355*	.0689	.3363**	1.0000		
Social Support	Satisfaction	-.0107	-.1074	-.0730	-.0996	-.0064	-.3371**	-.1643	.1224	.4164*	.0623	1.0000	
	Interest in New Programs	-.1962	.2194	.0023	-.0066	.0432	.0756	-.0170	-.0325	.2000	.3686**	-.0902	1.0000

*p < .01
**p < .05
***p < .10

conclusion about the relationship between cognitive and physical functioning could be reached.

When Age and Time in Nursing Home were added to the matrix of independent variables, (see Table 8) some more significant correlations surfaced. Age was positively and significantly correlated with disability in Cognitive Functioning (r = .41, p < .01), but not with Time in Nursing Home. This might have been expected; but surprisingly, disability in Economic Resources and disability in Physical Functioning were negatively correlated with Age (r = -.26, p < .10 and r = -.42, p < .01 respectively) and positively with Time in Nursing Home (r = .23, p < .13 and r = .34, p < .05 respectively). However, Age and Time in Nursing Home did not correlate significantly with each other, although an inverse relationship was noted. Thus Age seemed to subtract from disability, while Time in Nursing Home seemed to add to disability in Economic Resources and Physical Functioning. Since no causality can be drawn from correlations, the following speculations were possible: It might be (a) that Time in Nursing Home had a deteriorating effect on residents' Economic Resources and Physical Functioning, and many testimonials to this respect can be obtained from the literature; or it might be (b) that low Economic Resources and low Physical Functioning were

reasons for becoming a resident of a nursing home for a long time. With regard to Age, it might be speculated (a) that residents with less disability in Economic Resources and in Physical Functioning had a better chance to grow older; or it might be (b) that some residents were admitted to a nursing home because of age alone, or because of age with impaired cognitive functioning, while younger residents were admitted because of higher disability in Economic Resources and/or in Physical Functioning. The correlation between Cognitive Functioning and Physical Functioning would lend some support to this (r = -.34, p < .05). Future research should be directed towards untangling these questions. Because of the different directions of these intercorrelations, the Disability Indicators were not combined into a single scale but computed separately for correlations with facets of Social Support.

Intercorrelations of Social Support Facets

With respect to the relationships between facets of Social Support, 4 specific hypotheses were made in this study. The results are given in Table 8.

(1) There will be a significant negative relationship between Network Size and Social Support

Need. The hypothesis was not supported; the obtained correlation was positive and not significant.

(2) There will be a significant negative relationship between Social Interactions and Social Support Need. The hypothesis was not supported; the obtained correlation was significant but positive (r .34, $p < .05$).

(3) There will be a significant positive relationship between Network Size and Social Support Satisfaction. The hypothesis was not supported; the obtained correlation was not significant.

(4) There will be a significant positive relationship between Social Interactions and Social Support Satisfaction. The hypothesis was supported; the obtained correlation was $r = .42$, $p < .01$.

No hypotheses were made regarding the relationships between Network Size and Social Interactions, and between Need and Satisfaction. The obtained relationships were both positive, but not significant.

All but one hypothesis regarding facets of Social Support were not supported. First, Network Size had no significant relationship with Number of Social Interactions. One obvious reason might be that certain persons only came in groups, i.e. families with children, so they were only assigned one visit by the

residents. It is not surprising then that the relationships between Network Size and Need and between Network Size and Satisfaction, and between Social Interaction and Need and between Social Interaction and Satisfaction differed. On the one hand, Network Size was not significantly correlated with either Need or Satisfaction; on the other hand, Social Interaction had significant relationships with Need and with Satisfaction, even though not in the same hypothesized directions. The data suggested that with increase of social interaction not only satisfaction increased but also expressed need for social interaction. An explanation of these results might lie in the vague definition of Satisfaction and Need for Social Interaction. As discussed previously in the descriptive section, no distinction was made between quality and quantity of Social Interaction when a response for Satisfaction and Need was elicited. Also, some elucidation could be found in subjects' reasoning behind their responses. Some commented that they were very satisfied with their social interactions, but that in itself made them aware of how much they needed the social interactions they had. Others stated that their need was high because their number of social interactions was low; and some made it clear that they had no interest in interactions with others and

therefore no need. These comments were an indication that a more precise and sensitive measure for Social Support Need had to be developed. An interesting point remained: With decline in interactions, less need for interactions was expressed. Future research should address this issue and explore if decreased social interactions lead to resignation and the diagnosis of clinical depression in elderly nursing home residents.

Correlations of Disability Scales with Social Support Facets

In accordance with the main objective of this study, the relationships between Functioning Disability scales and Social Support facets were explored with the following four specific hypotheses. The results can be obtained from Table 8.

(1) There will be a significant negative relationship between each of the 5 impairment variables and Network Size. This hypothesis was not supported. The correlation between impairment in Physical Health and Network size was positive but not significant. The correlations obtained between the remaining 4 impairment scales and Network Size were in the hypothesized direction, but only the correlation between impairment in Economic Resources and Network

Size approached a significant level (r = -.24, p < .128).

(2) There will be a significant negative relationship between each of the 5 impairment variables and Social Interaction. This hypothesis was not supported. None of the correlations were close to approaching a significant level.

(3) There will be a significant negative relationship between each of the 5 impairment variables and Social Support Satisfaction. This hypothesis was not supported for 4 of the impairment scales. Even though all 5 of the correlations obtained were in the hypothesized direction, only one reached a significant level; the correlation between impairment on the Mental Health scale and Satisfaction with Social Support was r = -.34, p < .05, corrected for attenuation r = -.53 p < .01. As can be seen from Appendix F, the items in the Mental Health impairment scale addressed impairment in optimism. Thus the data suggested that a decline in optimism was related to a decline in satisfaction. An interpretation may be that pessimistic residents were less satisfied with their social interactions, or that less satisfaction led to pessimism with regard to social interactions. The design of this study did not allow discerning the direction. Therefore, further research is needed to clarify this issue.

(4) There will be a significant positive relationship between each of the 5 impairment variables and Social Support Need. This hypothesis was not supported for 4 of the 5 impairment scales. Only impairment on the Cognitive Functioning scale correlated significantly with Need for Social Interactions (r = .44 p < .01, corrected for attenuation r = .65). The items on the Cognitive Functioning impairment scale (see Appendix F) addressed self-rating of memory, awareness of the day's date, own age, date of birth, and name of nursing home. The results indicated that residents with higher impairment in this respect expressed more Need for Social Interaction than residents with less impairment.

No hypotheses were made regarding the relationships between Age and facets of Social Support and between Time in Nursing Home and facets of Social Support. The obtained correlations were generally negative but far from approaching a significant level.

Correlations of Interest in New Programs with Impairment Scales and Social Support Items

This study did not include hypotheses with respect to relationships between Interest in New Programs and Functioning and Social Impairments. As described previously, Interest in New Programs was measured by

the number of programs subjects indicated were of interest to them (see Appendix F). This included both number of programs suggested to subjects and number of subjects' own ideas for programs. No significant correlations were obtained between the Functional Impairment scales and Interest in New Programs (see Table 8). Age and Time in Nursing Home also did not yield significant correlations with Interest in New Programs; though it was interesting to note the directions of the relationships (see Table 8). While Age seemed to contribute to a decline in Interest in New Programs, Time in Nursing Home seemed to raise Interest in New Programs. Family Size, Network Size, and Number of Visitors showed a negative direction in the relationship with Interest in New Programs, but again not to any significant level. However, Number of friends within Nursing Home (r = .41 p < .01) and Number of Friends seen at Social Activities r = .31 p < .05) both correlated positively and significantly with Interest in New Programs. The correlation between the Social Interaction scale and Interest in New Programs was positive but not significant. It is important to note that only one item of the Social Interaction scale, Social Activities, correlated significantly with Interest in New Programs (r = .63

$p < .001$). The correlations of Interest in New Programs with items of the Satisfaction scale were negative, with the exception of Satisfaction with Social Activities, though only the correlation of Interest in New Programs with Satisfaction with Outings was significant ($r = -.29$ $p < .10$). Positive correlations were found between Interest in New Programs and items of the Need scale; all of the scale items but the correlation with Need for Visitors were also significant. The correlations of Interest in New Programs were $r = .31$ $p < .05$ with Need for Outings, $r = .31$ $p < .05$ with Need for Friends within Nursing Home, and $r = .37$ $p < .02$ with Need for Social Activities

Overall, New Programs seemed to have had similar appeal as Social Activities had. Network members of residents who expressed interest in new programs tended to be more often persons within the home than outside contacts. These residents also expressed more Need for Social Interactions, though not specifically for Visitors. For program development, residents with Interest in New Programs might be the easiest to reach. It is not clear, however, whether residents not expressing Interest in New Programs did not have an interest in new kinds of social interaction or whether they simply conceived any new program to be similar to

the social activities they already found not to be to their liking.

Discussion

The purpose of this study was to assess social support available to elderly nursing home residents and to explore the relationships between functioning disabilities and social support. This section summarizes the limitation of this research and the major findings, together with suggestions for future research and implications for program development.

Limitations

When reviewing the major findings of this study, one must be aware of how they were reached. First of all, sample size was very small and the subjects have to be recognized as a convenience sample obtained from a quite restricted setting. Participants were residents from a single nursing home of a Detroit suburb; and they volunteered to be interviewed which subjected the data to the flaws of self-report. For assessing actual relationships between functioning impairment and social support, self-report should not be used as a method of data collection. The data obtained for this study reflects self-perceived functioning. However, self-report might be an

appropriate method to assess social support need and satisfaction, though a more sensitive social support measure exploring what Social Support actually means to nursing home residents and distinguishing between quantity and quality of satisfaction and need would have to be developed. Generalizations to the population of elderly nursing home residents were, therefore, not possible. Furthermore, the statistics employed were correlational analyses which exclude the assignment of directionality. In spite of these restrictions, some distinct patterns useful to program development prevailed in the results and are reviewed next.

Major Findings

Characteristics of Elderly Residents

The demographics of the sample agreed with the demographics for elderly nursing home residents in the literature. The majority of subjects were 80 years old and older, female and widowed. On medicaid and/or Medicare were close to half of the sample, resembling national statistics. However, with respect to the functioning disability scales, the majority of subjects rated fair or better in Physical Health, Physical Functioning, Mental Health and Cognitive Functioning, while the literature reported the majority of elderly

nursing home residents as rating poor or worse in these areas. Here it became apparent that the sample came from the lesser disabled end of the impairment range (see Figure 2), probably due to the requirement of being able to participate in an interview. It was, therefore, not surprising to find that the same held true for Social Support. The grim picture of residents not having anyone to come and visit definitely did not emerge from this study. A very small percentage (2%) had indeed no one to come and visit during the whole preceding year. The fact, that this happened at all is a legitimate reason to explore the circumstances of such a situation. The vast majority, however, had at least one visit per week. And even though about one quarter of subjects had no immediate family (spouse or children), 96% of subjects had at least two persons in their social network. Adult children of residents were the main network members for most subjects; but the fact that a quarter of the sample without spouse or children also had a social network indicated that not only contact with family but also with community members were maintained. Social ties, at least in this sample, seemed to have survived institutionalization; even new ties were made during institutionalization. This might flourish when promoted by administration, staff, and program developers. With respect to social

interactions, the findings indicated that no resident in the sample had less than one interaction per week, i.e. a visit, an outing, a talk with a friend within the home, or participation in some kind of social activity offered within the home. The percentage of subjects that could be judged as falling into the lower end of the range of Social Interactions (2 or less per week) was only 12% (n=5). Restriction of impairment range could be considered as one reason why the main hypotheses of this study were not supported, but it also might be that close bonds with family and friends do not dissolve with institutionalization.

Relationships between Disability Indicators

As reported in the result section, positive intercorrelations between the impairment scales were generally obtained. However, inverse relationships were noted between impairment in Cognitive Functioning and impairment in Economic Resources, Physical Health, and Physical Functioning; and a positive relationship was found between impairment in Cognitive Functioning and impairment in Mental Health. As already mentioned, subjects with less impaired cognitive functioning might have more critically assessed their impairments, maybe remembering and comparing their present level to a previous competence level. Those more impaired in

cognitive functioning might have been less critical in their assessment of their functioning level. But with respect to impairment in Mental Health, previously described as a measure of optimism/pessimism, it seemed that subjects with less cognitive impairment were also less pessimistic. The most interesting finding, though, was the significant inverse relationship between cognitive functioning impairment and physical functioning impairment. This seemed to indicate that nursing home residents tended to be either more impaired in cognitive functioning but less in physical functioning, or more impaired in physical functioning but less in cognitive functioning. The notion that either the mind fails first or that the body fails first in the aging process seems to go along with this finding. Further support came from the significant positive relationship found between age and cognitive functioning and the significant negative relationship found between age and physical functioning. The question to be clarified in future research is: Are there two main categories of elderly nursing home residents, impairment in cognitive functioning and impairment in physical functioning? Because of these findings, it must be recognized that the relationships explored in this study were based on self-report data, i.e. the relationships found were between perceived

impairments. Suggestions for future research in this direction include careful considerations in data collection method such as direct observation rather than self-report or informant report of impairment, so that the relationships between actual impairments can be assessed.

Relationships between Social Support Facets

First, it was interesting to find that the relationship between network size and social interactions was not significant. Not every member of the network contributed equally to the social interactions of the elderly resident. Some members participated only in groups, i.e. families came to visit, the same residents congregated at social activities, etc. Only immediate family, almost exclusively daughters and sons of residents, seemed to visit regularly. This was reflected in the significant positive relationship found between size of immediate family and visits. Therefore, residents without children were at risk of having few visits. Visits seemed to be a special kind of social interactions for elderly nursing home residents that could not be replaced by interactions with friends within the home or by social activities. Future research addressing social support of elderly nursing home residents should

explore the special attraction of visits. The next interesting finding was that Social Interaction had a significant positive relationship with both Satisfaction and with Need. This relationship was expected for Satisfaction; but an inverse relationship was hypothesized for Need, presuming that low number of interactions give rise to need for interactions. The results indicated that either the needy also had more social interactions, or that raising social interactions simply raised both, expression of satisfaction and expression of need. Considering comments about problems with social interactions made by residents during the interviews (see Table 4), this researcher tends to agree with the latter statement. A direct answer to the issue should be sought in future research. A more sensitive measure, distinguishing between quality and quantity of Need and Satisfaction, is definitely needed.

Relationships between Functioning Disabilities and Social Support

The hypothesized significant negative relationships between functioning disabilities and network size, social interactions and satisfaction did not emerge, except for functioning in mental health. The exception was the significant negative relationship

between impairment in Mental Health and Social Support Satisfaction, which according to the items of the Mental Health impairment scale could be interpreted as meaning: either less optimistic residents were less satisfied with their social interactions, or less satisfaction with social interactions led to a more pessimistic outlook towards social interactions. Future research might resolve the question by measuring the effects of interventions aimed at raising satisfaction with social interactions.

The hypothesized significant positive relationships between functioning disabilities and Need for Social Support were not obtained, except for the correlation between impairment in Cognitive Functioning and Need for Social Support. The items in that impairment scale measured awareness of own memory's performance, of the day's date, of date of birth, and of name of nursing home. Residents with less awareness expressed more need for social interactions. Future research should address the issue if raising social interactions also raises residents awareness of time and place around them.

The results discussed here might have been due to the selection of the study site and the data collection method, as previously pointed out. Further considerations for these results would be that social

contacts and social interactions of elderly nursing home residents were already very restricted. The people the residents interacted with were mainly: (a) the adult children of the residents with special long-time bonds between them, (b) the other residents in the home sharing the same situation, and (c) the staff whose job it is to serve the residents. However, the significance of long time bonds with friends and neighbors deserve closer investigation.

Social Interactions and Program Development

The social interactions considered in this study will now be discussed with reference to program development.

Visits. A major part of social interactions residents in the nursing home had were visits. Network size had no significant relationship with social interactions, also not with visits. While the size of the network might have increased when groups of people like families visited, the number of visits did not increase with the members of the group. Some network members might have only come with someone else and never alone, like small children, a friend who did not drive, etc.; others seemed to come alone regularly. The number of visits increased, though, with the number of adult children a resident had. And with more

visits, satisfaction with visits went up. Interestingly, satisfaction with friends within nursing home also was raised with more visits; though the number of friends within the home did not seem to have been affected this way. Need for visits also was not affected by number of visits; but need for outings grew with number of visits. Outings with someone intimately known to the resident might have been more desirable, especially when the problems residents had on outings were considered, like restricted mobility and incontinence. Furthermore, the number of visits tended to increase when residents had a higher number of major illnesses, when there was more need for medical monitoring, and when residents needed more assistance with a bath or shower. This suggested that certain visitors were willing to be involved with an elderly in the nursing home. Contrary to this trend, though, the number of visits declined with longer time of residency in the home. Finally, no significant relationship existed between the number of visits and the interest residents expressed in new programs.

What visits then could mean for program development might be the following: First of all, visits were a major part of social interactions in a nursing home. In addition, regular visitors were an asset to residents because they tended to have a

motivation to be involved and residents tended to feel close to them. Usually a close bond had been in existence for many years prior to nursing home placement. Emotional support seemed to be most likely to come from this source of social interaction. The nursing home, however, has to actively incorporate involvement of visitors and not treat visitors as appendices to the daily routine. Therefore, the focus should be on development of programs for visitor involvement in residents' nursing home life. Furthermore, for residents with few or no visitors, recruitment of regular visitors should be considered, and volunteers who are generally directed to assist staff seem the right source.

Outings. Compared to visits, outings were a minor part of social interactions for residents in the nursing home. It seemed residents needed someone in their network who did not mind the special assistance most residents required on an outing. Especially incontinence, pain, and restricted mobility compounded the dependency on the person who took an elderly resident out. Familiarity with the environment and staff of the home promoted a sense of independence that was dramatically upset on an outing. Often residents did not feel it was worth the bother, especially when there was no one in their network they felt comfortable

with for such an undertaking. Therefore, it is easy to understand why outings went up with the number of children and even more so with the number of members in the social network. Also, residents who participated in this kind of social interaction tended to express more satisfaction with as well as need for outings. No significant relationship existed between outings and interest expressed for new programs. Program development concerning outings then should look in the direction of the suggestions made for visits, namely promotion of one-to-one relationships between residents and visitors. This might help to raise both, the number of outings and the satisfaction with outings.

Talks with friends within nursing home. Next to visits, talking to friends within the home could be considered a very important part of social interactions for residents. However, this kind of interaction was not affected by number of children a resident had or by how many members were in his or her social network. Number of friends within the home and participation in social activities, however, raised the number of times residents talked to friends within nursing home. Friends were not only other residents but also staff, volunteers, and even other residents' visitors. And the more often a resident talked to a friend, the higher was satisfaction with friends within the home;

in fact, satisfaction with social interactions in general was higher then. However, residents who talked a lot to friends within the nursing home did not seem to have a higher need for friends, only a higher need for social interactions in general. This might have been a reason why these residents were also more satisfied with social interactions in general. No special relationships existed between talking to friends within the home and certain functional disabilities, also not with interest in new programs. The discussion so far does not point towards special considerations for program development, except that it emphasizes once more the preference for one-to-one interactions. Therefore, facilitating friendships within nursing homes might be a worthwhile goal.

Social activities. Participation in social activities had the third rank among the social interactions discussed. This item was not significantly related to social network size or family size; but in detail, the more visitors a resident had, the less she/he participated in social activities. Residents who participated more in social activities tended to have been in the nursing home longer, to suffer from fewer major illnesses, to be more critical of their own memory and less aware of the day's exact day, to have more friends in the home, and to be more

satisfied with the social activities than residents who participated less. Furthermore, residents with higher participation had more need for social interactions in general, though not particularly more need for visits. Contrary to the other three social interactions considered in the study, participation in social activities seemed to enhance interest in new programs. One reason might have been that residents perceived new programs to be similar to the social activities they were familiar with. Therefore, new programs would probably reach mainly residents who already participated in social activities at the home, unless program development takes new directions. One new direction to try could again be recruiting visitors for a one-to-one relationship with residents who were lacking visitors. The purpose would not be to reduce participation in social activities but to build sources for social support. In addition, future research in this area might resolve the issue whether involved visitors raise residents' cognitive functioning, at least in the areas addressed here.

Interest in new programs. In this discussion it should be kept in mind that residents seemed to equate new programs with programs they knew from their social activities. Residents participating in social activities tended to be the same residents expressing

interest in new programs. Interestingly, when satisfaction with outings declined, interest in new programs rose. It also was higher for residents who reported that they had not much to look forward to. High interest in new programs was also accompanied by high need for social interactions. However, the more residents had difficulties taking a bath, the less interest they expressed in new programs. Obviously, these were residents with the most restricted mobility. These trends were similar to those found for social activities. Therefore, it can be expected that this group of residents would probably be pleased by programs similar to social activities.

Conclusion

The major findings of this study can be summarized as follows:

(1) The elderly nursing home residents' social ties with family and friends seemed to survive institutionalization but need support from administration and staff to flourish.

(2) Service utilization among nursing home residents was found to be negligible. Community agencies have to gear their services towards the needs of institutionalized elderly, since their needs differ from the needs of the elderly in the community.

(3) The hypothesized inverse relationships between functioning impairment and social support did not materialize in this study, except that impairment in mental health was negatively correlated with satisfaction with social interactions. The direction of causality, though, has to be ascertained in future research.

(4) Contrary to hypothesis, results revealed a significant positive relationship between cognitive impairment and need for social interactions, indicating that subjects less aware of time and place expressed more need for social interactions than subjects more aware of time and place. What effects cognitive impairment has on social interactions and on expressed need for social interactions needs to be clarified in future research.

(5) A significant negative relationship was found between impairment in cognitive functioning and physical functioning, which led to speculations that residents may be categorized as either mainly cognitively impaired or mainly physically impaired. Before conclusions can be reached, actual rather than perceived functioning impairment has to be assessed for a large sample representative of nursing home residents.

(6) Results of this study suggested that cognitive functioning became more impaired with age for nursing home residents; however, physical functioning seemed to be less impaired with years of age while more impaired with longer residency in the nursing home.

(7) Both satisfaction and need for social interactions increased with increased social interactions.

(8) From the four categories of social interactions explored in this study, visits seemed to be the most likely interaction in which social support was received. There were indications in residents' suggestions for new programs that social support meant assistance in developing a feeling of independence in activities of daily life. Therefore, program developers were advised to further visitors' involvement in the daily lives of nursing home residents.

(9) Restricted range of impairment in the sample was seen as a possible reason why the main hypotheses of the study were not supported.

(10) More sensitive measures of social support for elderly nursing home residents have to be developed to capture in self-report what social support actually means to institutionalized elderly, and aspects of

quantity and quality of satisfaction with and need for social support have to be addressed.

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Appendices

Appendix A

Letter of Permission to Reprint

NURSING ECONOMIC$
An Anthony J. Jannetti, Inc. Publication

August 5, 1986

Edith Letzel
3503 Cero Drive
Sterling Heights, MI 48310

Dear Ms. Letzel:

Thank you for your request to reprint figures from the article "Crisis in Long-Term Care: Part 1, The Problems" by Charlene Harrington. We are happy to grant permission, however, the following notation must appear on all copies, and we would like to receive one copy for our permanent files:

Reproduced with permission of Anthony J. Jannetti, Inc., publisher, Nursing Economic$.

We appreciate your interest in our journal.

Best wishes,

Karen Mitchell

Karen Mitchell, PhD, RN,
Editor

jc

Anthony J. Jannetti, Inc., Publisher / North Woodbury Road, Box 56 / Pitman, New Jersey 08071 / 609-589-2319

Appendix B

Administrative Agreement

MICHIGAN STATE UNIVERSITY

DEPARTMENT OF PSYCHOLOGY
PSYCHOLOGY RESEARCH BUILDING

EAST LANSING · MICHIGAN · 48824-1117

June 10, 1985

Administrative Agreement
between

Mr. J. Gaynier Administrator Nightingale Nursing Home East Warren, MI	and	Edith Letzel 3503 Cero Drive Sterling Heights Michigan

I. Mr. J. Gaynier, Administrator, agrees to

1) Allow Ms. Edith Letzel to conduct a study on the social support needs of elderly nursing home residents as outlined and discussed with Ms. S. Birko-Witt, Recreational Director at Nightingale East.
2) Provide a list of residents who would like to volunteer for an interview.
3) Provide a quiet space where the interviews can take place.

II. Ms. Edith Letzel agrees to

1) Assume full responsibility for the design, implementation, and analysis of the study.
2) Insure the confidentiality of information from participants in the study.
3) Make available all reports of the study as they become available.
4) Use the information collected in this study for no other purpose than to fulfill the requirements for a Masters Thesis in Ecological Psychology at MSU.
5) Work in close contact with Ms. Birko-Witt, Recreational Director at Nightingale East.
6) Discuss any concerns at Nightingale East, should any come up, first and foremost with the Administrator, Mr. J. Gaynier.

John J Gaynier
Mr. J. Gaynier, Administrator

Edith Letzel
Edith Letzel

Appendix C

Letter of Permission by UCRIHS

MICHIGAN STATE UNIVERSITY

UNIVERSITY COMMITTEE ON RESEARCH INVOLVING
HUMAN SUBJECTS (UCRIHS)
250 ADMINISTRATION BUILDING
(517) 355-2186

EAST LANSING • MICHIGAN • 48824-1046

November 1, 1985

Ms. Edith Letzel
3503 Cero Drive
Sterling Heights, MI 48077

Dear Ms. Letzel:

Subject: Proposal Entitled, "The Effects of Functional Disabilities on Social Support for Elderly Nursing Home Residents"

I am pleased to advise that I concur with your evaluation that this project is exempt from full UCRIHS review, and approval is herewith granted for conduct of the project.

You are reminded that UCRIHS approval is valid for one calendar year. If you plan to continue this project beyond one year, please make provisions for obtaining appropriate UCRIHS approval prior to November 1, 1986.

Any changes in procedures involving human subjects must be reviewed by the UCRIHS prior to initiation of the change. UCRIHS must also be notified promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

Thank you for bringing this project to my attention. If I can be of any future help, please do not hesitate to let me know.

Sincerely,

Henry E. Bredeck
Chairman, UCRIHS

HEB/jms

cc: Dr. William S. Davidson

Appendix D

Initial Contact Letter

Telephone 758-0700

Nightingale East Nursing Home, Inc.

11525 EAST TEN MILE ROAD
WARREN, MICH. 48089

November 19, 1985

Dear _____,

I would like to introduce to you a graduate student from Michigan State University who is looking into the physical and social problems residents in nursing homes might have. In her studies, Edith Letzel hopes to find information that will lead to new programs and services for nursing home residents, their families, and their friends.

Edith would like to interview residents here at Nightingale East and I thought you might be interested. It would take about an hour of your time and would be conducted at your convenience. Of course, all aspects of this interview will be kept confidential between Edith Letzel and you.

Within the next week, Edith will come to visit with you, answer any questions you might have about her study and, if you are interested, set up a time for the interview.

Your participation, however, is strictly voluntary. If you are not interested, Edith will not bother you with any details; simply tell her that you do not want to participate.

Sincerely,

Susan Burke-Witt
Director
Recreational Therapy

Appendix E

Consent Form

MICHIGAN STATE UNIVERSITY

DEPARTMENT OF PSYCHOLOGY
PSYCHOLOGY RESEARCH BUILDING

EAST LANSING · MICHIGAN · 48824-1117

Survey Consent Form

1. I have freely consented to take part in a survey to be conducted by Edith Letzel, a graduate student at Michigan State University. Edith Letzel is conducting the survey under the supervision of Dr. William Davidson to fulfill the requirements for a M. A. degree in Ecological Psychology.

2. This survey will involve a personal interview which will require about one hour of my time, scheduled when most convenient to me. In the interview I will be asked questions concerning my health, my disabilities, and my social life. The results of the study will be used to develop programs for elderly nursing home residents.

3. The study has been explained to me and I understand the explanation and what my participation will involve.

4. I understand that my participation in this study will not affect the care I am receiving now.

5. I understand that my participation in this study may not benefit me personally but could help elderly in nursing homes in the future.

6. I understand that my anonymity will be maintained and that all of my responses will be kept confidential.

7. I understand that my participation in this study is voluntary and that I may withdraw at any time without any penalty.

8. I understand that I am free to ask questions at any time during the study and that I can receive additional explanation after my participation is completed.

Signed:_____ Witness:_____

Date: _____ Date: _____

Appendix F

Interview Schedule

Interview Schedule

*Name of Interviewee:_____

Interview Scheduled for:_____

Date:_____

Time:_____

Called to Remind Date:_____

Time:_____

Rescheduled:_____

(PLACE CHECK MARK BEHIND FIRST DATE WHEN OK)

IMPORTANT: Interview cannot be started unless information for items 18 to 21 is filled in.

For Referral Purposes Only:
Area Agency on Aging - Telephone Number: 569-0333

*After interview is completed, promptly discard this front page.

Interview Schedule

Subject Number:_____ Sex:_____

Place of Interview:_____

Date of Interview:_____

Time at Beginning of Interview:_____

Time at End of Interview:_____

Duration in minutes:_____

Name of Interviewer:_____

Comments by Interviewer:

Instructions to Interviewer

1. First of all, do not give advice! Refer any requests to local Area Agency on Aging; telephone number is on front page of Interview Schedule. However, subject may copy names of agencies and programs mentioned in Section 7.

2. The interview will be scheduled as marked on front page of Interview Schedule. See subject the day before the set date to remind him/her of interview. Place check mark behind date when verified.

3. Be on time. If you cannot be on time, subject has to be notified and must not be left waiting!

4. Be prepared. Have multiple choice answer cards, Interview Schedule, and pencils ready. Fill in information for Questions No. 18 to 21 before start of interview.

5. Keep in mind that all instructions to the interviewer within the Interview Schedule are in CAPITAL LETTERS; all questions to be directed to the subject are typed in regular upper and lower case letters.

6. Before you start the interview, make sure that both you and subject are comfortable and no interruptions are expected for the next 60 minutes.

7. Always be polite, be empathetic, but try to adhere to questions in Interview Schedule once interview has started. It is important that all information be obtained for all of the questions.

8. If subject is going into too much detail, say: "I will make a note of this and we will come back to it later. Now let's go to the next question."

   Make these notes on back of Interview Schedule and refer to them at end of interview.

9. If you feel that subject loses interest in answering the questions, make an exception of above rule and let subject talk about an item of interest to him/her. Then say: "Let's go to the next question now."

   It is important to get a complete interview, but remember: Subject has the right to discontinue the interview.

10. Make sure subject understands multiple choice answers before you start with first question. Always verify answer by repeating subject's choice before recording it.

11. Score answer with a checkmark ✓ or X in the relevant space. If figures are given, write numbers clearly in the space provided. Take short notes of qualifying remarks. If no space is provided, use right hand border. Write legibly.

12. At end of interview, write down your overall comments in the space provided at the beginning of questionnaire. Mark subject number on <u>every</u> page of the Interview Schedule, and then promptly discard the cover page. Bring completed questionnaire to Edith Letzel's home address immediately.

ABILITY CARD

0. ABLE TO DO ON MY OWN

1. NEED A LITTLE ASSISTANCE

2. NEED A MODERATE AMOUNT OF ASSISTANCE

3. NEED A LOT OF ASSISTANCE

4. UNABLE TO DO

SATISFACTION CARD

0. NOT AT ALL SATISFIED

1. SLIGHTLY SATISFIED

2. MODERATELY SATISFIED

3. GREATLY SATISFIED

4. COULD NOT BE BETTER

NEED CARD

0. No need at all

1. Slight need

2. Moderate need

3. Great need

4. Desperate need

Subject #

Introduction: Hello, my name is _____.

As you know, I am here today to conduct the interview Edith Letzel has set up with you for this date. Thank you for this opportunity to talk with you.

I will be asking questions about your health, your family and friends, and how you are getting along in general. Do you have any comments at this time?

Comments:

(BEFORE STARTING WITH FIRST QUESTION, MAKE SURE SUBJECT UNDERSTANDS ANSWER CHOICES. GIVE THE FOLLOWING INSTRUCTIONS:)

Your answers to the questions I am going to ask are very important for this research. Some questions might not seem relevant to you, some even might seem silly; but please try to give me an answer.

It is also important that we finish the whole questionnaire. Therefore, I hope you will go along with my suggestion to discuss anything of interest that might come up at the end of the interview.

For most of the questions I have multiple choice answers. Please choose the answer that best fits your answer.

Let's try a sample question before we start:

If I would ask you

How satisfied are you with the food today?

I would give you these choices: (SHOW SATISFACTION CARD AND READ ANSWERS ALOUD) Is it

0. _____ Not at all satisfied
1. _____ Slightly satisfied
2. _____ Moderately satisfied
3. _____ Greatly satisfied
4. _____ Could not be better

What would your answer be?
(REMEMBER: PLACE AN X IN THE BOX CHOSEN BY SUBJECT)

Do you understand the procedure?

Yes _____ No _____

(IF "NO", TRY SAMPLE QUESTION AGAIN UNTIL SUBJECT UNDERSTANDS PROCEDURE)

Subject #

Section 1

I would like to begin with some general questions.

1) What is your ethnic background?
More specifically: Where were your parents or grandparents born?

(RECORD ANSWER:) _____

2) How did you earn your living during most of your life?

(RECORD ANSWER:) _____

3) How long have you been living in a nursing home?
(INCLUDE TIME IN OTHER NURSING HOMES IF APPLICABLE)

_____Years, _____Months _____Not Sure

4) How are you paying for nursing home costs at the presen time? Is it from

0. _____ Own funds

1. _____ Family funds

2. _____ Private insurance

3. _____ Medicare

4. _____ Medicaid 5. _____ Not sure

5) How were you paying for nursing home costs at the time of first admission to a nursing home? Was it

0. _____ Own funds

1. _____ Family funds

2. _____ Private insurance

3. _____ Medicare

4. _____ Medicaid 5. _____ Not sure

Section 2

Let's talk about your health now.

6) How would you say your health is at the present time? Is it

0. _____ Excellent

1. _____ Good

2. _____ Fair

3. _____ Poor

4. _____ Very Poor

7) Do you suffer from physical pain? Is it

0. _____ Not more than twice a year

1. _____ Not more than once a month

2. _____ Not more than once a week

3. _____ 2 to 6 times a week

4. _____ Daily

Subject #

8) Has your doctor told you that you suffer from a major illness? What illness is it? (RECORD ANSWER:) Any others?

_____

_____

9) Do you need any special medical monitoring like blood tests, injections, etc. Is it

0. _____ Not more than twice a year
1. _____ Not more than once a month
2. _____ Not more than once a week
3. _____ 2 to 6 times a week
4. _____ Daily

10) During the past 6 months, how many days did you have to stay in a hospital for physical health problems?

_____ Days

Section 3

I am going to ask you about some activities that must be done as part of our daily lives. I would like to know how much assistance, if any, you get to do these activities.

11) Do you walk on your own or do you get assistance? Look at this card (SHOW ABILITY CARD) and tell me which number best describes how much assistance you get. (READ CHOICES ALOUD WHILE SHOWING ABILITY CARD)

Is it

0. _____ Able to do on your own
1. _____ Get a little assistance
2. _____ Get a moderate amount of assistance
3. _____ Get lots of assistance
4. _____ Unable to do

(MARK ✓ NUMBER INDICATED BY SUBJECT)

(IF ANSWER IS 1, 2, OR 3, ASK:)

Please describe what kind of assistance you get.

_____

_____

12) Do you get in and out of bed on your own or do you get assistance?

Look at this card (SHOW ABILITY CARD) and tell me which number best describes how much assistance you get. (READ CHOICES ALOUD WHILE SHOWING ABILITY CARD)

Is it

0. _____ Able to do on my own
1. _____ Get a little assistance
2. _____ Get a moderate amount of assistance
3. _____ Get lots of assistance
4. _____ Unable to do

(MARK ✓ NUMBER INDICATED BY SUBJECT)

(IF ANSWER IS 1, 2, OR 3, ASK:)

Please describe what kind of assistance you get.

_____

_____

_____

Subject #

13) Do you take a shower or bath on your own or do you get assistance? Look at this card again (SHOW ABILITY CARD) and tell me which number best describes how much assistance you get. (READ CHOICES ALOUD WHILE SHOWING ABILITY CARD)

Is it

0. _____ Able to do on my own
1. _____ Get a little assistance
2. _____ Get a moderate amount of assistance
3. _____ Get lots of assistance
4. _____ Unable to do

(MARK ✓ NUMBER INDICATED BY SUBJECT)

(IF ANSWER IS 1, 2, OR 3, ASK:)

Please describe what kind of assistance you get.

_____

_____

14) Do you use diapers, a catheter, or an ostomy?

0. _____ No
_____ Yes

1. _____ Diapers
2. _____ Catheter
3. _____ Ostomy
4. _____ More than one of above

(IF YES, MARK THE NEXT QUESTION 4 ✓ AND GO TO QUESTION NO. 16. IF NO, ASK THE FOLLOWING QUESTION)

15) Do you have trouble getting to the bathroom on time?

Is it

0. _____ Not more than twice a year
1. _____ Not more than once a month
2. _____ Not more than once a week
3. _____ 2 to 6 times a week
4. _____ Daily

16) Do you get dressed and undressed on your own or do you get assistance?

Look at this card again (SHOW ABILITY CARD) and tell me which number best describes how much assistance you get. (READ CHOICES ALOUD WHILE SHOWING ABILITY CARD)

Is it

0. _____ Able to do on my own
1. _____ Get a little assistance
2. _____ Get a moderate amount of assistance
3. _____ Get lots of assistance
4. _____ Unable to do

(MARK ✓ NUMBER AS INDICATED BY SUBJECT)

(IF ANSWER IS 1, 2, OR 3, ASK:)

Please describe what kind of assistance you get.

_____

_____

Section 4

Now I have some questions concerning your memory.

17) First, how is your memory? Is it

0. _____ Excellent
1. _____ Good
2. _____ Fair
3. _____ Poor
4. _____ Very poor

Subject #

18) What is today's date?
(RECORD ANSWER BELOW)

Please give me
the Month: _____, the Day: _____, and the Year: _____

(TODAY'S DATE:

Month: _____, Day: _____, Year: _____

MUST BE FILLED IN BEFORE START OF INTERVIEW)

SCORE AS FOLLOWS:

0. _____ Knows month, day, and year
1. _____ Knows month and year
2. _____ Knows year only
3. _____ Knows month only (day does not count)
4. _____ None correct (day only does not count)

19) How old are you? (RECORD ANSWER BELOW)

Age:_____

a. (AGE:_____ - MUST BE FILLED IN BEFORE START OF INTERVIEW)
SCORE AS FOLLOWS:

b. 0. _____ Correct
1. _____ Within 2 years
2. _____ Within 3-5 years
3. _____ Within 6-8 years
4. _____ Over 8 years off

20) What is the name of this nursing home? (RECORD ANSWER BELOW)

Name of this nursing home:_____

(NAME OF THIS NURSING HOME:)_____

(MUST BE FILLED IN BEFORE START OF INTERVIEW)

IF CORRECT RECORD "0", IF INCORRECT RECORD "1"

0 _____

1 _____

21) When were you born? (RECORD ANSWER BELOW)

Please give me the Month:_____, the Day:_____, and the Year:_____

(DOB: MONTH:_____, DAY:_____, YEAR:_____

MUST BE FILLED IN BEFORE START OF INTERVIEW)
SCORE AS FOLLOWS:

0. _____ Knows month, day, and year
1. _____ Knows month and year
2. _____ Knows year only
3. _____ Knows month only (day does not count)
4. _____ None correct (day only does not count)

Section 5

I would like you to tell me about your feelings.

22) Do you find something to look forward to when you get up in the morning? Is it

0. _____ Every day
1. _____ 2 to 6 times a week
2. _____ Only about once a week
3. _____ Only about once a month
4. _____ About a couple of times a year or less

Please explain:_____

_____

Subject #

23) Do you have days when you do not want to get up? Is it

0. _____ Not more than a couple of times a year
1. _____ Not more than once a month
2. _____ Not more than once a week
3. _____ 2 to 6 times a week
4. _____ Every day

Please explain:_____

_____

24) Do you have trouble keeping your mind on what you are doing? Is it

0. _____ Not more than a couple of times a year
1. _____ Not more than once a month
2. _____ Not more than once a week
3. _____ 2 to 6 times a week
4. _____ Every day

Please explain:_____

_____

25) Do you have problems shaking off the blues? Is it

0. _____ Not more than a couple of times a year
1. _____ Not more than once a month
2. _____ Not more than once a week
3. _____ 2 to 6 times a week
4. _____ Every day

Please explain:_____

_____

26) Do you feel a sense of helplessness or hopelessness? Is it

0. _____ Not more than a couple of times a year
1. _____ Not more than once a month
2. _____ Not more than once a week
3. _____ 2 to 6 times a week
4. _____ Every day

Please explain:_____

_____

Section 6

Now I would like to ask you some questions about your family and friends.

27) a. What is your marital status at the present time?

1. _____ Married
2. _____ Widowed
3. _____ Divorced/Separated
4. _____ Never married

(IF PRESENTLY MARRIED, MARK "YES" IN BOX BELOW, OTHERWISE MARK "NO")

b. SPOUSE: 1. _____ Yes
2. _____ No

Subject #

28) Do you have children?

0. _____ None

_____ Yes

(IF YES, ASK:)

What are the names of your children? (LIST ONLY LIVING CHILDREN)
(RECORD FIRST NAMES BELOW, MARK S FOR SON, D FOR DAUGHTER)

FIRST NAME

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

Let's talk about your visitors.

(IF SOME OF THE FOLLOWING QUESTIONS ARE ANSWERED BY "DAILY" OR "WEEKLY", MAKE A NOTE OF SUBJECT'S ANSWER AND THEN SCORE UNDER THESE GUIDELINES: COUNT 30 DAYS IN ONE MONTH, 365 DAYS IN ONE YEAR, AND 4 WEEKS IN ONE MONTH, 52 WEEKS IN ONE YEAR.)

29) During the past week, how many times did people come to visit with you?

_____ Times

30) Please estimate how many times during the past year people have come to visit with you.

_____ Times

(PROBE:) Does someone come on your birthday or during the holidays? (IF NO VISITORS AT ALL, SKIP NEXT QUESTION AND ADJUST PHRASING OF SATISFACTION QUESTION)

31) Who are the people coming to visit you?
(RECORD FIRST NAME AND RELATIONSHIP - USE LIST ON LAST PAGE OF THIS INTERVIEW SCHEDULE)

(PROBE: Is there anyone else who visits you?)

_____ No. of Visitors

32) How satisfied are you with the visits you receive? Look at this card (SHOW SATISFACTION CARD) and tell me which number best describes your satisfaction. Is it

(READ CHOICES ALOUD AND CIRCLE NUMBER INDICATED BELOW)

0. 1. 2. 3. 4.

33. How great is your need for visitors? Look at this card (SHOW NEED CARD) and tell me which number best describes your need. Is it

(READ CHOICES ALOUD AND CIRCLE NUMBER INDICATED BELOW)

0. 1. 2. 3. 4.

34) Are there problems with receiving visitors?

0. _____ No

1. _____ Yes

Please specify:_____

_____

35) During the past week, how many times did you leave the nursing home either to visit with someone or to go on an outing?

_____ Times

36) Please estimate how many times during the past year you left the nursing home for a visit or an outing?

_____ Times

(PROBE: Does someone take you out on your birthday or during the holidays)

(IF NO OUTINGS AT ALL, SKIP NEXT QUESTION AND ADJUST PHRASING OF SATISFACTION QUESTION)

Subject #

37) I would like you to tell me about the people who take you on outings. Are they the same people that visit with you?

(ADD NAME AND RELATIONSHIP OF NEW PERSONS TO LIST ATTACHED TO END OF INTERVIEW SCHEDULE)

_____ No. of people who take resident on outings (MAY BE SAME PEOPLE WHO VISIT)

38) How satisfied are you with the outings you have? Look at this card (SHOW SATISFACTION CARD) and tell me which number best describes your satisfaction. Is it

(READ CHOICES ALOUD AND CIRCLE NUMBER INDICATED BY SUBJECT)

0. 1. 2. 3. 4.

39) How much do you want to go on outings? Look at this card (SHOW NEED CARD) and tell me which number best describes your need for outings. Is it

(READ CHOICES ALOUD AND CIRCLE NUMBER INDICATED BY SUBJECT)

0. 1. 2. 3. 4.

40) Are there any problems with outings?

0. _____ No

1. _____ Yes

Please specify:_____

_____

41) Have you made friends with people within this nursing home?

0. _____ None

_____ Yes (RECORD NO. OF NAMES GIVEN)

(PROBE:) Is there an aide, a nurse, a minister, a volunteer, or another nursing home resident you like to talk to?

(IF NO ONE IN THE NURSING HOME - WITH OR WITHOUT A NAME - IS CONSIDERED A FRIEND BY SUBJECT, SKIP NEXT QUESTION AND ADJUST PHRASING OF SATISFACTION QUESTION)

Who are the people in this nursing home you have made friends with? (RECORD NO. OF NAMES IN YES BOX)

(ADD NAME AND RELATIONSHIP OF NEW PERSONS TO LIST ATTACHED TO END OF INTERVIEW SCHEDULE)

42) During the last <u>week</u>, how often did you talk with the people you have made friends with here?

_____ Times

43) Please estimate how often during the past <u>year</u> you talked with these friends?

_____ Times

44) How satisfied are you with the friendships within the nursing home?

Look at this card again (SHOW SATISFACTION CARD) and tell me which number best describes your satisfaction. Is it

(READ CHOICES ALOUD AND CIRCLE NUMBER INDICATED BY SUBJECT)

0. 1. 2. 3. 4.

45) How much do you want friendships within the nursing home?

Look at this card again (SHOW NEED CARD) and tell me which number best describes your need for friendships within the nursing home. Is it

(READ CHOICES ALOUD AND CIRCLE NUMBER INDICATED BY SUBJECT)

0. 1. 2. 3. 4.

46) Are there problems in making friendships within the nursing home?

0. _____ No

1. _____ Yes

Please specify:_____

_____

Subject #

47) During the past week, how many times have you participated in the social activities offered in the nursing home?

_____ Times

48) Please estimate how many times during the past year you have participated in the social activities offered in the nursing home?

_____ Times

49) Who are the people you like to see at social activities?

(ADD NAME AND RELATIONSHIP OF NEW PERSONS TO LIST IN BACK OF INTERVIEW SCHEDULE)

(PROBE:) Is there anyone else?

_____ No. of people resident likes to see at social activities (MAY BE SAME PEOPLE SUBJECT CONSIDERS FRIENDS)

50) How satisfied are you with social activities? Look at this card again (SHOW SATISFACTION CARD) and tell me which number best describes your satisfaction. Is it

(READ CHOICES ALOUD AND CIRCLE NUMBER INDICATED BY SUBJECT)

0. 1. 2. 3. 4.

51) How much do you want social activities? Look at this card again (SHOW NEED CARD) and tell me which number best describes your need.

(READ CHOICES ALOUD AND CIRCLE NUMBER INDICATED BY SUBJECT)

0. 1. 2. 3. 4.

52) Are there problems with social activities?

0. _____ No

1. _____ Yes

Please specify:_____

_____

Section 7

Let's talk about some programs for nursing home residents that are available free of charge in this community.

53) Please tell me if you have heard of these programs.

(IF SUBJECT HAS HEARD OF PROGRAM, MARK "Y" FOR YES AND "N" FOR NO IN RESPECTIVE COLUMN BELOW AND ASK:)

54) Have you used the program?

(IF SUBJECT HAS USED THE PROGRAM, MARK "Y" FOR YES AND "N" FOR NO IN RESPECTIVE COLUMN BELOW AND ASK:)

55) Was the program useful to you?

(MARK "Y" FOR YES AND "N" FOR NO IN RESPECTIVE COLUMN BELOW)

	53) HEARD OF	54) USED	55) USEFUL
1. Council on Aging-Outreach Program			
2. County's Geriatric Mental Health Services			
3. County's Family Services			
4. County's Community Services			
5. Citizens for Better Care - Ombudsman			
6. Community Council Association			
7. Lakeshore Legal Services			
8. Society for the Blind			
9. Society for the Hearing Impaired (MAEDHI)			
10. Catholic Social Services			
11. Project Compassion-Outings			
12. Red Cross Volunteers-Visitors Program			
13. Residents Council of this nursing home			

Subject #

We have just talked about programs that exist. Now I have a list of programs that could be started.

56) Which of these programs are of interest to you?

(PLACE AN X IN FRONT OF THE PROGRAMS SUBJECT FINDS OF INTEREST)

1. _____ Group discussions for residents to share feelings and give each other support
2. _____ Matching residents one-to-one and training in daily support for each other
3. _____ Classes on self-care taught by a nurse
4. _____ Project planning sessions with other residents who have similar interests
5. _____ Match volunteers one-to-one with residents to develop relationships and interests
6. _____ A cooking and baking hour where residents try out recipes and menus
7. _____ Discussion group where the daily news is presented and discussed
8. _____ Job Club - procuring small projects in the community and doing these for profit
9. _____ Travel Club - planning outings and procuring necessary resources from community
10. _____ Library Connection - residents and volunteers procure reading material from libraries
11. _____ Film Club - residents and volunteers procure films for regular showings
12. _____ Planned activities within the nursing home that involve family and friends

57) If you had to limit your choice to one new program that could be started in the near future, which one would you choose to participate in?

(CIRCLE THE NUMBER INDICATED BY SUBJECT)

58) Do you have any ideas of your own for programs that could be started?

0. _____ No

_____ Yes

Please specify:_____

_____

_____

PROBE: Anything else?

_____ ADD UP NUMBER OF PROGRAM IDEAS SUGGESTED

(PROBE: Anything else?)

59) Would you have any conditions that have to be met first before you could participate in a new program -- such as no cost, family consent, specific time etc.?

0. _____No

1. _____Yes

Please specify:_____

_____

_____

We have come to the end of the interview. Would you like to discuss some items now?

(LET SUBJECT CHOOSE WHAT TO TALK ABOUT. DO NOT BRING ANYTHING UP YOURSELF. THE NOTES YOU MADE ON THE BACK OF THE INTERVIEW SCHEDULE SERVE TO HELP SUBJECT REMEMBER POINTS HE/SHE MADE DURING INTERVIEW. REFER TO THEM NOW IF SUFFICIENT TIME IS LEFT. TAKE SHORT BUT PRECISE NOTES OF WHAT IS IMPORTANT TO SUBJECT. AVOID LENGTHY DETAILS.)

NOTES:

Thanks again for your time. I enjoyed talking with you.

Subject #

60) Social Support Providers - Network Size

	NAME	RELATIONSHIP
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		

Number of people:_____

(REGULAR CONTACT - EVEN IF ONLY ONCE OR TWICE A YEAR - BUT ONLY WHEN AT LEAST FIRST NAME IS KNOWN)

SUBJECT NAME:_____

(TEAR OFF THIS PART BEFORE ATTACHING TO QUESTIONNAIRE)

SUBJECT NO._____

VERIFICATION

DATE OF BIRTH:_____

DIAGNOSIS:_____

_____

_____

Admitted to this Nursing Home - Date:_____

METHOD OF PAYMENT:

0) OWN FUNDS:_____

1) FAMILY FUNDS:_____

2) PRIVATE INSURANCE:_____

3) MEDICARE:_____

4) MEDICAID:_____

5) OTHER:_____

Appendix G

Coding Guide

Coding Guide

Interview Schedule

Question No.	Variable Name	Code Name	File	Column	Range of Code Values	Missing Value Code
-	Subject ID-Number	SUBJ	1&2	1- 2	1-42	None
-	File ID-Number	FILE	1&2	3	1& 2	None
-	Duration of Interview in Minutes	DUR	1	4- 6	Continuous	None
-	Sex of Subject	SEX	1	8	0& 1	None
19a	Age of Subject as per Nursing Home Records	AGE	1	9-10	55-97	None
1	Ethnic Background	ETHN	1	11	1- 8	9
2	Major Occupation in Life	OCC	1	12-13	2-85	None
27a	Marital Status	MSTAT	1	14	1- 4	None
28	No. of Subjects Children	CHILD	1	15	Continuous	None
3	Months of Living in N.Home	MONH	1	18-20	Continuous	999
4	Economic Resources for Nursing Home Costs	ECON	1	22	0- 4	9
6	Physical Health 1 Self-Rating of Health	PH1	1	24	0- 4	None
7	Physical Health 2 Suffering from Pain	PH2	1	25	0- 4	None
8	Physical Health 3 Number of Major Illnesses	PH3	1	26	Continuous	None
9	Physical Health 4 Need of Medical Monitoring	PH4	1	27	0- 4	None
10	Physical Health 5 Days in Hospital during last 6 months	PH5	1	28&29	Continuous	None
11	Physical Functioning 1 Assistance for Walking	PF1	1	31	0- 4	None
12	Physical Functioning 2 Assistance for Getting In and Out of Bed	PF2	1	32	0- 4	None
13	Physical Functioning 3 Assistance when Taking Bath or Shower	PF3	1	33	0- 4	None
14	Physical Functioning 4 Use of Diaper, Catheter, Ostomy	PF4	1	34	0- 4	None
15	Physical Functioning 5 Incontinence	PF5	1	35	0- 4	None
16	Physical Functioning 6 Assistance with Dressing	PF6	1	36	0- 4	None
17	Cognitive Functioning 1 Self-rating of Memory	CF1	1	38	0- 4	None
18	Cognitive Functioning 2 Knows Day's Date	CF2	1	39	0- 4	None
19b	Cognitive Functioning 3 Knows Own Age	CF3	1	40	0- 4	None
20	Cognitive Functioning 4 Knows Name of N.Home	CF4	1	41	0- 1	None
21	Cognitive Functioning 5 Knows Date of Birth	CF5	1	42	0- 4	None

Coding Guide

Interview Schedule

Question No.	Variable Name	Code Name	File	Column	Range of Code Values	Missing Value Code
22	Mental Health 1 Something to Look Forward To	MH1	1	44	0- 4	None
23	Mental Health 2 Not Wanting to Get Up	MH2	1	45	0- 4	None
24	Mental Health 3 Keeping Mind on Things	MH3	1	46	0- 4	None
25	Mental Health 4 Shaking the Blues	MH4	1	47	0- 4	None
26	Mental Health 5 Helplessness or Hopelessness	MH5	1	48	0- 4	None
-	Verification of Age from Nursing Home Records	VERIF1	1	51&52	55-97	None
-	Verification of Number of Major Illnesses on Record	VERIF2	1	53	Continuous	None
-	Verification of Months in this Nursing Home	VERIF3	1	55-57	Continuous	None
-	Verification of Economic Resources for N.Home Costs	VECON	1	58	0- 4	None
27b+28	Spouse plus No. of Children Size of Immediate Family	FS	2	18	Continuous	None
31	Network Size 1 No. of Visitors	NS1	2	20&21	Continuous	None
37	Network Size 2 No. of Persons who Take Subject on Outings	NS2	2	22	Continuous	None
41	Network Size 3 No. of Friends in N.Home	NS3	2	23	Continuous	None
49	Network Size 4 No. of Persons to See at Social Activities	NS4	2	24	Continuous	None
60	Total Network Size Total No. of Persons for Social Interactions Considered in this Study	NSTOTAL	2	25&26	Continuous	None
29	No. of Visits Received during past Week	SIW1	2	28&29	Continuous	None
35	No. of Outings Undertaken during past Week	SIW2	2	30	Continuous	None
42	No. of Talks with Friends within N.Home during past Week	SIW3	2	31	Continuous	None
47	No. of Social Activities during past Week	SIW4	2	32&33	Continuous	None
30	No. of Visits Received during past Year	SIY1	2	35-37	Continuous	None
36	No. of Outings Undertaken during past Year	SIY2	2	38-40	Continuous	None

Coding Guide

Interview Schedule

Question No.	Variable Name	Code Name	File	Column	Range of Code Values	Missing Value Code
43	No. of Talks with Friends within N.Home during past Year	SIY3	2	41-43	Continuous	None
48	No. of Social Activities during past Year	SIY4	2	44-46	Continuous	None
32	Satisfaction with Visits	S1	2	48	0- 4	None
38	Satisfaction with Outings	S2	2	49	0- 4	None
44	Satisfaction with Friendships within Nursing Home	S3	2	50	0- 4	None
50	Satisfaction with Social Activities	S4	2	51	0- 4	None
33	Need for Visitors	N1	2	53	0- 4	None
39	Need for Outings	N2	2	54	0- 4	None
45	Need for Friendships within Nursing Home	N3	2	55	0- 4	None
51	Need for Social Activities	N4	2	56	0- 4	None
56	Interest in New Programs Suggested to Subject	NP1	2	59	0-12	None
58	Subject's Own Ideas for New Programs	NP2	2	60	Continuous	None

Appendix H

Correlation Matrix for Physical Health Scale

Correlation Matrix for Physical Health Scale

	PH1	PH2	PH3	PH4	PH5
PH1	1.00000				
PH2	.40016	1.00000			
PH3	.33553	.21262	1.00000		
PH4	.32357	.14963	.20702	1.00000	
PH5	.30213	.21506	.20130	.46842	1.00000
Corrected Item-Total Correlation	.51797	.35281	.34428	.42416	.44059

Reliability Coefficient Alpha = .66209

PH1 = Self-rating of health
PH2 = Suffering from pain
PH3 = Major illnesses
PH4 = Need for medical monitoring
PH5 = Hospital days

Appendix I

Correlation Matrix for Physical Functioning Scale

Correlation Matrix for Physical Functioning Scale

	PF1	PF2	PF3	PF5	PF6
PF1	1.00000				
PF2	.68574	1.00000			
PF3	.49188	.31835	1.00000		
PF5	.23704	.32579	.15558	1.00000	
PF6	.57305	.82605	.34536	.38317	1.00000
Corrected Item-Total Correlation	.67356	.74510	.41336	.34027	.73284

Reliability Coefficient Alpha = .79326

PF1 = Ability to walk
PF2 = Ability to get in and out of bed
PF3 = Ability to take bath or shower
PF4 = Use of diaper, catheter, or ostomy (only used to score continence)
PF5 = Continence
PF6 = Ability to dress

Appendix J

Correlation Matrix for Cognitive Functioning Scale

Correlation Matrix for Cognitive Functioning Scale

	CF1	CF2	CF3	CF4	CF5
CF1	1.00000				
CF2	.39811	1.00000			
CF3	.15731	.45422	1.00000		
CF4	.30905	.63656	.19304	1.00000	
CF5	.06680	.49702	.52933	.33732	1.00000
Corrected Item-Total Correlation	.30546	.74085	.45780	.51525	.49663

Reliability Coefficient Alpha = .73592

CF1 = Self-rating memory
CF2 = Knowing the day's date
CF3 = Knowing own age
CF4 = Knowing name of nursing home
CF5 = Knowing date of birth

Appendix K

Correlation Matrix for Mental Health Scale

Correlation Matrix for Mental Health Scale

	MH1	MH2	MH3	MH4	MH5
MH1	1.00000				
MH2	.38561	1.00000			
MH3	.19084	.20695	1.00000		
MH4	.36231	.53697	.21885	1.00000	
MH5	.29604	.55900	.45293	.57708	1.00000
Corrected Item-Total Correlation	.40925	.58980	.34822	.59261	.67482

Reliability Coefficient Alpha = .75291

MH1 = Finding something to look forward to
MH2 = Not wanting to get up in the morning
MH3 = Trouble keeping mind on things
MH4 = Trouble shaking the blues
MH5 = Helplessness or hopelessness

Appendix L

Correlation Matrix for Satisfaction Scale

Correlation Matrix for Satisfaction Scale

	S1	S2	S3	S4
S1	1.00000			
S2	.10825	1.00000		
S3	.52726	.16716	1.00000	
S4	.08862	.11085	.34732	1.00000
Corrected Item-Total Correlation	.35123	.17403	.54787	.25480

Reliability Coefficient Alpha = .53719

S1 = Satisfaction with visits
S2 = Satisfaction with outings
S3 = Satisfaction with friends within nursing home
S4 = Satisfaction with social activities

Appendix M

Correlation Matrix for Need Scale

Correlation Matrix for Need Scale

	N1	N2	N3	N4
N1	1.00000			
N2	.39668	1.00000		
N3	.27019	.12044	1.00000	
N4	.28450	.28250	.34754	1.00000
Corrected Item-Total Correlation	.44844	.36480	.33254	.42759

Reliability Coefficient Alpha = .61297

N1 = Need for visits
N2 = Need for outings
N3 = Need for friends within nursing home
N4 = Need for social activities

Appendix N

Correlation Matrix for Network Size

Correlation Matrix for Network Size

	NS1	NS2	NS3	NS4
NS1	1.00000			
NS2	.48899	1.00000		
NS3	.04551	.27294	1.00000	
NS4	-.01873	.09129	.66539	1.00000
Corrected Item-Total Correlation	.26828	.50182	.34273	.21613

Reliability Coefficient Alpha = .49678

NS1 = Visitors
NS2 = People who take resident on outings
NS3 = Friends within nursing home
NS4 = Friends at social activities

Appendix O

Correlation Matrix for Social Interaction

Correlation Matrix for Social Interaction

	SIY1	SIY2	SIY3	SIY4
SIY1	1.00000			
SIY2	.12985	1.00000		
SIY3	.22889	-.00425	1.00000	
SIY4	-.04088	.06284	.30651	1.00000
Corrected Item-Total Correlation	.16657	.10025	.33953	.14910

Reliability Coefficient Alpha = .32392

SIY1 = Visits
SIY2 = Outings
SIY3 = Talk to friends within nursing home
SIY4 = Social activities