To the Graduate Council:

I am submitting herewith a dissertation written by Elaine Baldwin Johnson entitled "HOME VISITATIONS BY TRAINED VOLUNTEERS: EFFECT ON THE STATUS OF ISOLATED CLIENTS IN HOME HEALTH CARE." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Educational Psychology.

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HOME VISITATIONS BY TRAINED VOLUNTEERS: EFFECT ON THE STATUS OF ISOLATED CLIENTS IN HOME HEALTH CARE

A Dissertation

Presented for the

Doctor of Education

Degree

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DEDICATION

This dissertation is dedicated to my parents with love and everlasting appreciation for their constant support in my educational endeavors.

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ABSTRACT

This study evaluated the effect of home visitations by trained volunteers on the health status of isolated clients in home health care. The effect on health status was evaluated quantitatively and descriptively in terms of the Federally mandated goal of home health care, "...to preserve present capabilities and prevent further deterioration." The Client Assessment Scale was used as the dependent variable for the quantitative component. A questionnaire, completed by home health nurses, and feedback from group meetings with nurses and volunteers were used to gather descriptive information.

Three groups of clients were studied: (1) experimental (n=8), (2) control-for-involvement (n=7), and (3) no-visit control (n=10). A Median Sign test for correlated samples was used to test for significance between the pre- and post-intervention health status ratings of the clients under study. A Kruskal-Wallis One-Way ANOVA was used to conduct a comparison among groups on both pre- and post-intervention health status ratings. A Median Sign test for independent samples was used to determine specifically which groups differed.

No significant differences were found between pre- and post-intervention health status for clients in the experimental or no-visit control groups. Significant differences were found in the areas of sociability, cluster III, and total score for the control-for-involvement group. No significant differences were found between groups on the pre-intervention ratings. A significant difference was found in sociability on the post-intervention between-groups comparison. In the area of sociability both the experimental and control-for-involvement groups were significantly higher than for the no-visit control group. No difference on sociability was found between the experimental group and the control-for-involvement group. Information from questionnaires and group meetings was consistent with quantitative findings.

The study demonstrated that volunteer visitations by trained volunteers and by volunteers who involve clients in activities are beneficial to the sociability status of isolated clients in home health care. It is concluded that volunteer visitations may, by improving client sociability, be an effective strategy for increasing the length of time clients are able to remain in their own homes rather than being hospitalized or placed in a nursing home and thereby lower the overall cost of health care.

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CHAPTER I

INTRODUCTION

Background

Home health care is provided with the intent of reducing the number of costly hospitalizations and preventing premature institutionalization. The goal of home health care and the standard by which it is evaluated is, "...to preserve present capabilities and prevent further deterioration" (Code of Federal Regulations, Medicare/Medicaid Guidelines, [CFR] 1990). The attainment of this goal, on a client-by-client basis, allows individuals to remain at home who would otherwise be hospitalized, placed in a nursing home or other costly institution. There is, however, an existing factor among a number of clients in the home health care setting which may serve to mitigate against the initial or continued achievement of this goal. That factor is social isolation, that is, living alone with little or no social support or social contact. Leake (1992) and Williams, E., Regional Director, Visiting Nurse Home Health Services, Detroit (Personal communication, November 6, 1992) each believe that social isolation is a major obstacle to achieving the goal of

home health care consistently and, in fact, may make it impossible. It is not presently known how many home health care clients are living in virtual isolation. It is known there are currently over 101,000 clients served by home health agencies throughout Tennessee. Of that number seventy-six per-cent (76%) are over 65 years old and seventeen percent (17%) are over 85 years old (Joint Annual Reports for Home Health Care, 1992).

Of the 450 clients served by a multi-county East Tennessee home health agency in 1992, 135 were known to be living in social isolation (Leake, 1992). If this information is reflective of the entire state, then there may be as many as 33,000 clients in Tennessee who are living alone in isolated conditions.

Social isolation and living alone are closely associated with the development of low morale, poor health and a consequent increased risk of institutionalization (Bennett, 1980). While typically associated with living alone, social isolation and loneliness may occur in those who live with others (Calsyn, Munson, Peaco, Kupferberg, & Jackson, 1984). Steinback (1990) found that living alone or with someone other than a spouse increases the likelihood of institutionalization.

Social isolation predisposes to loneliness and loneliness is inexorably destructive, both physically and psychologically (Ryan & Patterson, 1987);(Turnstall, 1966). Loneliness has been found to correlate positively with depression, anxiety and multiple psychosomatic illnesses (Berg, Melstrom & Person, et. al., 1981). Social isolation is known to be related to poor eating patterns which are significant causes of physiological deterioration in the elderly (The Nutrition Screening Initiative, 1991).

Peplau (1982) defines loneliness as "the inability to do anything while alone." Loneliness is often accompanied by a sense of hollowness, emptiness, emotional pain and generalized discomfort (Austin, 1989) (Ryan & Patterson, 1987). In the elderly this leads to impatience, irritability, low levels of activity, aimlessness, disinterest in communicating and in listening to others (Austin, 1989). A composite of any or all of these feelings in a client may result in a loss of interest in health-related behaviors and cause a lack of participation in the medical plan of care. Thus, social isolation may virtually negate the home health agency's efforts to meet its patient care goal and it may actually foster the more socially undesireable and costly alternative of having to institutionalize the client. In light of these facts, one

may fairly postulate the need for preventing or reducing social isolation and its pervasive implications.

In a broader context, sharp increases in nursing home occupancy rates are costing the state of Tennessee millions of dollars yearly. State and local experts on aging have concluded this is due largely to a lack of services designed to allow the elderly to stay in their own homes rather than in institutions. Moreover, most elderly people prefer to stay in their homes and feel that being cared for at home improves the quality of their lives. Clearly, cost-effective strategies for making home care a more viable option for Tennesseans should be developed and tested (Wilkinson, 1993).

A review of the literature does not suggest that the social and economic values of using volunteers in a home health setting has been adequately investigated or evaluated. Moreover, Furstenberg (1985) has concluded that the effect of interactions with others on the actual health behavior of older adults warrants investigation.

Problem Statement

Volunteer services are used in a variety of health care settings. However, there is a void in the literature with regards to the efficacy of volunteer services within the home

health care segment of the health care industry. Therefore, the purpose of this study was to evaluate the effect of home visitations by trained volunteers on the health status of clients who are recipients of professional home health care services.

Research Question

The major conceptual question for research is: can visitations by volunteers trained in communications skills positively affect the health status of isolated elderly clients of home health agencies when evaluated against the goal of home health care?

Definition of Terms

Communication Skills

Communication skills are defined as the basic skills of active listening, reflecting feelings, showing empathy and focusing on client needs as expressed by the client. Special techniques for communicating with the client who is hard of hearing and/or who has limited vision are also included in the definition.

Isolated Client

An isolated client is defined as a client in the home care setting who lives alone or with others, in social isolation and with little or no social support.

Social Isolation

Social isolation is defined as; "the absence of specific role relationships which are generally activated and sustained through direct face-to-face interaction"(Bennett, 1980).

Little or no social support

Little or no social support is defined as the virtual absence of available people upon whom the client could rely and who would naturally communicate that they love, value and care about the client (O'Donnell,1992).

Client Health Status

Client health status is defined as the level at which the client meets the goal of "preservation of present capabilities and prevention of further deterioration," as assessed against items which indicate the degree of attainment of that goal.

Significance of the study

Living alone in social isolation predisposes elderly clients in home health to behaviors which lead to a deterioration of their health status. This operates against the achievement of the goal of home health. In turn this increases the cost of care in the home as well as leading to premature institutionalization. The results of an investigation of the effects of trained volunteers on client health status can provide the home health care industry with preliminary information which will be useful in longitudinal and other research designs as they ask and seek answers to questions such as:

1. Can a companionship visitation program decrease the number of skilled nursing visits needed by isolated clients?
2. Are there discreet areas within overall client health status in which volunteer visitors can make a difference which is significant enough to allow professional care to be concentrated in other areas of essential need?
3. How often do clients actually create or fake the need for additional professional visits in order

to have human contact? Can volunteer visiting diminish this behavior and thereby reduce home health and other outpatient health care costs (i.e., physician visits, medications, etc.)?

4. Can a visitation program decrease the number of hospitalizations and decrease the rate at which clients are institutionalized in nursing homes or other institutions?
5. Would it be cost-effective in a larger economic context to develop a new paraprofessional which would provide visitation to clients while at the same time adding jobs to the economy?
6. Could such a volunteer program interface with the current proposal for developing a multi-faceted "domestic Peace Corps" initiative?

The findings of this study may indicate a distinct and important role for the professional counselor in home health care. The professional counselor may be needed to train, deploy and supervise volunteers, and/or train altogether new paraprofessionals in the delivery of visitation services to clients. This would enable the counselor to use professional skills in an expanded fashion, benefiting large numbers of individuals directly and indirectly and at the same time establish and define a significant province for the

professional counselor within the growing home health care industry.

This study is consistent with the national goal of developing means of controlling the explosion of health care costs. The results may stimulate further exploration of the potential of trained volunteers in reducing the inordinate cost of delivering health care to the elderly and others in the home-bound community.

Limitations of the Study

The following limitations of this study could have affected the results:

1. The study was geographically limited. All subjects were drawn from the East Tennessee region.
2. The nurses who rated client health status were aware of the intervention plan. Nevertheless, to assure objectivity, client health status ratings were based on current assessment data from the client's chart. Information on charts must be accurate. It is used to plan client care and and to determine third party payment. To further safeguard the accuracy and objectivity of the client health status ratings, nurses were reminded verbally and in writing of the

importance of objectivity in data collection (see Appendix A). Therefore, the likelihood of bias was minimal.

CHAPTER II

REVIEW OF THE LITERATURE

Background

Volunteer visitation programs date back to 1869 when the Friendly Visitor program was founded in London. The purpose of the program was to increase morale and well-being and prevent premature institutionalization of the isolated elderly. Programs of this type are in operation in a number of communities in the United States today (Mulligan, 1980);("Rx. Take one," 1992-93). Typically the volunteer provides a social relationship on a regular basis which includes providing companionship, social stimulation and a listening ear (Korte & Gupta, 1991);(Mulligan,1980). Hillman (1987) concluded, that friendly visiting by volunteers can be a valuable source of emotional and social support for elders. Volunteer visitation programs for the elderly usually focus on clients in the home or the nursing home. Little controlled evaluation of these programs has been done. (Korte & Gupta, 1991). Studies of volunteers in the home have not been specific to the home health care client. Most of the

reported studies of volunteer visiting programs support their effectiveness.

Volunteer Visitations for the Isolated Elderly

There is a paucity of published empirical evaluations of volunteer visitation programs for the isolated elderly in the home. The few available evaluations have focused mainly on mental health outcomes without concomitant assessments of their effect on physical health status. Moreover, the studies have focused on elderly in the community generally, not specifically on clients in home health care.

The effectiveness of friendly visitor programs in increasing life satisfaction for the non-institutionalized community elderly was evaluated in two studies by Calsyn, et.al., (1984). Findings of the first study indicated no difference between face-to-face visiting, phone visiting, and a no-treatment control. The second study showed that a personal history approach to visiting is only marginally more effective than a companionship approach. The investigators attributed this to the more reciprocal visitor-client relationship associated with the personal history approach. They assert that clients in a visitation program generally

stand to benefit from higher levels of relational reciprocity.

A friendly visitor program in Wake County, North Carolina was designed to strengthen the social networks of isolated elderly in the community. In this program the volunteers were "network builders" who functioned to facilitate the development of new personal ties and to strengthen old ones. The goals of the program were to improve client well-being and delay the onset of institutionalization. In an experimental design, the program was compared to a regular friendly visitor program. The client population was comprised of widowed, divorced or separated elderly who were 60 years of age or older and non-institutionalized. The evaluation was conducted at the end of six months. Morale was measured by the Philadelphia Geriatric Center Morale Scale; happiness by Bradburn's Affect Balance scale; and fulfillment of relational needs by Brandt and Weinert's Personal Resources Questionnaire. A self-rated health status was also obtained. The results showed a slight increase in morale and happiness, a slight increase in relational needs fulfillment scores and a slight decline in self-rated health status. There was no discussion as to the effect of the program on institutionalization rates (Korte & Gupta, 1991).

A volunteer program for the frail elderly was implemented in rural Southwestern Pennsylvania. Volunteers could select a variety of tasks but most chose friendly visiting and telephone reassurance. There was no controlled evaluation of the project. Nonetheless, the conclusion is reached that such a program may have value in reducing the rate of decline of the homebound elderly (Young, Goughler & Larson, 1986).

A comparison of two interventions with the elderly performed by volunteers was conducted in New Zealand. One group of volunteers used structured activities while the other group merely befriended the subject. The mental health status of the subjects, as measured by a 12-item version of the General Health Questionnaire was used as the dependent variable. Slight improvements were found in both groups, however, no significant differences between groups were found (du Villier, Holmes & Witten, 1985).

Mulligan (1980) reports on an evaluation of a friendly visitor program conducted on the West Side of New York City in the Fall of 1971. The evaluation was designed to determine the effects of the program on the behavior patterns of community based, isolated elderly people. The sample consisted of 24 persons 65 years of age or older. The sample was divided into an experimental and a control group. Hour-

long visits were made by a team of two visitors once every other week for six months for a total of twelve visits. Behavioral improvement was found in the areas of personal appearance and condition of the home. At six-months follow-up none of the experimental group had been institutionalized. Three subjects from the control group were found in nursing homes.

A volunteer visitor program has been implemented within the Supportive Elder Intervention Services (SEIS) of the Visiting Nurse Association (VNA) of San Antonio, Texas. The impetus for the program was a combination of, (1) increasing needs for home care services which promote prolonged independence, (2) a deficiency of funds for services to the elderly, and (3) a shortage of qualified health care personnel. The SEIS program provides care management, homemaker and home health aide services, and coordinated community referral services. The volunteer visitor program focuses on clients who are at risk for unnecessary deterioration due to chronic conditions common to the frail elderly. The program was designed for the volunteer to function as an extension of the nurse care-manager. The responsibility of the volunteer is to observe, assess, record, and report on the current status of the clients. Volunteers provide neither care nor services.

Volunteers within the SEIS program visit at least every 90 days and telephone clients at least twice monthly. Volunteers seek to obtain information about how the client feels, what problems or concerns are identified, and how the individual is responding to care. Volunteers are chosen on the basis of, (1) empathy with the elderly, (2) listening skills, (3) telephone skills, (4) patience, (5) friendly personality, (6) ability to furnish his/her own transportation, and (7) willingness to commit to at least ten hours of service each month.

Volunteers receive approximately eight hours of training. Training includes orientation to agency policies and practices, advice on behaviors to protect the patient and the volunteer, confidentiality, and use of forms for assessment and reporting. Initial volunteer visits are supervised by a volunteer coordinator. A future evaluation of the program is to include: (1) goals, objectives, policies and procedures; (2) overall performance of personnel; (3) data collection and reporting instruments; (4) overall performance of personnel; (5) orientation and training procedures; and (5) data collected from surveys, reports, questionnaires and interviews (Shugart, 1992).

Williams, E. (Personal communication, November 6,1992) states that there are several companionship visiting programs

in the mid-west which provide visitation services for the elderly in home health care but that none are being evaluated against the goals of home health. Howard, A., Executive Director, American Federation of Home Health Agencies (Personal communication, November 5, 1992) states that she is unaware of any programs conducting such an evaluation. Both believe this type of evaluation is needed and could provide information which would be useful in determining appropriate levels of home health care intervention for homebound, isolated elderly clients.

No data-based studies on the effects of volunteer visitations for clients in home health care were found. Evaluations and reports of home visitations with community elderly suggest the likelihood of a positive relationship between volunteer visitations and improvements in morale, happiness and general behavior. It has not been proved that volunteer visitations positively affect physical health or that they lower institutionalization rates.

Volunteer Visitations in Nursing Homes

Higher morale, better health (Shulz, 1976), and improved cognitive functioning (Reinke, Holmes & Denny, 1981), have all been studied and found to be associated with

programs of volunteer visitation in nursing homes. Denny (1988) later concluded there was no effect of a friendly visitor program on cognitive functioning.

Nagel, Cimbolic and Newlin (1988) found a decrease in depression as a result of volunteer visitations in nursing homes. A descriptive study of the perceived effects of friendly visitation on the social well-being of elderly nursing home residents sugggested that friendly visitors might help residents to maintain a sense of continuity and thus help to diminish the negative effects of institutionalization (Schromm, 1992).

Green and Hewitt (1987) studied the effects of exhortation and scheduled visits by volunteers on the psychological well-being of institutionalized elderly persons. Exhortation involved instructing and encouraging the client to exercise more personal control in areas such as social activities, room arrangement, and use of free time. Visits of 30 minutes duration were conducted twice a week for three weeks. The investigators concluded that scheduled visits are effective in improving the psychological well-being of institutionalized elderly individuals but are not enhanced by the addition of exhortation. The greatest improvement occurred when there were scheduled visits with no exhortation.

Recent evaluations of client satisfaction with volunteer programs in nursing homes generally have been positive (Moss and Pfohl, 1988) (Ozminkowski, Supiano and Campbell, 1991). Nevertheless, a potential problem has been cited. Visitations which have low levels of client involvement have been associated with rapid post-visitation declines in overall client health status. On the other hand, a high level of active, direct client involvement is associated with good results, long-term. Therefore, a high degree of client involvement is recommended. Clients need to be involved in planning and scheduling visits and in determining an appropriate time and approach for the termination of the visiting sequence. Such involvement helps assure that visitations will not inadvertently trigger a subsequent decline (Hammerlie & Montgomery, 1987).

In general, evaluations of volunteer visitations to clients in nursing homes have shown positive effects on client psychological well-being. Benefits to clients tend to be more lasting, however, when clients are highly involved in the visitation plans and procedures.

Home Visiting in Child and Family Services

A survey of home visiting programs serving families with children ages birth to three indicates that the majority of services are provided by individuals who have a relatively large amount of professional training. Few programs depend entirely on paraprofessionals for service. Most programs provide some combination of professional and paraprofessional visitors. It is noted that a strong need for research exists in this area (Roberts & Wasik, 1990).

Pet Visitations

Beck and Katcher (1984) reviewed the literature on pet-facilitated therapy in general. They concluded that the studies, in aggregate, showed that pets produced only small therapeutic gains or had no effect at all on clients. More recently, Savishinsky (1992), reported that the research in pet-facilitated therapy indicates positive outcomes such as increased sociability, increased animation, better morale, and fulfillment of the need to nurture and to be nurtured.

A study by Hendy (1987) compared the relative benefits to nursing home residents of three types of visiting

programs, (1) people-alone, (2) people-plus-pets, and (3) pets-alone. Observations were recorded on residents' behaviors of talking, smiling, ambulation and alertness. Residents were brought together in the facility lounge for the visits. Visits lasted one hour. The types of visits were rotated. Observations were made four days a week for four weeks. The study demonstrated that people-alone visits produced the most social behaviors. All types of visits tested were found to increase alertness in comparison to the control group. Alertness and smiling, however, were the only behaviors found to be increased by the pet-alone condition.

Wallace and Naderman (1987) evaluated the effects of pet visitations on eight ambulatory nursing home residents who were confined to their own rooms. The study was conducted over an eight week period. Three behavioral measurements were taken, (1) The Memorial University of Newfoundland Scale of Happiness (MUNSH), (2) a Daily Attitude Index, and (3) and 18-item questionnaire which was completed daily by the nursing staff. The questionnaire included measures of social interactions, attitude, and well-being (e.g., eating habits, activity level). The results showed that neither the Daily Attitude nor the MUNSH were affected by pet visitations. The nurses' scale, however, showed increases in well-being and attitude which were maintained throughout the visitation

period. Increases in social activity did not last beyond the time of the visits.

Neubrander (1987) interviewed nursing home residents about their responses to weekly pet visitations. Eighty percent of those interviewed noted more advantages than disadvantages to the pet visitations.

Overall, the positive effects of pet visitations on nursing home residents appear to be minimal. Although nursing home residents seem to enjoy pet visitations studies tend to show that visitations by people are more beneficial.

Peer Counseling

Considerable experience in the use of trained lay volunteers exists within the area of peer counseling. Nevertheless, the outcome evaluations of peer counseling are meager. Most of the information consists of descriptive reports of various peer counseling programs (Bratter & Freeman, 1990).

Early studies on peer counseling provide compelling evidence of its effectiveness. A review of a cross-section of studies supports the conclusion that paraprofessionals can contribute meaningfully to client improvement. Paraprofessionals have been found to achieve a level of

therapeutic effectiveness only slightly below that of experienced counselors and can be just as effective as professionals in promoting positive client change over relatively short periods of time (Brown, 1974);(Karlsruher, 1974).

Prominent among the early studies of peer counseling are those of Carkhuff and Truax (1965), Poser (1966) and Rioch, (1966). Carkhuff and Truax (1965) found significant improvement in hospitalized mental health patients treated by lay counselors. Poser (1966) found that patients in group therapy conducted by untrained undergraduate students had slightly better outcomes than those in groups conducted by psychiatrists and social workers. Rioch (1966) trained forty-year-old nonprofessional women to perform psychotherapy with positive results. The performance of the women in this study was nearly commensurate with that of experienced professional therapists.

The counseling services provided by peer counselors differentiate peer counseling from friendly visitor or companion programs. Peer counseling programs typically are developed on the assumption that training volunteers in accurate empathy, warmth and genuineness produces an increase in the ability of the volunteer to be therapeutic. Peer counseling requires the counselor to use the techniques of

active listening and constructive response to help clients with their concerns (Kirkpatrick & Patchner, 1987). Peer counselors may function as advocates and role models as well as performing a counseling function. Most peer counseling takes place in agencies, not in the home (Bratter & Freeman, 1990).

The Volunteer Counseling Service of Rockland County, New York provides an example of a successful peer counseling program. Counseling is provided for battered women, teenagers, parents of teens, people with marital problems, people with reactive depression and families experiencing divorce or illness. Caregivers of the elderly, people with reactive anxiety, abusive parents and those struggling with issues of aging also receive peer counseling. Volunteers are trained in the techniques of listening and clarification. They are taught the importance of being viewed as a role model. Training also includes basic casework skills, child and adolescent development, counseling techniques and role playing. Client success is defined on a continuum from modest growth to definitive life changes. Program assessment indicates that the volunteers provide effective assistance to clients (Golden, 1991).

A peer counseling program in Broome County, New York focused on training older adults as peer counselors. The

training included skills such as minimal encouraging, restatement, reflection of feelings, clarification, non-verbal referents, confrontation, self-disclosure and direct guidance. The training in this program consisted of 20 hours of classroom instruction plus a ten-week supervised practicum. The effects of the program were judged to be positive based on the opinions of staff supervisors (Hoffman,1983).

Older adult paraprofessional peer counselors were used sucessfully in the Senior Services Program (SSP) of the Neighborhood Outreach Program (NOP) in a low-income area of San Diego, California. The peer counselors were trained in social gerontology, information and referral, interviewing, counseling, developing social networks, and utilizing outreach and advocacy techniques. Several factors appeared to underlie program success: (1) increased identification of seniors most in need of services; (2) use of peer counselors who were able to relate to the problems of aging; (3) making use of the client's self-help skills by involving them in problem-solving; and (4) helping clients expand their social network, thus reducing dependence on professional social services (Toseland, Decker, & Bliesner, 1979).

Family Service America provides peer counseling for the elderly through programs within its member agencies. The

purpose of peer counseling with the elderly through Family Service America agencies is to maintain the individual's autonomous functioning for as long as possible. Peer counseling is reported to benefit elderly persons by helping them work through issues of loss, fear of the future, and fear of dying.

In the Geriatric Peer Counseling Project at the University of North Carolina, volunteers ages fifty-three to eighty-three provide mental health care to older persons with severe physical and emotional problems. The long-term program goals of the project are to relieve patient depression, to keep the frail elderly at home for a longer period of time than would be possible without volunteer visits, and to encourage an overall higher level of client function. A ten-week training program includes listening skills and lectures on various topics about aging and mental health. The listening skills training is based on Carl Rogers' model of non-directive counseling. Volunteers receive group and individual supervision. Initial responses to the project appear positive but definitive evaluation protocols are lacking (Grossman, Rizzolo, & Atkinson, 1992).

Peer counseling is thought to help elderly clients view themselves as worthwhile and valuable. This, in turn,

fosters better physical health in elderly clients who face issues such as illness and loss (Bratter & Freeman, 1990).

In sum, evaluations of peer counseling have indicated postitive outcomes in terms of client mental health. Peer counselors working with the elderly have been viewed as particularly effective in promoting client improvements in feelings of self-worth, independence, and overcoming fears commonly associated with aging.

Volunteerism

Overview

The field of social welfare has a long history of volunteerism. Volunteers in social welfare have performed essential service work as well as functioning as client advocates. Nonetheless, attitudes and reactions toward the use of volunteers has been ambivalent. Hence, the use of volunteers in social agencies often has been inadequate and ineffective. Social workers have not been adequately trained to work with volunteers and may be insensitive to their needs and potential contributions. Public positions, such as that taken by the National Organization of Women, have been unsupportive of volunteerism. Those arguing against the use of volunteers in social service agencies claim that low or

non-remuneration obscures the true value of the individual's contribution; that if a service is needed by the community the community should be willing to pay for it. They insist that volunteerism must supplement and not substitute for a gainfully employed work force (Salmon, 1985).

Salmon (1985) concludes that if individual older people and agencies are to benefit from volunteer programs the needs, interests and differences of the volunteers must be given paramount consideration. Means by which gratification may be perceived must be provided if volunteers are to be retained. Guidelines for attracting and retaining volunteers include:

1. The experience and background of volunteers should be matched with the opportunities to serve.
2. Group training is desirable in that it provides the volunteer with a peer group with which to identify.
3. Volunteers should be offered choices of placement and types of services in which they may participate.
4. Elaborate formal pre-training is discouraged in favor of a general orientation to the specific job assignment.
5. Volunteers should be given personalized attention by agency staff.

6. Public recognition of volunteers by the larger community is desirable.
7. The volunteer should not bear personal costs for participating, i.e., transportation and lunch should be provided.
8. Volunteers should not be turned away for lack of social or job skills.

Volunteers tend to be uninterested in busy work. Volunteer workers gain a sense of achievement when what they do is clearly related to the objectives of the organization. Paid staff and volunteers should have distinctly separate roles. Use of volunteers as unpaid staff to cover budgetary problems is discouraged.

Insights into the use of volunteers have been gained through the accumulated experiences of the community-based home visiting programs supported by the Ford Foundation in its Child Survival/Fair Start Initiative. Volunteer home visitors help improve pregnancy outcomes, infant health, and family conditions that influence child development. Lay volunteers participate in information sharing, modeling, demonstrations, providing emotional support, and joint problem-solving.

Valuable knowledge related to management of volunteer programs has been gained from the Ford Foundation

initiatives. Recommendations for program managers, in summary, are:

1. Agencies initiating home visitor programs should be aware of certain implementation problems which are particularly pressing in the start-up period.
2. It is important to define a specific and realistic role for the volunteer.
3. The skills and qualities demanded of lay workers should be identified and incorporated into a training program.
4. A supervisor who will nurture and monitor the continued development of volunteers should be provided and supervision approached from a perspective which is more educational than administrative.

It is recommended that agencies understand the dynamics of tensions which volunteers experience. Volunteers often have difficulty defining a new social role which is half-friend, half-intervenor; a role which demands conflicting purposes and relational styles. Moreover, they may be uncomfortable moving back and forth between sub-cultures. An additional consideration is that volunteers may need guidance in finding ways to build on experiences acquired through the home visiting program in a way that enables them better to

achieve personal goals in a wider society (Larner & Halpern, 1987).

Wolf (1985) calls attention to the risk of professionalization of social relationships when using lay volunteers. Professionalization is a possible unintended consequence of training and providing volunteer services within a formal professional service agency. Through an inner city program known as Project Elderly Neighbors, it was learned that lay workers who actively resisted professionalization contributed most to the individuals they were helping (Wolf, 1985).

Older adult volunteers

The literature reveals a trend toward the use of older adult volunteers to work with the elderly. This trend tends to confirm the findings of Furstenberg's qualitative study of older people's choices of lay consultants. Furstenberg (1985) defines lay consultation to mean "...discussions of health problems with people other than professionals." Her study assumes that, because of the prevalence of chronic illness in the elderly, their compliance with regimens and continuation of care are critically important. The study found that older clients talk more freely about their health problems with those of the same generation. A reluctance to talk to their children about their health problems was evident. It

appeared that gaining validation of their own experience and understanding how others have coped successfully can foster management of the illness more effectively than scientific or technical information about it.

Bolton and Dignum-Scott (1978) discussed the training and deployment of older adults as peer advocacy counselors. They recommended that training include attending behavior, open questions, paraphrasing, reflection of feelings and summarization. They asserted that, through training, the peer counselor learned to function as a positive role model and as an effective aid to client problem-solving.

A review of paraprofessional peer programs for older adult clients by Gatz, Hillman and Amaral (1984) focused on six relevant issues: (1) benefits to the helpers; (2) the range of roles for helpers; (3) recruitment, selection, and training practices; (4) helper-helpee age similarity as a factor which enhances effectiveness; (5) status of integration of programs into the mental health system; and (6) the dearth of outcome evaluations.

Benefits to the helper were identified broadly as an increased sense of usefulness and improved self-image. Helpers also tended to experience gains in interpersonal skills, expression of feelings, and ability to evaluate their own performance.

Most programs conducted broad-based recruiting in which few people were screened out. The preponderance of older adult helpers were women.

In planning paraprofessional programs care should be taken not inadvertently to exploit less powerful adults as a source of free labor and to refrain from patronizing the older adult through too exclusive an emphasis on helper benefits.

Scant attention has been given to evaluating the outcomes or the economic effectiveness of volunteer programs. Nonetheless, both are often cited as justification for program initiation.

Project SERVE, a program of volunteer service by older persons, has been described by Sainer and Zander (1971). The purpose of the project was to test the effectiveness of group methods in recruiting, placing, training and retaining older persons as volunteers. It was thought that by providing needed service in community service agencies, older adults would be more likely to maintain a sense of continued usefulness and self-respect and consequently overcome some of the loneliness that often accompanies aging. The program recruited and trained 640 volunteers in its first three years of operation and reported a seventy percent (70%) retention rate for the period. Retention is attributed to the

program's primary emphasis on the needs, interests and differences of the individual volunteer rather than on the needs of the service agency. Older adult lay volunteers have been used to provide counseling and emotional support to chronically-ill children and their parents. The use of home visitors has been reported to be a cost-effective means of providing supportive services for families.

The Family Friends Program, originally conducted in Washington, D.C., was developed to demonstrate the feasibility of recruiting, training and supervising older workers to provide supportive services to chronically-ill children and their families in the home setting. In this project, forty-one (41) volunteers, age 55 or older, visited a child at least weekly for nine months. Volunteers participated in a 50-hour, two-week training course. The visitors were trained in social and emotional support, supplemental educational tutoring, cultural and recreational activity, advocacy, and self-help skills. Evaluation of the program was conducted by interviewing the parents. Parents confirmed that children improved in sociability, physical/cognitive functioning, and schoolwork. Family behavioral changes included increased participation in clubs, organizations and churches. Attitudinal changes were also

reported. Parents verified feelings of increased self-esteem and social satisfaction.

The evaluation of the Family Friends Program indicated that older volunteers represent valuable low-cost supplements to professional care. Preliminary observations indicated that the volunteer visitors may play a role in reducing inappropriate inpatient visits and length of stay of hospitalizations (Miller & Diao, 1987).

Consistent with the ideas behind project SERVE, Salmon (1985) describes why the provision of volunteer services may be beneficial to the older volunteer. He explains that volunteers are likely to achieve increased gratification and a sense of self-worth. He perceives that a sense of belonging results from volunteer work and delays early institutionalization for those who volunteer.

Several benefits to clients and volunteers have been described in an evaluation of a friendly visiting program sponsored by the Israeli Social Security Administration. The program was based on the concept of mutual aid among the elderly. Clients experienced relief from boredom and increased morale. Volunteers gained a refurbished identity as active helpers and contributors to communal well-being (Vinokur-Kaplan, Cibulski, Spero & Bergman, 1984).

A survey by Krause, Herzog and Baker (1992) was conducted to assess the relative advantages of providing assistance to others in informal versus formal settings. The results suggested that providing support to others in informal settings contributes considerably more to the helper's sense of well-being. This appears to be related to increased feelings of personal control which is associated with lower levels of depressive symptomatology.

Training

A study conducted at Andrus Gerontology Center of the University of Southern California evaluated the acquisition of counseling skills by older adults. This study was based on earlier findings by Carkhuff and Truax which indicated that peers may be more effective than professionals because of their more intimate understanding of the problems and culture of the clients. The 15-hour training program focused on accurate empathy, nonpossessive warmth, and genuineness. Subjects were rated according to scales devised by Truax. Pre-training and post-training scores were obtained on accurate empathy, warmth and genuineness. Following the training, experimental subjects attained at least the minimum score necessary for effective counseling. The results of this study indicated that older adults can be trained in the

kinds of interpersonal skills needed for counseling (Becker & Zarit,1978).

Isquick (1981) examined the effect of empathy training on empathy, self-exploration and key attitudes in older people. It was found that the training group improved significantly on empathy as compared with two control groups. The training group was better able to rate the empathy of others, to write empathic responses and to be empathic in a helping interview. No change in attitudes was found. Nonetheless, the training group showed significant gains in self-exploration. Isquick comments that this finding tends to dispel the view that older adults are rigid and unwilling to change.

An examination of the effects of a volunteer training program on depression levels of nursing home residents showed that residents who received a volunteer counselor improved significantly in the level of depression as compared with a no-volunteer control group. Elderly and adolescent volunteers were used in the study. Both proved equally effective. Hence, this study also demonstrated that adolescents could serve as effective change agents with clients much their senior (Nagel, Cimbolic, & Newlin, 1988). This study tends to suggest that a wide range of age groups

may be effective in providing interpersonal services to the elderly.

The doctoral research of Kresken (1989) investigated the effects of peer facilitation on the life-satisfaction of nursing home residents and the relevancy of training volunteers over 55 years of age prior to visitations. The seven-hour training program included communication skills, the process of aging, and the environment of the nursing home. Residents were visited twice a week for four weeks. The Life Satisfaction Index-Z was used as the dependent variable. The results of this study suggested that peer facilitation may be effective in raising life satisfaction for nursing home residents and that training appears to improve the interpersonal communication skills of the peer visitors.

Volunteer programs for students in psychology and child development have been conducted in mental health agencies and have been successful in exposing students to clients and their problems. Students typically volunteer about 20 hours per semester and function more as companions than as therapists. The students' reactions are discussed during class time and lectures and readings are integrated with the volunteer experiences. The effect on clients is described as favorable (Scogin & Richard, 1987).

Role considerations

The role of volunteers in pet-facilitated therapy was included in the overall evaluation of the Cornell Companion Animals Program (CAP). CAP, staffed primarily by volunteers, provided weekly pet visitations to a variety of geriatric, educational and residential institutions. Individuals, in the role of volunteer, experienced positive and negative encounters, giving and receiving affection, and suffering rejection and loss. They also faced the difficult issue of how to enter into other people's space and privacy. Even though volunteers generally found the total experience to be gratifying, they described feelings of discomfort and ambiguity over personal closeness.

Some volunteers reported feelings of guilt when, for personal reasons, they were unable to make their regular visits. Others commented that adaptation to working with the elderly and/or to the nursing home environment required major adjustments. Volunteers who remained with the program long-term developed close ties with individual clients. Consequently they sometimes saw depression, deterioration and death among those to whom they had grown attached.

Recommendations about how to strengthen and improve the role of volunteers were developed from this evaluation. The recommendations include: (1) formation of an advisory council

made up largely of volunteers; (2) development of a training program which prepares volunteers more thoroughly for the variety of experiences which they encounter; and (3) organization into support groups the volunteers who visit the same facility (Savishinsky, 1992).

The literature suggests that volunteerism can be satisfying to volunteers and to clients. Volunteers, adolescents to older adults, have been trained to provide services to clients in a variety of settings with varying degrees of sucess. Both the satisfaction and success of volunteerism appears to depend heavily upon the extent to which agencies attend to the motivations, abilities, and personalities of the individuals who volunteer.

Ethical Issues in Home Visiting

There is no national home visiting organization with an established set of ethical guidelines. Nonetheless, home visitors may be confronted by ethical issues and the need to make judgement calls. Home visitors may face differences in values, customs and beliefs. They may encounter differences between clients and themselves and sometimes between themselves and their own program. In certain situations visitors may wonder whether to tell the truth and when and if

they should share information given to them in confidence. They may have questions as to how they will know when they have helped all they can and when to stop visiting.

The foremost ethical consideration for home visiting is that the clients' interests are primary. Fostering independence is important. Confidentiality is a client right. Commitment to the sponsoring agency and respectful treatment of staff and colleagues is expected.

Six guidelines based on Reamer's *Guidelines for Resolving Ethical Dilemmas* may provide a useful framework for ethical considerations in home visiting. These guidelines are:

(1) Client safety and health are more important than complete honesty.

(2) Client behaviors should be freely chosen, even behaviors which others might consider self-destructive, unless the chosen behaviors interfere with someone else's well-being.

(3) The home visitor involves necessary family members and/or professionals when needed to determine if the client is properly "informed".

(4) The home visitor observes the policies and professional guidelines of the agency and obeys the laws of society.

(5) The home visitor is obligated to violate a rule if a client's well-being clearly is in jeopardy.

(6) Prudent judgement should dictate any use of personal funds for clients.

Home visitors should be trained in ethical decision-making so they can act thoughtfully and competently when faced with ethical dilemmas. They should know how to initiate referrals and be able to determine when referral is appropriate (Bryant, Lyons & Wasik, 1990).

CHAPTER III

METHODOLOGY

Overview

The methodology was designed to yield quantitative and descriptive information about the effects of volunteer home visitations on the health status of isolated clients in the home health care environment. The data was examined and evaluated against the Federally mandated goal of home health care, "...to preserve present capabilities and prevent further deterioration" (CFR, 1990). The intervention of home visitations by trained volunteers was the independent variable. The dependent variable was the health status of the client as measured by the Client Assessment Scale (see Appendix B). The assumptions underlying this study were:

(1) The sample is random.

(2) There is a relationship between visitations by trained volunteers and client health status.

Three groups of subjects were evaluated, (1) experimental, (2) control-for-involvement, and (3) no-visit control. The following null hypotheses were tested.

H_o I. There will be no differences between the pre-intervention and post-intervention health status of clients in the experimental group.

H_o II. There will be no differences between the pre-intervention and post-intervention health status of clients in the control-for-involvement group.

H_o III. There will be no differences between the pre-intervention and post-intervention health status of clients in the no-visit control group.

H_o IV. There will be no differences between groups in pre- or post-intervention client health status.

At the end of the intervention period a questionnaire was used to obtain descriptive information from the nursing staff about the effects of the visitations on the health status of each client in the study (see Appendix C).

Procedures

Selection of client population

Thirty isolated home health clients who live alone or who have no close friends or family living in the home were

selected for the study. Clients were randomly assigned to one of three groups by drawing names with replacement. The three groups were, (1) experimental, (2) control-for-involvement, and (3) no-visit control. Clients in the experimental group were visited by trained volunteers. Clients in the control for involvement group were visited by untrained volunteers who were asked to involve the client in an activity of the client's choice. The third group of clients received no visitations other than regular nursing visits.

Two subjects in the experimental group were taken out of the study because one of the volunteers was unable to continue after the first week of the visitation period. In the control-for-involvement group one client decided not to participate and two were hospitalized. Therefore, the total number of subjects in the study was reduced to twenty-five. The configuration of the study for groups, interventions, and subjects is shown in Table 1.

Table 1

Study Configuration: Groups, Interventions, and Subjects per group

Group	Intervention	Subjects
1.Experimental	Visits by Trained Volunteers	8
2.Control-for-Involvement	Visits by Untrained Volunteers Involving Subjects in Activities	7
3.No-Visit Control	None	10

Note. N = 25

Selection of volunteers

Volunteers were recruited and selected from the East Tennessee communities served by *Your Home Visiting Nurse Service, Inc.* Volunteers were adults in good health ranging from 25 to 72 years of age. Twelve volunteers (one male and eleven females) participated in the project. Seven volunteers participated in the experimental condition; five in the control-for-involvement condition. Volunteers were approved by the executive director of the home health agency

and by the investigator. Volunteers were assigned to clients on the basis of geographical proximity.

Preparation of volunteers

Prior to beginning the visitations all twelve volunteers received a general orientation which included information about how to participate in home visitation and how to coordinate with members of the nursing staff (see Appendix D). Volunteers in the control-for-involvement condition were told to involve the client in an activity such as reading or working on crafts. Volunteers in the experimental group received, in addition to the orientation, nine hours of training in communication skills and understanding client behaviors and feelings (see Appendix E). These skills have been described in the literature as effective and appropriate in preparing nonprofessional volunteers to interact with clients in a manner known to foster positive client outcomes (Brown, 1974);(Carkhuff & Truax, 1965);(Gatz, et.al., 1984);(Isquick, 1981);(Karksruher, 1974);(Kresken, 1989);(Nagel, et. al., 1988);(Oziminkowski, et. al., 1991);(Poser, 1966);(Rioch, 1966);(Scogin & Rickard, 1987);(Savishinsky, 1992);(Toseland, et.al., 1979);(Vinokur-Kaplan, et.al., 1982).

Limits of volunteer's responsibilities

The responsibilities of the volunteers were distinctly different from those of agency staff members. Volunteers were expected only to visit and interact with the clients and were not responsible for any nursing care, chores or errands.

Role of the nursing staff

The role of the nursing staff in this study included completion of the Client Assessment Scale and completion of the post-intervention questionnaires. Members of the nursing staff were oriented to the project and to their role in it (see Appendix F). The orientation was done by the investigator.

Intervention Plan

Clients in the experimental (n = 8) and control-for-involvement (n = 7) groups were to be visited by a volunteer for a minimum of one hour per week for ten weeks. Ten of the 15 clients were actually visited fewer than the projected goal of ten visits per client.

The volunteers in the experimental group interacted with the client during the visit, using the skills presented in the training program. Volunteers in the control-for-involvement condition participated with the client in an activity, e.g., letter writing, quilting, reading aloud or going for short walks.

Intervention verification

The investigator met with trained volunteers at the end of the fourth and tenth weeks to determine the extent to which volunteers used the skills and ideas presented in the training program. Trained volunteers also kept a log in which they recorded date and time of each visit and the the use of specified communication skills (see Appendix G). Volunteers for the control-for-involvement group kept a log indicating the dates and times of visits and types of activities in which they involved the client (see Appendix H). Note: approval to tape-record communications skills used by trained volunteers could not be obtained.

Ratings of client health status

The Client Assessment Scale was used to rate the health status of each client in the study before and after the ten-week visitation period. The 15 items on the Client Assessment Scale are factors which are routinely assessed and documented on client charts by the home health nurse. A rating of "3" on an item on the Client Assessment Scale is indicative of satisfactory status. When a client falls below "3" on an item, deterioration or decline in present status may be at hand.

Client Assessment Scales were completed twice for each client in the study. The first Client Assessment Scale was

done during the week prior to the initiation of the visitations; the second one within the week following the tenth visit. The nurses completed the Client Assessment Scales from current assessment data which they had recorded on each client's chart.

Analysis of Client Assessment Scales

The Client Assessment Scale ratings for each group of clients at the beginning of the visitations was compared with the ratings for the same clients at the end of the visitations (see Appendix I). Tests for statistical significance were run on each of the 15 items on the Client Assessment Scale and on the total score for all items. Three clusters of item scores were also tested. Cluster I included activity, mobility, activities of daily living, and physical limitations. Cluster II included appetite, dietary compliance, bladder elimination patterns, and bowel elimination patterns. Cluster III included sleep patterns, alertness, lucidity, sociability, and general mental outlook.

The use of ordinal data in this study indicated the application of non-parametric statistical tests (Advanced Educational Statistics, 1991). The Median Sign test for correlated samples was used to test the first three null hypotheses; a Kruskal-Wallis One-Way ANOVA was used to test

the fourth. The Median Sign test for independent samples was used to test for significant difference between groups.

Questionnaires

Questionnaires were completed by the nurses at the end of the visitations. The questionnaires allowed the nurses to identify specific areas in which they observed client change over the time of the visitations and to provide examples which supported their observations. Questionnaires were examined to help determine whether the visitation program contributed to attaining the goal of home health, "...to preserve present capabilities and prevent further deterioration" (CFR, 1990).

CHAPTER IV

FINDINGS

Presentation

The results of the analysis of the Client Assessment Scale data are reported first. Information related to intervention verification is presented second. Third, the results of the questionnaires are summarized and finally, perceptions from volunteers and nursing staff members are reported.

Analysis of Client Assessment Scales

Approach

The analysis of the Client Assessment Scales was conducted to test the null hypotheses. Each hypothesis was tested according to: (1) each of the 15 items on the scale, (2) clusters I, II, and III, and (3) the total score for each client. The Median Sign test for correlated samples was used to test the first three null hypotheses. A Kruskal-Wallis One-Way ANOVA was used to test the fourth.

Experimental condition: H_o I

The null hypothesis for the experimental group was: there will be no differences between the pre-intervention and post-intervention health status of the clients within the experimental group. No significant differences were found between the pre- and post-intervention health status of clients in the experimental group. Therefore, the null hypothesis was not rejected. It was concluded there were no significant differences in the pre- and post-intervention health status of the clients in the experimental group. Calculated values of t ranged from 0.3536 to 1.414, $p > .05$. Results are shown in Appendix J. For data see Appendix I.

Control-for-involvement: H_o II

The null hypothesis for the control-for-involvement group was: there will be no differences between the pre- and post-intervention health status of the clients within the control-for-involvement group. Significant differences were found for: (1) sociability, $t = 1.889$, $p < .05$, (2) cluster III, $t = 3.778$, $p < .05$, and (3) for the total score, $t = 2.267$, $p < .05$. Therefore, the null hypothesis was rejected for those three items. Values of t for the other 16 areas measured ranged from 0.3779 to 0.7558. $p > .05$. Results are shown in Appendix J. For data see Appendix I.

No-visit control group: H_o III

The null hypothesis for the no-visit control group was: there will be no differences between the pre- and post-intervention health status of clients within the no-visit control group. The null hypothesis was not rejected and it was concluded there were no differences between the pre- and post-intervention health status of clients in the no-visit control group. Values of t ranged from 0.000 to 1.581, p >.05. For results see Appendix J. For data see Appendix I.

Comparison between groups: H_o IV

The null hypothesis for comparisons between groups was: there will be no differences between the three groups in pre- or post-intervention client health status. No significant differences were found between groups on any pre-intervention ratings. Values of H ranged from 0.450 to 5.017, p >.05. Results are shown in Appendix J. For data see Appendix I.

A significant difference between groups was found for sociability on the post-intervention ratings, H = 13.452, p <.01. No significant post-intervention differences were found on any of the other items or clusters or on the total scores. Values of H ranged from 0.000 to 5.849, p >.05. Therefore, the null hypothesis is rejected for the post-

intervention ratings on sociability and it is concluded that, for sociability, at least one of the groups is different. Results are described in Table 2.

Table 2

Kruskal-Wallis One-Way ANOVA for Post-Intervention Ratings on Sociability.

Subject	Experimental	Subject	Control-for-Involvement	Subject	No-Visit Control
1	4	1	4	1	2
2	3	2	4	2	2
3	3	3	5	3	2
4	3	4	4	4	1
5	4	5	4	5	3
6	4	6	3	6	3
7	4	7	5	7	3
8	4			8	2
				9	2
				10	4

Note. $H = 13.452$, $p < .01$ $df = 2$

A Median Sign test was performed to determine which groups differed. A significant difference was found between the experimental and no-visit control groups and between the control-for-involvement and no-visit control groups. No difference was found between the experimental and control-for-involvement groups. Results are described in Table 3.

Table 3

Median Sign Tests for Independent Samples: Comparison between Groups on Sociability

Comparison Between Groups	Chi Square Values
Experimental vs. Involvement	3.00
Experimental vs. No-Visit Control	8.57*
Involvement vs. No-Visit control	9.55*

*P <.01 df = 1

Summary of quantitative findings

The Median Sign test for correlated samples was applied to pre- and post-intervention health status ratings for each of the 15 items, three clusters and total scores on the Client Assessment Scale. No differences between pre-and post- intervention health status ratings were found for the experimental or no-visit-control groups. Significant differences were found for the control-for-involvement group on sociability, cluster III, and for the total score.

A Kruskal-Wallis One-way ANOVA was used to compare the pre- and post-intervention health status ratings among groups. No pre-intervention differences among groups were found. The comparison of post- intervention ratings showed

that at the end of the study at least one of the groups differed in sociability ratings. The comparisons between groups showed that the ratings for sociability for clients in the experimental and control-for-involvement groups were each higher than for those in the no-visit control. These comparisons also demonstrated that the clients in the control-for-involvement group did not differ significantly on ratings of sociability from clients in the experimental group.

Intervention Validation

Logs

Volunteers for the experimental group (n = 8) reported a total of 60 visits. Volunteers for the control for involvement group (n = 7) reported a total of 65 visits. The number of visits per subject per group is shown in Table 4. Volunteers for the experimental group visited with clients using the communication skills presented in the training program. The skills used in each visit were recorded in the Logs which the volunteers kept. The number of visits for which specified communication skills were reported by trained volunteers is shown in Table 5. Note: it is possible that a

Table 4

Visits per Subject for Experimental and Control-for-Involvement groups

Subject	Experimental Group	Control-for Involvement-Group
1	10	10
2	10	10
3	10	9
4	8	9
5	6	9
6	6	9
7	5	9
8	5	

Table 5

Self-Report by Trained Volunteers: Number of Visits in Which Specified Communication Skills were Used

Active Listening	Empathic Responding	Clarifying	Summarizing
60	38	14	34

precise differentiation between active listening and attentive listening was not made consistently by volunteers.

Volunteers for the control-for-involvement condition engaged clients in a variety of activities. The Logs kept by the volunteers showed that talking, walking, prayer/Bible study, and listening to tapes were engaged in frequently. Several other activities were reported such as sharing recipes, popping popcorn, canning, fixing curtains, and straightening clothes. Frequencies for reported activies are shown in Table 6.

Table 6

Frequencies of Activities Reported by Volunteers for the Control-for-Involvement Group

Activity	Frequency
Talking	38
Prayer/Bible Reading	13
Walking	9
Listening to Tapes	7
Reading Mail	6
Straightening Clothes	4
Looking at Pictures	3
Fixing Curtains	2
Shopping	2
Sharing Recipes	2
Quilting	1
Canning	1
Bathing Dog	1
Popping Popcorn	1

Group meetings

Group meetings were held with trained volunteers at the end of the fourth and tenth week of the study to obtain feedback about the use of the communication skills covered in the training program. At the first meeting volunteers confirmed they were using active listening and summarizing skills. Several commented that the clients liked to talk and that summarizing of conversations helped to achieve continuity of conversation and to terminate a visit graciously.

At the second meeting the volunteers still thought that active listening was the most frequently used skill. They also stated they used empathic responding. Clarification was the least used skill. Some of the volunteers said they had used the skills related to communicating with clients who had hearing difficulties. Volunteers emphasized often that most clients liked to talk a lot during the visits and that listening attentively was important.

Questionnaires

Experimental group.

Questionnaires indicated that three of the clients in the experimental group had no changes in the 15 items

measured. Five clients improved in sociability and general mental outlook but showed no changes in the other 13 areas. The changes in sociability and general mental outlook were attributed to the visitations by volunteers. The same five clients were observed to be more talkative, more cheerful and more interested in outside events. Two of them were observed to complain less, be more outgoing and less affected by boredom.

Control-for-Involvement Group

Three of the seven clients in this group improved in sociability and general mental outlook. One client improved in sociability, general mental outlook, and activity. One client improved in sociability and sleep patterns, one only in sociability. Another client improved in general mental outlook but declined in activity, mobility, and bladder patterns. All seven clients were observed to be more talkative and in better spirits. The improvement in sleep pattern was attributed to the client having someone with whom to talk out feelings of fearfulness. One of the clients was observed to take an interest in listening to audio tapes and one became more open about discussing personal concerns. The questionnaires indicated that the positive changes experienced by clients in this group appeared to be related to the visitations.

No-visit control.

Seven of the ten clients in the no-visit control group showed no change across the 15 items measured. One client experienced a decline in sleep patterns which was described as fear-related. One client declined in sociability and general mental outlook but improved in medication compliance. This improvement was attributed to the client's medication schedule being changed from four times a day to once a day.

Participant Perceptions

After all visitations were completed and data collected the investigator met with volunteers and members of the nursing staff to give them an opportunity to comment on their perceptions of the visitation project. Overall, the responses of the nurses and volunteers were positive.

The nursing staff believed that both types of visits were beneficial. They said that the visitors met a need which they themselves generally were not able to meet and that the visitations enhanced the effectiveness of professional health care. The nursing staff agreed that the clients enjoyed and benefited from the visits. They added that several clients said they wished the program would

continue. Two of the nurses thought the visits should take place at least twice a week.

Volunteers for the experimental group said that they enjoyed the visits and looked forward to them. They said the clients always seemed glad to see them. Several clients asked if they would come back to visit after the ten weeks were over. Volunteers said that when clients learned that the volunteers were not being paid they seemed especially positive about the volunteers.

Volunteers for the control-for-involvement group identified additional areas of need which they thought could be met through a volunteer program. They noted that some clients needed help with household chores and/or with transportation.

The nursing staff recommended that visitations especially be concentrated in the winter months. They observed that depression and deterioration is more likely at that time.

Volunteers for the experimental group recommended that training programs be tailored to groups of volunteers with similar backgrounds. They thought that a shorter, more concentrated program would be more convenient and more approriate for some. They thought that less experienced volunteers would require more extensive training. Volunteers

agreed that the training was useful. They noted that a major benefit of the training for them was their increased sensitivity to the importance of listening.

CHAPTER V

DISCUSSION

The purpose of this study was to evaluate the effect of home visitations by trained volunteers on the health status of isolated clients in home health care. The effect on health status was evaluated quantitatively and descriptively and related to the overall goal of home health care, "...to preserve present capabilities and prevent further deterioration" (CFR, 1990).

Interpretation of Findings

The primary research question for this study was: can visitations by volunteers trained in communications skills positively affect the health status of isolated elderly clients of home health agencies when evaluated against the goal of home health care? To help answer this question four null hypotheses were tested. The results are interpreted as follows.

H_o I

The null hypothesis, there will be no differences between pre- and post-intervention health status for clients in the experimental group, was not rejected. Although some changes were noted on the questionnaires, quantitative changes were not great enough to show significance.

H_o II

The null hypothesis, there will be no differences between pre-and post- intervention health status for clients in the control-for-involvement group, was rejected for sociability, cluster III, and for the total score. Sociability contributed to eighty percent of the variance for cluster III and to thirty-two percent of the variance of the total scores.

The lack of statistically significant differences between pre- and post- intervention health status ratings for clients in the experimental group should not be construed to mean the visitations were not beneficial. The goal of home health implies: (1) that clients who are receiving health care in the home are at a level of physical and mental health appropriate for home care as opposed to institutionalization;

and (2) that if a client does not decline or deteriorate from that status the goal is being met. Therefore, failure to improve does not mean the goal of home health care is not being achieved nor does it imply that the visits by volunteers were of no avail.

H_o III

The null hypothesis, there will be no differences between pre- and post-intervention health status for clients in the no-visit control group, was not rejected. Although there were areas of decline for this group the changes were not great enough to show statistical significance.

H_o IV

The null hypothesis, there will be no differences between groups in pre- and post-intervention health status, was not rejected for any pre-intervention ratings. It was rejected in the area of sociability for post-intervention ratings. It was not rejected for for any other areas, post-intervention.

Post-intervention sociability ratings were significantly higher for the experimental and control-for-involvement groups than for the no-visit control group. The Client Assessment Scale data indicated that the clients in the no-visit control group either declined significantly or showed no improvement in sociability. Questionnaire data and

discussion with the nursing staff indicated the differences are likely due to the volunteer visitations. Several of the nurses commented that they thought the downward trend in sociability in the no-visit control group was related to an on-going lack of an opportunity to socialize.

Sociability generally refers to the state of being friendly and agreeable in the company of others. It can help predict the general direction of overall client health. Decreased sociability is a common sign of loneliness and loneliness ordinarily is harmful to physical and mental health (Beck, Rawlins & Williams, 1988);(Bennett, 1980). Decreased sociability is a sign of stress which has been linked to increased susceptibility to cardio-vascular, gastrointestinal, auto-immune, infectious, and malignant disorders (Hall, 1993). Therefore, sociability can be a significant indicator of the probable direction of client health status and may help predict whether the client will be able to remain at home.

It can be seen from the aggregate findings of this study that volunteer visitations are beneficial to the sociability status of isolated clients in home health care. It also can be observed that none of the groups in the study declined on any ratings except sociability. Therefore, it appears from this study that home health care is successful short-term in

helping clients to meet the goal of home health care in all areas except sociability.

The long-range effects of declining sociability in isolated home health clients cannot be determined from this study. Nevertheless, previous studies indicate that declining sociability due to continuing isolation can lead to declining health status (Bennett, 1980) and increased likelihood of institutionalization (Steinback, 1990). One can conclude from this study that both general and time constraints within which home health nurses and other health professionals function do not allow them to provide clients with sufficient opportunities for socialization and interpersonal involvement. Yet, to add this responsibility to the required functions of health care professionals would be financially unrealistic. Not only would it add to the cost of care but would be an inappropriate use of scarce resources.

No significant difference was found between the experimental and control-for-involvement groups on ratings of sociability. On the other hand, the questionnaires indicated a slightly better outcome for clients in the experimental condition. Both groups shared common elements. Volunteers in the experimental group focused on listening to the client and encouraging the client to talk about their individual

concerns. Volunteers in the control-for-involvement condition involved clients in an activity of the client's choice. In both cases the client was the center of attention and was made to feel important and given a measure of control. Both factors have been associated with better health status and increased feelings of self-worth (Shulz, 1976) (Hammerlie & Montgomery, 1987).

The results of this study may be interpreted to mean that volunteer visitations positively affected the sociability of clients in the experimental group and in the control for involvement group. It cannot be concluded that one approach was significantly more effective than the other. It appears that focusing positively on the clients, their needs and concerns, is likely to be the central element for positively affecting client sociability. Moreover,the volunteers trained for this study were given only basic introductory-level content. It is conceivable that more advanced training would result in even better outcomes for clients visited by trained volunteers.

Overall the visitations were beneficial. Nevertheless, this short-term study did not demonstrate that the visitations had a significant affect on the other assessed parameters of health status during the visitation period.

Implications for Further Research

A key area for research is the relatedness of sociability, health status, and institutionalization rates for home health clients over a longer period of time. The literature suggests that relatedness is likely. Such a study could have major implications for providing directions for the total care of the elderly in home health care and in long-term care facilities.

Research relating sociability to institutionalization rates for clients in home health care is needed to help determine the cost-effectiveness of volunteer visitation programs. A related study, which measured sociability and compared it with the frequency and duration of skilled visits would also yield important data on cost-effectiveness.

A more long-term investigation of the affect of communication skills on the overall well-being of the elderly may yield useful information for planning and administering client care. Ideally, communication skills tested would be verified by tape-recording.

The Client Assessment Scale could be used to isolate specific items for further study. It could be used to determine if specific interventions effect change in discreet

areas. For example, to determine if a specific counseling technique affects clients' general mental outlook. It could also be used in nursing research; for example, to determine if a specific nursing intervention affects bladder elimination and/or sleep patterns. Conceivably, it could help identify the better types, frequency, and timing of administering certain prescribed medications.

Implications for Home Health Care

The literature supports the belief that most elderly persons prefer to remain in their own homes and feel that they have a better quality of life at home than in an institution (Wilkinson, 1993) (Antone, 1993). Based on the findings of this study it appears that home health care is effective in meeting that goal on a relatively long-term basis. The results of this study and others suggest that social isolation and declining sociability in clients may adversely affect client health status over time. An active program of volunteer visitors, trained in a variety of skills, may delay declines in sociability and possibly in certain areas of physical health and thereby increase the time clients are able to remain at home. Clearly, it can improve the client's perceived quality of life. It also

should help clients maintain a sense of self-worth, control and independence which are quickly lost in the impersonalized atmosphere of institutions.

The Client Assessment Scale may provide a useful instrument by which to monitor client care in terms of the goal of home health. It could also be used as the basis for training home health personnel to focus client assessments in a way that is universally and consistently meaningful to third party payors and fiscal intermediaries.

Recommendations

Professional counselors are prepared in counseling and communications and in the skills of training and education. Following are recommendations for ways in which counselor educators and/or professional counselors could be used advantageously by home health care agencies. Recommendations one and five are based on the statistical results of this study. Recommendations two, three, and four are observational.

1. Use professional counselors to train and manage volunteer programs and to train home health care staff to improve overall interpersonal effectiveness. Benefits of volunteer visitations to clients have been demonstrated by

this study. Further: the success of health care interventions may be determined by the "human factor" in the relationship between the professional helper and the client (Kim, 1993). Health care workers in home health may lack interpersonal skills that could enhance their efforts with clients. Hence, clients and their families may benefit more from health care workers who have additional training in communications and interpersonal relationship skills. A reduction in the overall cost of care could be expected.

2. Use professional counselors to allow the home health industry to expand its services in depth and scope for the purpose of reducing the overall cost of care. The availability of in-patient mental health services continues to diminish and the cost of these services continues to rise. Few professionals are available to provide mental health and counseling services in the home. Empirical studies have established that lay persons can be trained to provide counseling services with outcomes which equal those of mental health professionals. Counselor educators are qualified to develop and provide comprehensive training to lay volunteers who could then provide mental health services to clients in their homes at a significant and continuing cost savings. Should it be determined that a new paraprofessional should be developed to provide in-home counseling, the counselor

educator is ideally qualified to design and implement approriate training.

3. Use the home health agency environment as a training field for counselors, particularly those aspiring to certification as geriatric counselors. As more and more individuals in need of counseling will not be concentrated in institutions it may make sense to adapt training sites accordingly. Counselor educators could provide essential on-site supervision for students and interns in counseling programs.

4. Professional Counselors, especially those certified in geriatric counseling, are qualified to provide professional counseling services to home health clients and their families. Counseling services for clients and their families in the home may improve client mental health, enhance the effectiveness of medical care and help to increase the overall ability of the client to remain at home.

5. Investigate the utility of developing a program of volunteer visitations to isolated elderly as a component of a "Domestic Peace Corps" and/or as a means for college students to off-set federally sponsored student loans. Counselor educators could design and implement such programs, provide training and supervision of participants, and conduct data-based research on outcomes.

Specific measures which tend to improve the effectiveness of volunteer visitations can be identified from this study. The following recommendations are related to enhancing the outcomes of future volunteer visitation programs or studies.

1. Allow clients to select activities which are meaningful to them. According to Frankl (1962) activities, in order to foster a sense of well-being, must be important to the person who does them. This was evidenced by the success of the control-for-involvement group in which this concept was applied.

2. Provide more extensive training in communication skills. Ideally, a supervised practicum would be included.

3. Increase the total number of visits scheduled and assure that the actual visitation rate approaches ninety per cent of total. Increased numbers of visits are associated with better outcomes. Increasing the length of time of the visitation program and frequency of visits per week should be considered.

Conclusions

This study has demonstrated that isolated clients in home health care can benefit from visitations by volunteers.

Volunteers who are attentive to the interests and needs of clients can have a positive affect on client sociability and enhance the effectiveness of professional care. Well-managed programs for volunteers in home health may improve clients' perceived quality of life and prolong the time that isolated clients are able to remain in their homes. Extensive efforts should be made to prepare and deploy volunteers in home health care as would be expected to be indicated by longer-term studies. The effect on institutionalization rates and cost of care should be determined. Such an undertaking would provide valuable information needed to develop health policies and systems in an era of increased longevity and diminishing resources. Visitations by trained volunteers to the isolated elderly in home health care offer a practical approach by which to improve the quality of care with a concomitant reduction in cost.

REFERENCES

REFERENCES

Advanced Educational Statistics (1991). Lecture notes: University of Tennessee, Knoxville.

Agresti, A. A. (1990). Cognitive screening of the older client. *Journal of Mental Health Counseling.* 3, 384-392

Antone, T. (1993). Obstacles to home care. *Homecare,* 15, 54-60.

Austin, A. G. (1989). Becoming immune to loneliness: Helping the elderly fill a void. *Journal of Gerontological Nursing.* 15,(9), 25-28.

Beck, A.M. & Katcher, A.H. (1984). A new look at pet-facilitated therapy. *Journal of the American Veterinary Medical Assoication,* 184, 414-421.

Beck, K. C., Rawlins, R.P. & Williams, S.R. (1988). *Mental health psychiatric nursing.* St. Louis: The C.V. Mosby Company.

Becker, F. & Zarit, S.H. (1978). Training older adults as peer counselors. *Educational Gerontology,* 3, 241-250.

Bennett, R. (Ed.). (1980). *Aging, isolation and resocialization.* New York: Van Nostrand Reinhold.

Berg, S., Mellstrom, D., Person, G. et. al. (1981). Loneliness in the Swedish aged. *Journal of Gerontology.* 36, 342-349.

Bolton, C.R. & Dignum-Scott, J.E. (1970). Peer-group advocacy counseling for the elderly: A conceptual model. *Journal of Gerontological Social Work,* 14, 321-331.

Bratter, B. & Greeman, E. (1990). The maturing of peer counseling. *Generations,* 14, 49-52.

Brown, W.F. (1974). Effectiveness of paraprofessionals: The evidence. *Personnel and Guidance Journal,* 53, 257-263.

Bryant, D., Lyons, C. & Wasik, B.H. (1990). Ethical issues involved in home visiting. *Topics in Early Childhood Special Education,* 10, 92-107.,

Calsyn, R.F., Munson, M., Peaco, D. Kupferberg, J. & Jackson, J. (1984). A comparison of the effectiveness of various approaches to visiting isolated community elderly. *Journal of Gerontological Social Work,* 7, 29-42.

Carkhuff, R.R. & Truax, C.B. (1965). Lay mental health counseling: The effects of lay group counseling. In B.G. Guerney, Jr. (Ed.), *New roles for nonprofessionals, parents and teachers* (pp. 565-574). New york: Holt, Rinehart and Winston, Inc.

Code of Federal Regulations, Medicare/Medicaid Guide. Chicago: Commerce Clearing Hourse, Inc.

Denny, N. (1988). A reanalysis of a "friendly visitor" program. *American Journal of Community Psychology,* 16, 409-425.

du Villier, P., Holmes, H., & Witten, K. (1985). Befrienders versus barefoot therapists: The effects of type of visitor on elderly in the community. *Community Mental Health in New Zealand,* 1. 76-83.

Eisenberg, D.M. & Carrillo, T.E.(1990). Friends of the family: Counseling elders at family service agencies. *Generations,* 14, 25-26.

Frankl, V. (1962). *Man's search for meaning: An introduction to logotherapy.* Boston: Beacon Press.

Furstenberg, A-L. (1985). Older people's choices of lay consultants. *Journal of Gerontological Social Work,* 9, 21-33.

Gatz, M., Hileman, C. & Amaral, P. (1984). Older adult paraprofessionals: Working with and in behalf of older adults. *Journal of Community Psychology,* 12, 347-357.

Golden, G.K. (1991). Volunteer counselors: An innovative, economic response to mental health service gaps. *Social Work,* 36, 230-232.

Green, L.E. & Hewitt, J. (1987). Effects of exhortation and scheduled visits on improving the psychological well-being of institutionalized elderly persons. *Psychological Reports*. 60, 217-218.

Grossman, E.G., Rizzolo, P.F. & Atkinson,V. (1992). Geriatric peer-counseling: Pilot project provides support for the homebound elderly. *North Carolina Medical Journal*, 53, 296-298.

Hall, N.R.S. (Speaker). (1993). *Psychoneuroimmunology* (Cassette Recording). University of South Florida College of Medicine: Health Dateline.

Hammerlie, F.M. & Montgomery, R.L. (1987). Self-perception theory, salience of behavior, and a control-enhancing program for the elderly. *Journal of Social and Clinical Psychology*, 5, 313-329.

Hendy, H. M. (1987). Effects of pets and/or people visits on nursing home residents. *International Journal Of Aging and Human Development*, 25, 279-287.

Hillman, D.J. (1987). Friends in need: An ethnographic portrait of a senior volunteer friendly-visiting program (Doctoral dissertation, New School for Social 2916A.

Hoffman, S.B. (1983). Peer counselor training with the elderly. *The Gerontologist*, 23, 358-61.

Isquick, M.F. (1981). Training older people in empathy: Effects on empathy, attitudes, and self-exploration. *International Journal of Aging and Human Development*, 13, 1-4.

Joint Annual Reports for Home Health Care. (1992). Nashville: Tennessee Association for Home Care.

Karksruher, A.E.(1974). The nonprofessional as a psychotherapeutic agen; A review of the empirical evidence pertaining to its effectiveness. *American Journal of Community Psychology*, 2, 61-77.

Kart, C. S., Metress, E. K.& Seamus, M. P. (1988). *Aging, health and society*. Boston: Jones and Bartlett.

Kim, Y.M. (1993). Helping health professionals with the human factor. *American Counselor*, 2, 22-24.

Kirkpatrick, R.V. & Patchner, M.A. (1987). The utilization of peer counselors for the provision of mental health services for the aged. *Clinical Gerontologist*, 3-13.

Korte, C. & Gupta, V. (1991). A program of friendly visitors as network builders. *The Gerontologist* 31, 404-407.

Krause, N., Herzog, R.A. & Baker, E. (1992). Providing support to others and well-being in later life. *Jouranal of Gerontology*, 47, 300-311.

Kresken, A.S. (1989). The effects of peer facilitation on the nursing home residents (Doctoral dissertation, University of South Carolina, 1989). *Dissertation Abstracts International, 50,* 1564A.

Larner, M. & Halpern R. (1987). Lay home visiting programs: Strengths, tensions and challenges. *Zero to Three*, 8, 1-7.

Leake, B. (1992). *Annual Report*. Your Home Visiting Nurse Service, Inc., Knoxville.

Miller, M. & Diao, J. (1987). Family Friends: New resources for psychosoical care of chronically ill children in families. *Children's Health Care,* 15, 259-264.

Moss, M. S. & Pfohl, D. C. (1988). New friendships: Staff as visitors of nursing home residents. *The Gerontologist,* 28, 263-265.

Mulligan, N. (1980) Reduction and prevention of isolation in the community aged: Friendly visiting. In R. Bennett (ed.), *Aging, isolation and resocialization.* New York: Van Nostrand Reinhold.

Nagel, J., Cimbolic, P.& Newlin, N. (1988). Efficacy of elderly and adolescent volunteer counselors in a nursing home setting. *Journal of Counseling Psychology,* 35, 81-86.

Neubrander, J.L. (1987). The history of pet ownership and responses to pet visitations among elderly residents in a long-term care facility (Master's thesis, University of Florida, 1987). *Master's Abstracts International. 27,* 100.

O'Donnell, P. (1992). *Social support as as factor of perceived independence among individuals with head injury.* Unpublished doctoral dissertation. University of Tennessee, Knoxville.

Ozminkowski, R. J., Supiano, K. P.& Campbell, R. (1991) Volunteers in nursing home enrichment: A survey to evaluate training and satisfaction. *Activities, adaptation and aging,* 15, 13-43.

Peplau, H. (1982). In S. Smoyak and S. Rouslin (Eds.). *A collection of classics in psychiatric nursing literature.* New jersey: Charles B. Slack.

Poser, E.G. (1966). The effect of therapists' training on group therapeutic outcome. In B.G. Guerney, Jr. (ed.), *Psychotherapeutic agents: New roles for nonprofessionals, parents and teachers* (pp. 577-586). New York: Holt, Rinehart and Winston, Inc.

Preston, D. B. & Mansfield, P. K. (1984). An exploration of stressful life events, Illness and coping among the rural elderly. *The Gerontologist,* 24, 490-494.

Reinke, B., Holmes, D.& Denney, N. (1981). Influence of a "friendly visitor" program on the cognitive functioning and morale of elderly persons. *American Journal of Community Psychology,* 9, 491- 504.

Rioch, M.J. (1966). Changing concepts in the training of therapists. In B.G. Guerney, Jr. (ed), *Psychotherapeutic agents: New roles for nonprofessionals, parents and teachers* (pp. 73-77). New york: Holt, Rinehart and Winston, Inc.

Roberts, B.N. & Wasik, B.H. (1990). Home visiting programs for families with children birth to three: Results of a national survey. *Journal of Early Intervention,* 14, 274-284.

Rx: Take one ounce of prevention daily. (1992-93, December-January). *Modern Maturity*, p.6.

Ryan, C. & Patterson, J. (1987). Loneliness in the elderly. *Journal of Gerontological Nursing*, 13, (5), 6-11.

Sainer, J. & Zander, M. (1971). Guidelines for older person volunteers. *The Gerontologist*, 11, 201-208.

Salmon, R. (1985). The use of aged volunteers: Individual and organizational considerations. *Journal of Gerontological Social Work*, 8, 211-223.

Savishinsky, J.S. (1992). Intimacy, domesticity and pet therapy with the elderly: Expectation and experience among nursing home volunteers. *Social Science Medicine*, 12, 1325-1334.

Schromm, K.L. (1992). The perceived effects of friendly visitation on the social well-being of institutionalized older persons (Master's thesis, San Hose State University, 1992). *Master's abstracts International.31*,124.

Scogin f. & Rickard, H.C. (1987). A volunteer program for abnormal psychology students: Eighteen years and still going strong. *Teaching of Psychology*, 14, 95-97.

Shugart, E.B. (1992). Using volunteer visitors in home care. *Journal of Nursing Administration*, 22, 42-45.

Shulz, R. (1976). Effects of control and predictability on the physical and psychological well-being of the institutionalized aged. *Journal of Personality and Social Psychology*, 33, 563-573.

Steinbach, U. (1990). The effect of social networks on institutionalization and mortality of elderly people (Doctoral dissertation, The Johns Hopkins University, 1990). *Dissertation Abstracts International. 51*, 1777A.

The Nutrition Screening Initiative (1991).*Nutrition screening manual for professionals caring for older americans.* Washington, D. C.

Toseland, R.W., Decker, J. & Bliesner, J. (1979). A community outreach program for socially isolated older persons. *Journal of Gerontological Social Work*, 3 211-225.

Turnstall, J. (1966). *Old and alone.* New York: Humanities Press.

Vinokur-Kaplan, D. Cibulske, O. Spero, S., & Bergman, S. (1982). "Oldster-to-oldster": An example of mutual aid through friendly visiting among Israeli elderly. *Journal of Gerontological Social Work*, 4, 75-91.

Wallace, J. E. & Naderman, S. (1987). Effects of pet visitations on semiambulatory nursing home residents: Problems in assessment. *The Journal of applied Gerontology*, 6, 183-188.

Wilkinson, M. (1993, June 28). Lack of home health care program costly to state. *The Knoxville News-Sentinel*, pp. A1,A13.

Wolf, J.H. (1985). "Professionalizing" volunteer work in a black neighborhood. *Social Service Review*, 59, 423-34.

Young, C. L., Goughler, D. H., & Larson, P. J. (1986).Organizational volunteers for the rural frail elderly: Outreach, casefinding, and service delivery. *The Gerontologist*, 26, 342-344.

APPENDICES

APPENDIX A. RISK OF BIAS IN DATA COLLECTION

Risk of Bias in Data Collection

In this research study you, the nurses, have knowledge of the particular intervention received by the subjects under study. This situation tends to increase the possibility of subjectivity entering into the data collection process. If this occurs bias can result. That is, the results of the study may become somewhat distorted. Therefore, it is critical to the accuracy and usefulness of this study that data collection be as objective as possible. Please keep this in mind when completing the Client Assessment Scales and questionnaires used in this study.

APPENDIX B. CLIENT ASSESSMENT SCALE

Client Assessment Scale

Please assess your client on the items listed by using the following 5 point scale. For each item circle the appropriate number as follows:

When compared with care plan goals:

Client status is substantially better than expected.	5
Client status is better than expected.	4
Client status is at the expected level.	3
Client status is worse than expected.	2
Client status is substantially worse than expected.	1

Activity	1	2	3	4	5
Mobility	1	2	3	4	5
Activities of daily living	1	2	3	4	5
Physical limitations	1	2	3	4	5
Appetite	1	2	3	4	5
Dietary compliance	1	2	3	4	5
Elimination patterns, bladder	1	2	3	4	5
Elimination patterns, bowel	1	2	3	4	5
Sleep patterns	1	2	3	4	5
Alertness	1	2	3	4	5
Lucidity	1	2	3	4	5
Sociability	1	2	3	4	5
General Mental Outlook	1	2	3	4	5
Medication Compliance	1	2	3	4	5
Blood pressure	1	2	3	4	5

Total score _____

APPENDIX C. QUESTIONNAIRE

Questionnaire

Nurse_____

Client_____

1. From previously completed Client Assessment Scales, indicate with a checkmark in which of the following areas (if any) this client's status changed over the ten weeks of the visitation project. Also indicate whether the change was in the direction of improvement or deterioration (better or worse).

	Status Changed		Direction of Change	
Yes No			Better	Worse
Activity	___	___	___	___
Mobility	___	___	___	___
Activities of daily living	___	___	___	___
Physical limitations	___	___	___	___
Appetite	___	___	___	___
Dietary Compliance	___	___	___	___
Elimination patterns, bladder	___	___	___	___
Elimination patterns, bowel	___	___	___	___
Sleep patterns	___	___	___	___
Alertness	___	___	___	___
Lucidity	___	___	___	___
Sociability	___	___	___	___
General Mental Outlook	___	___	___	___
Medication Compliance	___	___	___	___
Blood pressure	___	___	___	___

2. List all areas which you checked as changed. For each area listed, briefly indicate what you think caused the change.

Area of Change Possible Cause

3. From the areas listed in question two above, list all areas in which you stated the reason for change to be the volunteer visitations. For each of these areas please give a specific example of the change, e.g. Client increased activity from sitting in chair to walking about the house and to the mailbox.

Area of Change	Example

4. Describe any changes in client behavior which you believe to be attributable to the volunteer visitations.

APPENDIX D. ORIENTATION OF VOLUNTEERS

ORIENTATION FOR VOLUNTEERS

Welcome	Betty Leake, Executive Dir.
Overview of Project	Elaine Johnson, Project Dir.
Introductions	Elaine Johnson
Introduction to Home Visiting and Emergency Procedures	Betty Leake
Responsibilities of Volunteers	Elaine Johnson

- Training
- Visiting
- Keeping a log
- Coordinating with the nurses
- Communication with project director
- Informed consents

Volunteers meet with nurses for further discussion

APPENDIX E. TRAINING PROGRAM FOR VOLUNTEERS

TRAINING PROGRAM FOR VOLUNTEERS

(9 HOURS)

Purpose: To train volunteers in selected basic skills of therapeutic communication which can be applied during visitations with isolated clients in home health.

Focus: This training program focuses on developing skills in active listening, empathic responses, clarification and summarization. Special techniques for communicating with clients who have limited hearing and vision are be included.

Approach: This program is conducted informally in group. Basic communication concepts will be introduced. A variety of activities and role playing experiences will be used. All volunteers are to participate in each of these experiences.

SESSION 1: FEELINGS, EMPATHY AND EMPATHIC RESPONSES

Hour #1

Introduction to purpose of the visitation: Project Director

What is at Stake? Loneliness and isolation can decrease motivation to do things, i.e., to eat, to walk. It can decrease the sense of self-worth and self-esteem and can decrease the desire to participate in the medical plan of care which can aggravate illness and cause worsening health.

Personalize: Have any of you ever experienced a period of loneliness? What was it like? How did you behave? What did you need the most?

What is the objective of the visitation? The purpose of the visitation is to help clients feel that someone cares and that someone is interested in them as a person and in their feelings. It is to connect emotionally with client and give them a sense of being cared for. It is not to do chores and run errands but to be a relationship for them - someone who gives them their undivided attention.. Nurses and other

professionals have tasks to perform. Relating, showing caring attention, a listening heart is the only job you have. We want to find out if this type of relationship can help prevent further deterioration and consequent institutionalization.

Question: How do you feel about this right now? (discussion)

Comment: If you made visits right now you would no doubt be good company for the client. In this training, however, you will learn some therapeutic communication skills that will help you connect with the client more quickly and mor in depth. Some of you may be familiar with these. At first it may seem a little awkward and even artificial. The skills should become more natural as your become more familiar with using them and experience the positive results.

Hour #2

Feelings

Introduction: What are feelings? What we are at any time. How we feel is important to us. Feelings are not good or bad they are emotions, internal responses to what is going on. It is important to respect the feelings of others even if you disagree. It feels bad when your feelings are not accepted or are judged negatively. We must have a good understanding of feelings in order to engage in therapeutic communication.

How do we communicate our feelings?

Verbal

Non-verbal

Have group give examples of feelings and how they are communicated.

Handout: Feelings Faces

Allow time to identify with and discuss faces

Activity: Feeling Cards. "Deal" the feeling cards and have each person tell about a time when they felt like the feeling on the card.

Process and summarize.

Introduction to Empathic Responses: What is empathy? It is an intellectual grasp of the other's feelings. It is not about me but about you. Expressing empathy increases a sense of personal interest, closeness, trust and self-esteem. It provides a connection and way to focus on the other person.

How can we express empathy? Use examples from feelings cards activity and model empathic responses with the volunteers.

Hour #3

Practice and Homework assignment - Empathy

Practice: Have the volunteers get into triads. Designate a relater, a responder, and observer. The relater tells about a time when he/she was afraid. The relater makes empathic responses. The observer keeps up with the responses and notes if opportunities are misses. Change roles and repeat for worried.

Get back into large group and process.

Homework:

1. Think about one or two special memories. Jot down the feelings associated with those memories.

2. Have someone you know tell about an experience. Practice making empathic responses. Note how they respond to you. Note your own feelings about your own experience in making empathic responses.

SESSION #2: ACTIVE LISTENING, CLARIFYING, SUMMARIZING

Hour #1

Active Listening

Briefly Review Empathy from previous session

Process Homework

Introduction to concept of Active listening:

Paying full attention, being absorbed in what the other person is saying verbally and nonverbally. Listen "listening".(Ex.15:26).

Active listening has a therapeutic effect. It says you are "tuned in" to the person.

Examples:

You feel.....

You feel because.....

Open ended statements instead of questions

Avoiding questions which are answerable with "yes" and "no".

Paying attention to congruence between verbal and non-verbal.

Hour #2

Active Listening cont., Awareness of Non-therapeutic Responses

Non-therapeutic responses.

Giving advice shoulds and oughts

Judgemental remarks importance of acceptance

"Blowing off" feelings or "the problem".

"That happens to everyone."

"Cheer up, it could be worse."

Body language: turning away, closing up, little or no eye contact.

Personalize: Has anyone ever responded to you this way? Is there someone who consistently responds this way? How does it make you feel?

Activity: Something that Really Bugged Me was.....

1. Have members write it down
2. Model non-therapeutic responses.
3. Model active listening responses.
4. Have group practice in triads (Relater, responder, observer)
5. Process

Hour #3

Clarifying and Summarizing

Clarifying: focusing on the underlying issues and sorting out confusing and conflicting feelings. "You say this but...."
Summarizing: When What How? Volunteer may do and may ask client to participate especially at the end of a visit.

Active Listening Activity: Listening Triads

Homework: Identify at least on one-therapeutic response which either you make or is made to you. Note: How did the other person or how did you feel?
Identify some examples of non-verbal communication. Note whether it is consistent with what is being said.
Bring examples to next session.

SESSION #3: PHYSICAL, INTELLECTUAL AND EMOTIONAL FACTORS WHICH PROMOTE EFFECTIVE COMMUNICATION.

Hour #1

Environment, Hearing & Visual Problems

Review

Process homework

Environment

Setting

Comfort

Seating

Space Don't violate intimate space (Demonstrate)

Hearing

Eliminate backgroung noise

Face client

Voice pitch: lower pitch. don't increase volume elderly lose "higher pitch hairs."

Pace and allow adequate response time

Simplicity

Brevity

Clarity

If having to repeat a lot check what you are doing. Try not to show impatience or frustration.

Vision

Stay in visual field

pantomime

watch for glare

don't write on white

Timing,relevance and adaptablity

Be sensitive to mood. Be prepared to alter your agenda. Deal with the client's priorities.

Patient's physical appearance may give clues. Pay attention to how dressed and groomed, to posture and how they walk - whether they make eye contact.

Attitude

Respect Ask what they would like to be called

Humor Be sensitive. Laugh with, not at

Respect clients values and sociocultural background

Acceptance

Condesencion "Honeys" etc.

Coldness (could happen if you are emotionally uncomfortable)

Listening:

for meaning. concentrate. Don't interrupt. Don't finish sentences or them (if happen to do this, apologize).

Touch: Take cues from client. Quick forearm touch is usually acceptable. Handshakes and hugs - what meets client's. need? What seems appropriate and respectful?

Hour #2

Preparing to Start and Preparing to Finish

Opening the Interaction

The objective is to ecourage the client to speak and express their thoughts and feelings.

If you were in the client's place how would you feel? What kind of opener would encourage you to talk? Give you a sense of comfort and trust?

What kind of openers have you thought about? What are you comfortable with.

Ask group to think about what kind of affect the examples might have.

Practice prn.

Preparation for termination

Should begin on first visit. Tell client will be visiting for 10 weeks. Let client express any reaction to this.

Remind about 1/2 way through.

Remind on next to last and last visit.

What about follow-up? Telephone? Letters?

Hour #3

Summary and Final plans for Visits

Summarize: Have group participate. List on chart

Empathy

Active Listening

Clarification

Summarization

Special problems

Discussion: What will be the easiest for you and why? What will be the most difficult? How will you deal with it? How would others handle it?

Review plan

First visit with nurse. Time, place, name and tel.#

Keeping logs

Emergency procedures

Contacts: Nurse, Branch Manager, Project Director

Mid-term and final meeting with project director.

Give out calendars.

APPENDIX F. ORIENTATION FOR NURSES

Orientation for Nurses

1. Purpose and background of the project
   Betty's "dream", Nurse's observations about loneliness
   See if volunteers can make a difference
   Starting out with a short-term limited study
   Could turn into major long-range project

2. Nurses will play a key role in the project.
   a. preparing the client and obtaining informed consent
   b. collecting data (x 2)
   c. completing a questionnaire at the end of the project
   d. Supporting the volunteer

3. How will the project operate?
   a. Three groups of patients and two groups of volunteers
      Trained, Activities, Control
   b. Total project will last about 16 weeks but will have visits for 10.
   c. Sequence
      1. Orientation of nurses
      2. Orientation luncheon for volunteers, nurses and branch managers
      3. Training of volunteers
      4. Initial measurement during week before visits begin.
      5. Visits take place. Logs are kept.
      6. Project director meets with trained volunteers
      7. Repeat assessment within one week of last visit
      8. Nurses complete questionnaires

4. Orient nurses to: (1) Informed consent (2) Client assessment scale, (3) questionnaire

APPENDIX G. LOG FOR TRAINED VOLUNTEERS

Name_____

Client_____

LOG

Date	Length of Visit	Communication Skills Applied
_____	_____	____Active Listening
		____Empathic responses
		____Clarifying
		____Summarizing
Date	Length of Visit	Communication Skills Applied
_____	_____	____Active Listening
		____Empathic responses
		____Clarifying
		____Summarizing
Date	Length of Visit	Communication Skills Applied
_____	_____	____Active Listening
		____Empathic responses
		____Clarifying
		____Summarizing
Date	Length of Visit	Communication Skills Applied
_____	_____	____Active Listening
		____Empathic responses
		____Clarifying
		____Summarizing

APPENDIX H. LOG FOR VOLUNTEERS/CONTROL FOR INVOLVEMENT

Name_____

Client_____

LOG

Date	Length of Visit	Activities Performed
_____	_____	_____
		_____
		_____
Date	Length of Visit	Activities Performed
_____	_____	_____
		_____
		_____
Date	Length of Visit	Activities Performed
_____	_____	_____
		_____
		_____
Date	Length of Visit	Activities Performed
_____	_____	_____
		_____

APPENDIX I. DATA

Activity Scores

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	5	5	3	3	3	3
2	3	3	2	3	3	3
3	3	3	3	3	3	3
4	3	3	2	2	2	2
5	3	3	3	3	3	3
6	3	3	4	3	3	3
7	2	2	3	3	3	3
8	3	3			3	3
9					3	3
10					2	2

Mobility Scores

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	5	5	3	3	3	3
2	3	3	3	3	3	3
3	3	3	3	3	3	3
4	3	3	2	2	2	2
5	3	3	3	3	3	3
6	3	3	4	4	3	3
7	3	2	3	3	3	3
8	3	3			3	3
9					3	3
10					2	2

Activities of daily living scores

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	5	5	3	3	3	3
2	3	3	3	3	3	3
3	3	3	3	3	3	3
4	3	3	2	2	2	2
5	3	3	3	3	3	3
6	3	3	5	3	3	3
7	2	2	3	3	3	3
8	3	3			3	3
9					3	3
10					2	2

Physical limitation Scores

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	4	4	3	3	3	3
2	3	3	3	3	3	3
3	3	3	3	3	2	2
4	3	3	3	3	2	3
5	3	3	3	3	3	3
6	3	3	4	3	3	3
7	2	2	3	3	3	3
8	3	3			3	3
9					3	3
10					2	2

Appetite Scores

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	4	4	2	2	3	3
2	3	3	3	4	3	3
3	3	3	3	3	3	3
4	3	3	3	3	3	3
5	4	3	3	3	3	4
6	3	3	3	4	2	2
7	3	3	4	4	1	1
8	3	3			3	3
9					4	4
10					3	3

Dietary compliance scores

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	3	3	3	3	2	2
2	3	3	3	4	3	3
3	3	3	3	3	3	3
4	3	3	2	2	2	2
5	3	3	3	3	3	3
6	3	3	4	3	3	3
7	3	3	2	2	2	2
8	3	3			3	3
9					4	4
10					3	3

Bladder elimination scores

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	3	3	3	3	2	3
2	3	3	3	4	3	3
3	3	3	3	3	3	3
4	2	3	3	3	3	3
5	3	3	3	3	3	3
6	3	3	3	2	3	3
7	3	3	3	3	3	3
8	3	3			2	2
9					4	4
10					3	3

Bowel elimination pattern scores

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	3	3	3	3	3	3
2	4	4	3	4	3	3
3	3	3	3	3	3	3
4	3	3	3	3	3	3
5	3	3	3	3	3	3
6	3	3	3	3	2	2
7	3	3	2	2	3	3
8	3	3			2	2
9					4	4
10					3	3

Sleep pattern scores

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	3	3	3	3	3	2
2	3	3	3	4	3	3
3	3	3	3	3	3	3
4	3	3	3	3	2	2
5	3	3	3	4	3	4
6	4	3	3	3	3	3
7	3	3	3	3	2	2
8	3	3			3	3
9					3	3
10					3	3

Alertness Scores

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	4	4	3	3	3	3
2	3	3	2	4	3	3
3	3	3	3	3	3	3
4	3	3	3	3	3	3
5	3	3	3	3	3	3
6	3	3	1	1	3	3
7	3	3	3	3	3	3
8	3	3			2	2
9					4	4
10					3	3

Lucidity Scores

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	4	4	3	3	3	3
2	3	3	3	3	3	3
3	3	3	2	2	3	3
4	3	3	3	3	3	3
5	3	3	3	3	3	3
6	3	3	1	1	3	3
7	3	3	3	3	3	3
8	3	3			3	3
9					4	4
10					4	4

Sociability Scores

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	4	4	4	4	3	2
2	3	3	2	4	3	2
3	3	3	4	5	2	2
4	2	3	3	4	1	1
5	4	4	3	4	4	3
6	3	4	3	3	3	3
7	4	4	4	5	3	3
8	3	4			2	2
9					4	2
10					4	4

General mental outlook scores

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	4	4	3	3	3	3
2	3	3	2	4	2	2
3	4	4	3	4	3	3
4	2	2	3	2	1	1
5	4	4	3	3	4	4
6	4	4	2	2	3	3
7	3	4	3	3	3	3
8	3	4			2	2
9					4	4
10					3	3

Medication compliance scores

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	4	4	3	3	2	3
2	3	3	3	3	3	3
3	3	3	3	3	1	5
4	3	3	3	3	3	3
5	3	3	4	4	3	3
6	3	3	3	3	4	4
7	3	3	4	4	3	3
8	3	3			4	4
9					4	4
10					3	3

Blood pressure Scores

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	3	3	3	3	3	3
2	3	3	4	3	3	3
3	3	3	3	3	3	3
4	3	3	3	3	3	3
5	3	3	3	3	3	3
6	3	3	4	4	3	3
7	3	3	3	3	3	3
8	3	3			3	3
9					4	4
10					3	3

Cluster one: Activity, Mobility, ADL, Physical limitations

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	19	19	12	12	12	12
2	12	12	11	12	12	12
3	12	12	12	12	11	11
4	12	12	8	8	8	8
5	12	12	12	12	12	12
6	12	12	17	16	12	12
7	8	8	12	12	12	12
8	12	12			12	12
9					12	12
10					8	8

Cluster two:Appetite, Diet, Bowel, Bladder

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	13	13	11	11	11	11
2	14	14	12	16	12	12
3	12	12	12	12	12	12
4	11	12	11	11	11	11
5	13	12	12	12	12	13
6	12	12	13	12	13	13
7	12	12	11	11	9	9
8	12	12			10	10
9					16	16
10					12	12

Cluster three: Sleep, Alertness, Lucidity, Sociability, GMO

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	19	19	16	16	15	13
2	15	15	12	17	14	13
3	16	16	15	17	14	14
4	13	14	15	15	10	10
5	17	17	15	17	17	17
6	17	17	10	10	15	15
7	15	17	16	17	15	15
8	15	17			12	12
9					15	15
10					17	17

Total scores

	Experimental		Involvement		Control	
Subject	pre	post	pre	post	pre	post
1	58	58	45	45	43	42
2	46	46	44	53	44	43
3	48	46	45	45	41	45
4	42	44	40	40	35	35
5	48	47	46	48	47	48
6	47	47	47	42	44	44
7	41	43	46	47	41	41
8	39	41			41	41
9					55	55
10					43	43

APPENDIX J. VALUES FOR STATISTICAL TESTS

Median Sign Test for Correlated Samples: Pre-Intervention/Post-Intervention Health Status Comparisons for each Group, Values of *t*.

Item Measured	Experimental Group	Control-for-Involvement Group	No-Visit Control Group
Activity	0.3536	0.3779	0.3162
Mobility	0.3536	0.3779	0.3162
Activities of Daily Living	0.3536	0.3779	0.3162
Physical Limitations	0.3536	0.3779	0.3162
Appetite	0.3536	0.3779	0.3162
Dietary Compliance	0.3536	0.3779	0.3162
Bladder Elimination Patterns	0.3536	0.3779	0
Bowel Elimination Patterns	0.3536	0.3779	0.3162

Sleep Patterns	0.3536	0.3779	0.3162
Alertness	0.3536	0.3779	0.3162
Lucidity	0.3536	0.3779	0.3162
Sociability	0.7072	1.889*	1.581
General Mental Outlook	0	0.3779	1.265
Medication Compliance	0.3536	0.3779	1.265
Blood Pressure	0.3536	0	0.3162
Cluster I	0.3536	0.3779	0.3162
Cluster II	0.3536	0.7558	0
Cluster III	1.414	3.778*	0.6325
Total Score	0.7072	2.267*	0.9487

*P <.05

Kruskal-Wallis One-Way ANOVA: Between Groups Comparisons,Values of *H.*

Item Measured	Pre-Intervention	Post-Intervention
Activity	H = 0.680, p .712	H = 0.846, p .655
Mobility	H = 2.401, p .301	H = .935, p .626
Activities of Daily Living	H = 0.993, p .627	H = .846, p .655
Physical Limitations	H = 3.641, p .162	H = 1.488, p .475
Appetite	H = 1.938, p .379	H = 1.065, p .587
Dietary Compliance	H = 1.065, p .587	H = 00,832, p .66
Bladder Elimination Patterns	H = 0,450, p .799	H = .000, p 1
Bowel Elimination Patterns	H = 1.600, p .449	H = 0.900, p .638
Sleep Patterns	H = 2.432, p .296	H = 3.88, p .143
Alertness	H = 3.322, p .19	H = 0.394, p .821

Lucidity	H = 5.017, p .081	H = 5.017, p .081
Sociability	H = 0.813, p .6666	H = 13.452, p .01
General Mental Outlook	H = 3.599, p .165	H = 4.571, p .102
Medication Compliance	H = 0.448, p .801	H = 1.782, p .41
Blood Pressure	H = 2.831, p .243	H = 1.081, p .583
Cluster I	H = 1.190, p .552	H = 1.692, p .429
Cluster II	H = 2.272, p .321	H = 1.728, p .421
Cluster III	H = 2.763, p .251	H = 5.849, p .054
Total Score	H = 2.140, p .343	H = 2.205, p .332

VITA

Elaine Baldwin Johnson was born in Glynn County, Georgia, August 11, 1941. Her parents are Frank Pearsall "Red" and Mildred A. "Micky" Baldwin. She attended elementary and high school in Horry County, South Carolina where she graduated from Wampee-Little River High School June, 1958.

Johnson received the Bachelor of Science in Nursing degree from the University of South Carolina in 1962 and a Master's in Nursing degree from Emory University in 1964.

Her professional work experience includes that of nurse, teacher, consultant, and administrator. She has received fellowships in nursing and in education, and has authored several articles. She is currently employed as Associate Professor of Nursing at Roane State Community College.