The University of Manitoba

Volunteer Visiting of the Elderly

and its Effects on

Loneliness, Self-Esteem, and Social Contacts

by

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Acknowledgments

This thesis is dedicated to:

-the entire staff of the Age and Opportunity Centre, whose hard work and patience made it possible--especially Janette Martin.

-the family and "other-family" members who stood by me whether things were going well or not, and refrained from saying, "You must be almost finished, right?"

-Mrs. Blanche Walker, who taught me that aging can be exciting, and never gave up hope that "that darn paper" would someday be completed.

-and, especially, Steve Holborn, whose support and concern made it all worthwhile.

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Abstract

Changes in loneliness, self-esteem scores and
number of social contacts before and after 12-14
weeks of visiting were investigated. There were
24 elderly ($\underline{M}$ = 68.7 yrs) women who had been
assigned a visitor from the Friendly Visiting Program
sponsored by Age and Opportunity Centre, in Winnipeg,
Manitoba. Twenty eight subjects were junior high
or high school students ($\underline{M}$ = 15.2 yrs) who had
volunteered to be Friendly Visitors. Program
participants were tested before they were matched   .
as a visiting pair, and 12 - 14 weeks after visiting
had begun. A 2 X 2 mixed ANOVA was used to demonstrate
that after 12-14 weeks of visiting, loneliness scores
for all participants had decreased significantly (lower
loneliness scores indicate less feelings of loneliness).
This analysis showed an effect due to age group, program
participation and an interaction between the two. Further
ANOVA analyses showed that self-esteem scores increased
for all participants (higher self-esteem was
indicative of a more positive self-image). A
strong negative correlation was found between

self-concept and loneliness, as has been noted in

previous research. The average number of weekly

social contacts did not change over 12-14 weeks of

visiting. The implications of these findings are

discussed with special emphasis on the lack of a

control group in this study, and recommendations

for future research are noted.

VOLUNTEER VISITING OF THE ELDERLY

AND ITS EFFECTS ON

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The Friendly Visiting Program, sponsored by the Age and

Opportunity Centre, Inc. in Winnipeg, Manitoba, is a program

which presently provides "support for persons 60 years of

age and over, or retired, who do not get out of their homes

and who are feeling lonely or isolated as a result" (Age and

Opportunity, 1981). The assumption underlying this service

is that the loneliness and/or social isolation of these

elderly persons will be reduced through weekly visits by a

volunteer.

Description of Friendly Visiting Program

The Friendly Visiting Program presently involves

recruiting volunteers from local Winnipeg high schools who

agree to visit an elderly person for one or two hours per

week. The volunteer's commitment is for one calendar year,

and the program emphasizes that volunteers are companions who

find what they can "do with rather than for, the person they

visit" (Age and Opportunity, 1981). Anecdotal evidence in

the form of verbal reports by both students and elderly

persons involved in the visiting program points to its success. However, prior to the present study, no empirical research had examined whether the program does, indeed, do what it intends.

Some key terms will be defined before presenting the hypotheses investigated by the present study:

Description of Key Terms

Social isolation is the present condition of having few contacts with family or friends, where the person used to have many such interactions (Nahemow, 1979). This definition makes the assumption that isolation involves a diminishing of the number and quality of an individual's social contacts. Thus, social isolation is defined as an ongoing, progressive process and is only applicable when comparing a person's present number of social contacts to the number of such contacts he or she had in the past.

Loneliness may be distinguished from social isolation, as loneliness necessitates a discrepancy between the person's desired and achieved social relations (Peplau & Caldwell, 1978), whereas social isolation is a denotation of decreasing access to friendship contacts (Nahemow, 1979). In other words, a person could become more and more isolated, while not feeling lonely. Some people prefer to do many activities alone, although this is not generally the rule

(Goldenberg, 1982). Thus, loneliness, here, "exists to the extent that a person's network of social relationships is smaller or less satisfying than the person desires" (Peplau & Perlman, 1979).

Self-esteem is a difficult term to define because it is often used interchangably with other terms such as self concept, self worth, identity and ego strength (Lowenthal, 1977). Wylie (1960) defines it loosely as involving a person's attitudes, feelings and perceptions of him/herself as an object. Fitts (1965) describes self-esteem as being an overall or "net positive" rating of an individual's self concept. Self concept, here, is the overall image an individual has of himself or herself--an image which reflects all of this individual's actual experiences and the way he or she perceives them. Self esteem is considered to be one aspect of these experiences; the overall positive affective component (Breytspraak & George, 1979; Kalish, 1975). Thus, self-esteem is a measure of how much the individual likes himself or herself.

Self-esteem is seen by many as being closely related to much of a person's behavior. For example, if a person has favorable self-esteem, he or she is more likely to engage in conversation with a stranger, attempt new activites (e.g., try a new sport), or describe him or herself in positive

terms (Fitts, 1978). Self-esteem is also seen as being positively correlated with a person's general adjustment and state of mental health (Fitts,1965).

Each of the terms defined above will be examined separately, as it relates to the changes which occur in individuals involved in the Friendly Visiting Program. These changes are the research questions which were investigated by the present study.

Research Questions

Social Isolation

The Friendly Visiting Program intends to reduce the social isolation of elderly persons by providing them with a visitor once a week. Thus, for the purposes of this study, it is assumed that the number and quality of social contacts an elderly person has, has diminished. However, the introduction of a new weekly social contact, by itself, will not necessarily decrease the social isolation of an individual.

The definition of social isolation used in this study involves a decrease in the number of contacts an individual has with family or friends (Nahemow, 1979). A volunteer visitor, then, may only be expected to decrease the social isolation of an elderly person if they become friends. If they do become friends, (and the number of social contacts

each of them has outside of this visiting dyad remains

constant), then the number of future friendship contacts

each of these individuals has will increase in relation to

the number of such contacts each of them enjoyed in the

past. Thus, by definition, social isolation will be

reduced.

Importance of Social Supports

The presence of social support systems are important to

all age groups. They are correlated with increased morale

or self-esteem (Lowenthal & Haven, 1968; Toseland & Rasch,

1980), improved personal health (Dimsdale, 1979; Lynch,

1977) and increased longevity (Lehr & Schmitz-Scherzer,

1976; Shanas, 1968). These human support systems appear to

be especially important for women, who are the majority of

the elderly (Auerbach & Gerber, 1976; Statistics Canada,

1981; U.S. Bureau of the Census, 1980). Social supports may

be considered especially necessary for elderly women when we

consider that compared to older men, older women are more

likely to be poor (Dulude, 1978); to outlive their spouse

and some children (Martin Mathews, 1980; Neugarten, 1977),

and to be seen as physically unattractive (Berscheid &

Walster, 1974; Sontag, 1972).

The number and type of social contacts an elderly woman

has may diminish over time for many reasons: (a) her friends

may die or move away; (b) her spouse may die; (c) her children may move away; or, (d) she may become physically unable to leave the house and engage in social activities, e.g., social clubs or religious organizations (Bogat & Jason, 1983). Many of these changes cannot be prevented (such as the death of friends and/or spouse). However, the elderly person's living situation can be altered, and may be directly related to availability of social interaction.

Living Conditions

Demographic trends. Living conditions often determine the ease with which elderly women can make social contacts (Abu-Laban, 1980), and although the percentage of older women is increasing in relation to the size of the population, the percentage who are living with their families (husband, children or other relatives) has been decreasing since 1961. At that time, 50% of women 65 or older lived with their families, whereas in 1976, only 42% had such living arrangements (Fletcher & Stone, 1980). This change in percentage of elderly women living with family members is due to a combination of three factors. First, because women tend to marry men 2-10 years older than themselves (Statistics Canada, 1981), and have a longer life expectancy than men (Auerbach & Gerber, 1976; US Bureau of the Census, 1976), they can expect to live at least part of

their later lives as widows. Further, although male life expectancy has increased since 1950 (from 66.23 to 70.54 years), female life expectancy has increased more rapidly (from 70.46 to 78.13 years) (Myers & Manton, 1984a; 1984b). Therefore, women can expect to spend an increasing number of years as widows.

Another explanation for declining rates of intergenerational co-residence is the increasing economic prosperity of older persons. In 1900, there was no social security system, very few private pension plans, and a lower level of resources for persons at all stages of the life cycle. Thus, an elderly person who had lost his or her own means of support had few options except for reliance upon children. We have no evidence that these elderly people ever wanted to live with their children (Lee, 1985). Presently, we know that older people who live with relatives consititute an extremely low-income segment of the elderly population (Lawton, 1980; Soldo, 1979). These persons are also more likely than other elderly to be in poor health or have serious physical limitations (National Center for Health Statistics, 1974). Thus, the difference between 1900 and 1985 appears to be that more of today's elderly have better options available to them than living with their families.

A third reason for the declining percentage of elderly
women living with family members relates to the individual
other than a spouse, to whom most older people turn for
help. This person is usually a middle aged woman--typically
a married adult daughter or daughter-in-law, who is a mother
herself (Johnson, 1983; Lang & Brody, 1983; Shanas, 1962).
However, a growing proportion of these daughters or
daughters-in-law are likely to have competing
commitments--especially as participants in the paid labor
force (Brody, 1978; 1981; Treas, 1979). Therefore, fewer
daughters or daughters-in-law are available to care for an
elderly person at home during the day.

Living situation and social isolation. Elderly women
often choose to live alone--without the aid/support of their
relatives (Abu-Laban, 1980). Lopata's (1973, 1979) study of
widows in the Chicago area found that they actively choose
to live alone in order to maintain their autonomy. Loether
(1975) notes that the North American system which emphasizes
the attributes of self-reliance and independence may cause
some individuals to live alone because it "is expected" or

because they "don't want to impose on anyone", even if they, themselves, are unhappy with the situation. Other authors have noted that even elderly persons who live in family situations may face isolation and decreases in social interactions as the family becomes unable to meet, or is uninterested in meeting, their needs (Fletcher & Stone, 1980; Ontario Council of Health, 1978; Treas, 1979). Thus, even if elderly individuals live with family members, they may become socially isolated.

Requests for social support. When elderly women live with their husbands, in their own households, they provide support for, and obtain support from, their spouses. As long as their husbands are living, elderly women tend to make relatively few demands for social support from their offspring or social agencies (Abu-Laban, 1980; Fletcher & Stone, 1980; Lopata, 1978; Uhlenberg, 1979). This is in keeping with Shanas' (1980) "principle of substitution" whereby family members are available in serial order, so that if one individual is not available, another will serve. This principle can be contrasted to the "principle of the shared-functioning kinship system" where specific needs of the older person are matched to the most appropriate primary relationship as determined by long-term commitment, proximity, and degree of intimacy (Johnson, 1983; Litwak,

1980).

Of the older women who are widowed, 21% live with family members such as children and grandchildren (Fletcher & Stone,1980).   These women usually receive necessary kinds of social support from their extended family (Chappell, 1983) or, at least, this group of women very seldom requests help from formal support agencies (Shanas, 1980). A larger proportion (29%) of elderly widows, however, live alone, maintaining their independence as long as their health and resources allow (Abu-Laban, 1980; Fletcher & Stone, 1980; Statistics Canada, 1978). Whether or not the previously mentioned trend toward living alone after age 65 will lead to an increase in requests for social support from formal agencies in the future, is not clear at present.

Projections of Social Support Available

Positive forecast. If kin were to continue to provide the majority of social support for their elderly relatives, we might not notice a deficit in elderly care services until around the year 2006, when the baby boom generation enters retirement. In fact, we might see a temporary decrease in requests for formal services, as those who will be reaching age 65 within the next decade or two are the parents of the baby boom generation. These

individuals have a greater number of children potentially available to provide support than the current elderly population who are the cohorts with the lowest fertility in history--about one quarter having no surviving children (U.S. N.I.A., 1978). Projections also suggest that joint survival of a married couple is increasing, which means that, due to mutual support, there may be somewhat less demand on formal services (Fengler & Goodrich, 1979; Myers & Nathanson, 1983; Myers, 1982; Myers & Manton, 1983).

Negative forecast. In contrast to this optimism, there are many factors which suggest an older person in the future will have less opportunity for family support than present and previous generations of older persons had (Fletcher & Stone, 1980). The most notable factors are the rising incidence of childless or one-child families, the escalating divorce rate, the increasing mobility of young people and the growing participation of women in the paid labor force (middle-aged daughters and daughter-in-laws are the family members who usually take responsibility for an elderly parent - participation in the paid labor force by these women makes them unavailable to stay at home and care for an elderly individual).

Furthermore, as the proportion of elderly who are reaching the upper range of old age (85+ years) increases

(Johnson, 1983; Statistics Canada, 1981), the more likely the "child" caring for that elderly person is to be elderly, himself or herself. This caregiver is subject to great stress by a combination of decreasing personal resources and/or physical capacity and, concomitantly, increasing responsibilities to his/her parent. This is also the time of life when an individual may have been looking forward to retirement, and instead finds him or herself caring for an aging parent. This "child", then, runs the risk of becoming overburdened and ill, as a result (Johnson, 1983). If this occurs, both the elderly parent and the elderly "child" may have to call on formal services for care.

Most importantly, not all elderly persons have daughters or daughter-in-laws to act as their caregivers. When the informal support system once enjoyed by an elderly person is interrupted through death of a partner or the move of family members to another city, he or she is susceptible to social isolation and potentially to loneliness.

Consequences of Social Isolation.

While the extent of social isolation among the elderly is debated (Chappell, 1982; 1983), the consequences for those who find themselves in this situation are alarming. Social isolation leads to increased vulnerability to a wide range of illness--including asthma and heart attacks

(Pilisuk & Froland, 1978). It also correlated with poorer recovery from cancer, depression, anxiety and schizophrenia (Hammer, 1983). (For a review of the health conditions which show a relationship to social networks, see Mueller, 1980). Social isolation, further, has been linked to malnutrition and increased numbers of accidents (Clark & Anderson, 1967). It is also implicated as a precondition for loneliness, in that loneliness is more likely with limited opportunity for interaction (Shanas, 1962).

Loneliness

The Friendly Visiting Program expects that by increasing an elderly individual's social contacts by one visit per week they will decrease the discripancy between that person's desired and achieved social relations. Thus, the weekly visits are seen to reduce loneliness in the elderly participants. The addition of one visit could increase an isolated individual's social contacts by 20% in a week if, as in this study, the person had an average of 5 social contacts per week outside of their visitor.

Loneliness in the Elderly

Elderly persons who are widowed or lose close friends often feel the situation is uncontrollable, unchangable, and hopeless: They often believe it is "too late" to start over again (Abrahams, 1972; Lopata, 1979). It is also speculated that this feeling of "I am too old to change" (Gordon, 1955)

may prevent many elderly from attempting to make new friends.

Tunstall's (1967) study of elderly people found that almost half the elderly cited widowhood as the main reason for their loneliness; the rest cited being housebound, being ill or being blind. Nearly half the sample said they felt nothing could alleviate their loneliness. In part, this is because loneliness is often attributed by the elderly to the process of aging, which is seen as irreversible (Peplau & Caldwell, 1978). It is possible that this belief becomes a self-fulfilling prophecy which causes people to make few attempts to alter a situation which they perceive as unchangable.

Sources of loneliness. One of the key sources of loneliness is the lack of a stable, intimate relationship in which the person can express his or her most important thoughts, feelings, hopes and fears with the confidence that he or she will be understood and accepted (Haas-Hawkings, 1978; Lowenthal & Haven, 1968; Sermat, 1978; Strain & Chappell, 1982). If a person feels that there is no one to whom he or she can express his or her most important thoughts, or that even if he or she could express such thoughts, they would not be understood, this person is likely to lose self-esteem. Poor self-esteem is reflected

by statements which show the person feels he or she has very little self-worth or self-esteem (Fitts, 1965).

Self-Esteem

Although the Friendly Visiting Program does not address the issue of changes in participant's self-esteem directly, by proposing that this visiting situation reduces feelings of loneliness, the program should also increase an individual's positive feelings about himself or herself.

Loneliness has been shown to be linked to unfavorable self-esteem (Goswick & Jones, 1981). "Since lonely individuals have a low estimate of self-worth, ...their negative self-concept may be matched by derogatory and hostile views toward other people as well" (Hansson & Jones, 1981). Thus, lonely individuals may reduce their chances of developing lasting relationships because of their poor self-esteem.

Self Esteem and Responsibility

One of the key sources of self-esteem, for adults, is a job (Shapiro & Roos, 1982). Recent studies have demonstrated a positive association between employment and life satisfaction (Palmore, 1968; Riley & Foner, 1969). Some researchers discuss the positive aspects of retirement, such as release from stress, more time for relaxation and freedom to pursue personal interests (e.g., Atchley, 1976; Breen,

1963; Sussman, 1972). This perspective emphasizes that the
majority of older workers are able to tolerate loss of work
as a result of retirement because they did not hold a
highly-ranked position on which their self-esteem was based
(Kremer, 1985). However, most of the articles relating an
elderly individual's self-esteem and participation in the
labor force focus on negative effects of retirement - an
exit from the job market (e.g., Beck, 1982; Holahan, 1981;
Mutran & Reitzes, 1981). Very little empirical work has
been done on what elderly persons find most satisfying in
retirement. This is especially important when considering
elderly women, very few of whom have ever participated in
the paid labor force.

A notable exception is a study by Reid and Ziegler
(1978) which investigated the activities elderly citizens
felt made them important and happy. Most of these
individuals placed a high degree of emphasis on helping
others and making them feel good. In fact, helping others
was seen as being as significant to these individuals as
having good health. Financial independence, in contrast,
was ranked far down the list—usually 13th or 14th out of 18
items. Feeling useful and having plans for the future have
both been implicated as predictors of life satisfaction in
the elderly (e.g., Dickie, Ludwig, & Blauw, 1979; Steitz,

1979; Zeigler & Reid, 1983).

It should be noted that the elderly involved in this program have requested a visitor, which may cause them to feel they are merely the recipients of a service, rather than helpers, themselves. On the other hand, visitors are instructed to be companions, who do things "with rather than for" the elderly person they visit (Age and Opportunity, 1981). This may increase the probablity of forming a friendship between visitor and visitee. Thus, for the elderly involved in this program, having a visitor not only may be increasing the number of social contacts they get each week (and thus decreasing social isolation), but also may be developing a friendship relation which will reduce loneliness and improve self-esteem. Furthermore, having a regular visitor may create a feeling of usefulness in the person being visited which, likewise, reduces loneliness and improves self esteem.

Significance of the Study for the Adolescents

Loneliness and Social Isolation

Another focus of this study was to assess the level of loneliness in the adolescents involved in the visiting program. Although problems such as loneliness and social isolation may be prevalent amongst the elderly, they are not problems exclusive to this age group. According to some

previous research, adolescents display as great an incidence of loneliness as do the elderly (Brennan & Auslander, 1979; Ostrov & Offer, 1980). Other researchers (e.g., Revenson & Johnson, 1980) have found younger adults to display much more loneliness than older adults. Rubenstein and Shaver (1980) found that the incidence of loneliness peaked at adolescence and showed a decline with increasing age. However, a study done by Locke (1984) which compared loneliness in first-year college students to their grandparents, found no difference between the loneliness scores of the students and their grandparents. This lack of discrepancy between loneliness scores of the young and old respondents (which differs from the majority of the research in this area) was attributed to the relatedness of the respondents. "Possibly having a grandparent willing to complete the questionnaire indicates a cooperation within the family that serves as a buffer for both young and old" (p. 43).

Social developmental processes have been implicated in the emergence of loneliness in adolescence (Brennan, 1982; Ellison, 1978). The developmental changes that occur at adolescence are particularly disruptive as they interfere with social relations and/or create social deficits. Adolescence is marked by separation from parents as primary

attachment figures (Sullivan, 1953; Weiss, 1973). In cases where adolescents' separation from the parents involves diminishing contact between the children and their parents (as is usually the case), this situation may also be considered a form of social isolation (Arling, 1976). Separation from family (either physically, emotionally or both) also comes at at time when adolescents are faced with other social losses, such as friends who go away to school or to find work (Locke, 1984). These losses increase this type of social isolation in the adolescent.

Simultaneous with this disruption of primary attachment to parents, is an increased emphasis upon relationships with the same sex, and perhaps with the opposite sex (Brennan, 1982). Cutrona (1982) reported that students' attitudes and their assessment of their relationships had a considerable impact on loneliness. Thus, the changes at adolescence both disrupt existing patterns of attachments and produce powerful new needs for emotional attachments. These changes appear to lead directly to a deficit state in emotional relations (Brennan & Auslander, 1979; Brennan, 1982; Ostrov & Offer, 1980). Therefore, loneliness and social isolation in the young, as in the elderly, may be precipitated by a process which disrupts the existing relationships of the individual (Goldenberg, 1982). The important point here is

that when a person, of any age, has fewer social relations than they would like, the individual is likely to feel lonely (Peplau & Caldwell, 1978).

The adolescent also finds him or herself striving for personal autonomy. Ostrov and Offer state: "Every time we grow more autonomous, create our own thoughts, assert our own identity, we risk moving away from others and therefore risk loneliness" (1978, p. 34). This increasing need for independence and individuality leads to feelings of separateness and responsibility in the adolescent, and creates an "existential loneliness"--the awareness of the self as a separate individual combined with an increased sense of self-consciousness (Brennan, 1982).

Further, the struggle for autonomy and self-definition leads the adolescent into conflict with the social roles availiable to him or her. "The adolescent's social position is fairly clear," notes Rappoport (1972). "...as compared with older and younger people, he hasn't got one". The adolescent suddenly finds himself or herself too old to enjoy many of the privileges of a child, but too young to enjoy the rights of an adult (Brennan, 1982; Lewin, 1939). These factors all lead an adolescent to feel isolated--unable to find a clearly defined role, severing the bonds with parents, groping for popularity, acceptance

and a sense of belonging with peers. Adolescents, like the

elderly, may be at a stage in life where "a certain amount

of loneliness--particularly feeings of emotional isolation

and existential loneiness--may be unavoidable" (Brennan,

1982, p. 286).

According to some, the major difference between the

elderly and adolescents on variables such as loneliness and

social isolation may be hope. Adolescents may describe

their situation as "bad", while expecting it to change

sometime in the future (Abrahams, 1972). With age, the

events which alter a person's achieved social relationships

become less positive and less voluntary (Peplau & Caldwell,

1978).

Hypotheses and their Rationale

1. Friendly Visiting was expected to reduce feelings

of loneliness in elderly in relation to their initial

scores.

This change was expected as the visiting pairs

developed a friendship relationship. A number of studies

(e.g., Edwards & Klemmach, 1973; Phillips, 1969) have found

links between increasing quantities of friendship

relationships and decreasing loneliness. However,

investigation on the question of how friendships are formed

has largely been confined to demographic and sociological

variables (Chown, 1981). Physical proximity has been shown

to be the most important single variable in the development

of friendships in the elderly (Chown, 1981). However, to

date, no investigation has been made into how or why a weekly visitor might become a friend.

Hess (1972) describes friends as being chosen, and chosen according to criteria such as value consensus, commonality of interests and experiences and other antecedents of interpersonal attraction. On the other hand, kin relations are ascribed rather than achieved--containing a strong element of obligation rather than interest (Lee, 1979). Lee (1979) found that the morale of the elderly persons involved in his study was not effected by frequency of contacts with their natural children. Perhaps a critical distinction is that the elderly involved in the Friendly Visiting Program have requested a visitor and, further, have been consulted as to whether they would like a student, and have chosen that option. The visitors, likewise, have chosen to be involved in visiting an elderly person. Thus, unlike the interaction with natural children, the Friendly Visitor Program offers interaction which is not obligatory.

The attachment between grandparents and grandchildren has, further, been described as a "special" one (Steuve, 1982). Kornbaher and Woodward (1981) suggest that this is because grandparents are exempt from the emotional intensity which characterizes parent-child relationships. "...In

short, grandparents and grandchildren do not have to do anything to make each other happy. Their happiness comes from being together" (p. xiii). Lee and Ellithorpe (1982) suggest that this increase in satisfaction may be more a function of their friendship than their genetic link. Thus, this may be the ideal match of age groups for reducing feelings of loneliness in the elderly

2. The adolescents were expected to change from feeling lonely to feeling, at least, less lonely.

This is because they should "just expect things to get better" (Abrahams, 1972), and because they were interacting with an elderly friend, thus gaining both a responsible role and a new social contact.

3. The reduction of loneliness and improvement of self-esteem were expected to go hand-in-hand (i.e., the correlation between the two is expected to be large and inverse—with high loneliness associated with poor self-concept).

This is a relationship which has been documented in previous studies (e.g., Goswick & Jones, 1981). Still it was important to test this, and not just to assume that this sample of elderly and high school age young adults would follow the population norms set with young adults (20-40 years old) as subjects.

4. Elderly were expected to show an increase in number of social contacts after 12 - 14 weeks of visiting.

This hypothesis was derived from a study by Arling (1976) who showed that increased friendship links, not family ties, are associated with an increase in number of daily activities in the elderly. Rosow (1967) had already shown that the number contacts with people increased the number of attempts to contact other people. Rosow showed that even if the human contacts were non-intimate and brief (e.g., mailman or paper boy), elderly persons who received these contacts made more attempts to contact their friends or family and to go out to meetings than elderly persons who did not have these intermittent contacts.

<center>Method</center>

Subjects

   Elderly. Twenty four subjects were elderly (M=68.7,
S.D.=4.7 yrs) women. All of these elderly women had either
requested a Friendly Visitor or had a visitor requested for
them by a family member or care-giver. All but one of these
women had been married at one time. At present, 21 (or 91%)
were widowed, one was divorced and one woman's husband was
alive but lived in Florida from October until April, each
year. Although 96% of these women had at least one living
child, only 58% had a child living in Winnipeg. Seventy nine
percent of the women who had children living in the city
described themselves as having "frequent" contact with that
child/children, and 21% said they had "at least monthly"
contact.

   Ninety two percent of the 24 elderly women lived alone.
(This includes the woman whose husband was living in Florida
for the duration of this study). One woman lived with her
sister, and one lived with her daughter, but described
herself as being, "pretty much alone because she works. .
.and then when she doesn't work, she kind of ignores me".

   The majority of women sampled had siblings living in
Manitoba. However, only 38% had brothers or sisters living
in Winnipeg.

Students. Twenty eight subjects were junior high or high school students (M=15.2, S.D.=1.4) who had volunteered to be Friendly visitors. All of the student participants in the study were offered the chance to volunteer as a Friendly Visitor or to engage in one of many other "special activities" (e.g., volleyball, choir, or working in a nursing home) as part of their school requirements.

All of the students lived at home with at least one parent. Twenty four students' parents were married, three had parents who were divorced and one didn't know his parents' marital status. The average number of siblings was three (M = 2.8, S.D. = 1.0) with a range from zero to six.

Materials

The following three forms, administered at two different times, allowed change scores on loneliness, self-esteem, and number of social contacts to be obtained for everyone involved in the visiting program.

Revised UCLA Loneliness Scale. The UCLA (University of California, Los Angeles) Loneliness Scale was developed by Russell, Peplau, and Ferguson (1978) and revised by Russell, Peplau and Cutrona (1980). The scale was originally developed to detect variations in loneliness that occurred in everyday life (Russell, Peplau, & Cutrona, 1980). Loneliness has been shown to be linked to negative affects, including

boredom, restlessness, and unhappiness, and to dissatisfaction with social relationships (Perlman, Gerson, & Spinner, 1978; Russell et al., 1978). The revised version was formulated to alleviate two major problems. First, all items on the original scale were worded in the same direction, with high scores reflecting feelings of social dissatisfaction. Thus, any systematic response bias toward high/low scores, irrespective of item content, would influence the total scale score. A second problem concerned the discriminant validity of the scale. Correlations ranging from .4 to .5 were found between loneliness scores and the Beck Depression Inventory (Bragg, 1979) and the Coopersmith measure of self-esteem (Jones, 1982). Thus, it was necessary to demonstrate that loneliness was distinct from related constructs, such as low self-esteem and depression. This was accomplished by the revision (Russell, et al., 1980).

The scale is a pencil and paper inventory suitable for administration to individuals and groups; it typically takes 5 minutes to complete (Russell, et al., 1980). It took approximately 10 minutes to administer verbally. The revised scale consists of 20 items, half of which are positively worded and half of which are negatively worded (e.g., "I have a lot in common with the people around me"; "I feel left out"). These items are randomly intermixed. The subjects

respond to these statements on a four point scale from "never" to "often". This scale is scored in such a way that high scores indicate loneliness.

Normative data for the Revised UCLA Loneliness Scale are based on a group of 237 first year college students. The relationship between scores on the revised loneliness scale and measures of social activities, a test of concurrent validity, was found to be significant (p < .001). The validity of this scale as a tool to test loneliness in the elderly of Winnipeg has been demonstrated (D'Amato, 1982). The revised loneliness scale also has a high internal consistency with an alpha coefficient of .94. (The scale is shown in Appendix A).

Tennessee Self-Concept Scale. The Tennessee Self-Concept Scale was developed by Fitts (1965) to assess an individual's self-perception and self-esteem. The scale is a pencil and paper inventory suitable for administration to individuals and groups; it typically takes 10 to 20 minutes to complete (Fitts, 1965). It took approximately 45 minutes to administer it verbally. The scale consists of 100 items that are self descriptive and have been derived from a number of pre-existing self concept measures and from written self descriptions. The subjects responded to these statements (e.g., "I am an honest person"; "I get angry sometimes") on a

five point scale from "completely true" to "completely false". The counselling and research form (used in the present study) yields a total or "net positive" score which represents an internal frame of reference, or self-esteem. The net positive score, in turn, yields several sub-scores (e.g., Physical Self, Moral-Ethical Self, Personal Self, Family Self, and Social Self). High net positive scores on the Tennessee Self-concept Scale are associated with a favorable self-concept.

Normative data for the Tennessee Self-Concept Scale are based on a group of 626 subjects from various parts of the U.S., with equal numbers of both sexes. There is wide range of social, economic and intellectual levels represented (Fitts, 1965). A wide range of age groups (including the elderly) have also been tested with the Tennessee Self-Concept Scale (D'Amato, 1981; Hamner, 1968).

The test-retest reliability coefficients for all scale scores range from .60 to .92. Validity data are extensive , according to Fitts (1965). The Tennessee Self-Concept Scale is able to clinically discriminate between psychiatric patient and non-patient groups for almost every subscore of the test. The test also discriminates among patient groups and between people high and low in personality integration.

Social Life Space Index. This scale was developed by

Cumming and Henry (1961) and is used to assess the number of

social contacts a person has had during the past week. It

consists of five questions such as, "How many of your

neighbors do you see...every day?...once a week?...a few

times a month?...less often than once a month but do see

them?...never?". This scale is shown in Appendix B.

Daily Social Life Space Checklist. This form was

developed by the experimenter and was used as a behavioral

check on the information given in the Social Life Space

Index. It was hoped that this form would increase the ease

with which participants monitored their own interactions with

others. It consists of two columns denoting type of contact

(personal or telephone), and four types of individuals

(relative, neighbor, friend, or other). The participant

simply places a check in the appropriate box (e.g., a phone

call from someone selling carpet cleaning would be marked in

"Other - Telephone Contact"), for each contact made during

the day. Since this form was used as a behavioral check on

the information provided by the Social Life Space Index, it

was not deemed appropriate to add a column for initiation of

contact. In other words, the purpose of this form was simply

to monitor the retrospective account of contacts noted on the

Social Life Space Index. This form is shown in Appendix C.

Demographic Information. General demographic

information such as age, marital status in the past and present, number of children (if any), number of siblings, number of relatives living in Winnipeg, was collected from the elderly women. Demographic information was obtained by Age and Opportunity staff during their initial visit to the elderly person. This information was, then, be passed on to the investigator.

Demographic information was also requested from the high school students by the investigator. General information such as age, sex, parents' marital status, and number of siblings was obtained.

Procedure

First Data Collection. Each elderly woman was living independently and had been contacted by one or two Age and Opportunity staff members, who collected demographic information, and judged the elderly person to be agreeable to having a high school age volunteer. Elderly women were contacted in their homes by the investigator who administered the Tennessee Self-Concept Scale, the Revised UCLA Loneliness Scale, and the Social Life Space Index, verbally. These tests were administered verbally to the elderly to eliminate a possible confounding variable--adequate eyesight necessary to read the tests. The investigator gave the elderly woman seven copies of the Daily Social Life Space Checklist - one

for each day - and explained how to fill it in, and that she would be calling every couple of days to make sure everything was going well. The investigator also described how she would come by in one week to pick up the completed forms. The investigator answered any questions the woman had at that time, and gave her a telephone number to call if she should have further questions.

When the investigator picked up the seven completed forms, the elderly individual was thanked for her participation, thus far, in the experiment. She also was reminded that there would be another portion of the experiment, later in the year.

Students were living at home with their families and attended junior high or high school within the city of Winnipeg, Manitoba at the outset of the study. Students were either contacted by the investigator at the Age and Opportunity office, during their training session (before visiting) or, if they are missed at that time, they were contacted at school. They were given the Tennessee Self-Concept Scale, the Revised UCLA Loneliness scale, the Social Life Space Index, and a demographic questionnaire, which they were asked to complete them while the investigator waited. The investigator gave the student seven copies of the Daily Social Life Space Checklist - one for each day -

explained how to fill it in, and that she would be at the student's school at the end of the week to pick up the completed forms. The investigator called each of the students during the week to answer any questions the student had regarding the forms.

After the investigator received the seven completed forms, the student was thanked for his or her participation in this portion of the experiment. Then he or she was reminded that there would be another portion of the experiment, later in the year.

Second data collection. The student visitors and the elderly women who were being visited were contacted by telephone by the investigator 12 - 14 weeks after the initial visit to arrange the second appointment to collect data. The Social Life Space Index, the Tennessee Self-Concept Scale, and the UCLA Loneliness scale, were given, as before, to both the elderly and the student participants.

Results

The data to be presented will follow the same order as the hypotheses outlined on pages 23-26: Changes in scores for (a) loneliness and (b) self-esteem will be described for all program participants; then (c) the correlation between loneliness and self-esteem will be described; and, finally, (d) the number of social contacts will be examined.

Changes from Initial to Second Testing

The effects of program participation (the independent variable being before visiting and after 12-14 weeks of visiting) on the three dependent measures (Revised UCLA Loneliness scale, Tennessee Self-Concept scale and Social Lifespace Index) are shown in Tables 1, 2, and 3, respectively. These measures were all investigated using a fixed effects, 2 X 2 mixed ANOVA with age group as between subjects variable and before vs. after 12-14 weeks of visiting as a within subjects variables.

Revised UCLA Loneliness Scores

Elderly. Hypothesis 1 stated that Friendly visiting was expected to reduce feelings of loneliness in the elderly in relation to their initial scores.

The elderly women in this study had an average loneliness score of 46 ($\underline{M}$ = 45.9, S.D. = 11.6), with a range from 27 to 67. (These data are shown on Table 1). The mean score on the Revised UCLA Loneliness scale for first-year college students was 36.53 (Russell, Peplau & Cutrona, 1980). The range of these normative data was from 20-68. Thus, although the average loneliness score for the elderly was significantly higher than that of college students ($\underline{t}$(2) = 4.07, $\underline{p}$ < .01), the elderly's scores were within the range found in the normative sample.

Thus, the elderly, as expected, had average initial

Table 1

Revised UCLA Loneliness Scores[a]

	Mean	S.D.
Elderly		
Before Visiting	45.9	11.6
After 12-14 weeks	35.5	9.3
Students		
Before Visiting	34.4	8.7
After 12-14 weeks	30.4	9.3

[a]Note: Lower scores on this test are indicative of less
loneliness or, more positive feelings about
oneself.

loneliness scores which far exceeded the mean of the normative sample, indicating that they felt lonelier than the first-year college students did, before visiting began. However, after 12-14 weeks of visiting, the elderly showed a significant decrease in loneliness scores ($F_{(1,22)}$= 89.8, p < .001). Thus, at the time of the second testing, the loneliness scores of the elderly had decreased to the point where the average loneliness score for the elderly did not differ significantly from the average score in the normative sample (Russell, Peplau & Cutrona, 1980). Thus, hypothesis 1 was substantiated.

Students. Hypothesis 2 stated that adolescents were expected to change from feeling lonely to feeling, at least, less lonely.

The students involved in this study had an average loneliness score of 34 ($\underline{M}$ = 34.4, S.D. = 8.7), with a range from 14 to 50 (as shown in Table 1). The mean score of the adolescent visitors was not significantly different from the mean score of the normative sample (Russell, Peplau & Cutrona, 1980). Thus, these junior high and high school students may be considered equivalent to the first-year college students, in terms of Revised UCLA Loneliness scores.

However, after 12-14 weeks of visiting, the students in this study showed a significant decrease in loneliness

$(F_{(1,28)}=4.6, \underline{p}<.05)$. Thus, even though loneliness scores for students were equivalent to the norms before visiting, they still showed a decrease in feelings of loneliness after 12-14 weeks of involvement in the visiting program. Thus, hypothesis 2 was substantiated.

Interaction Effect. The initial loneliness scores for elderly differed significantly from the scores for the student visitors ($\underline{t}=10.3$, p<.01). Similarly, loneliness scores from the second testing differed, with elderly, still having higher loneliness ratings than students ($\underline{t}=5.2$, p<.05).

These changes in Revised UCLA Loneliness scores for the elderly and the student visitors were, however, complicated by an interaction between the group of the participant (visitor vs. visitee) program on participants (see Appendix E). Closer examination of the data revealed that the magnitude of change in loneliness was very different across the two age groups, although the direction of change (a decrease in loneliness over time) was the same for each group (elderly being visited and students doing visiting). The elderly being visited in this study showed a significantly greater drop in loneliness scores than did the students doing visiting after participating in the program (t=5.0, p<.001). These changes are shown in Figure 1.

Revised
UCLA
Loneliness
Scores
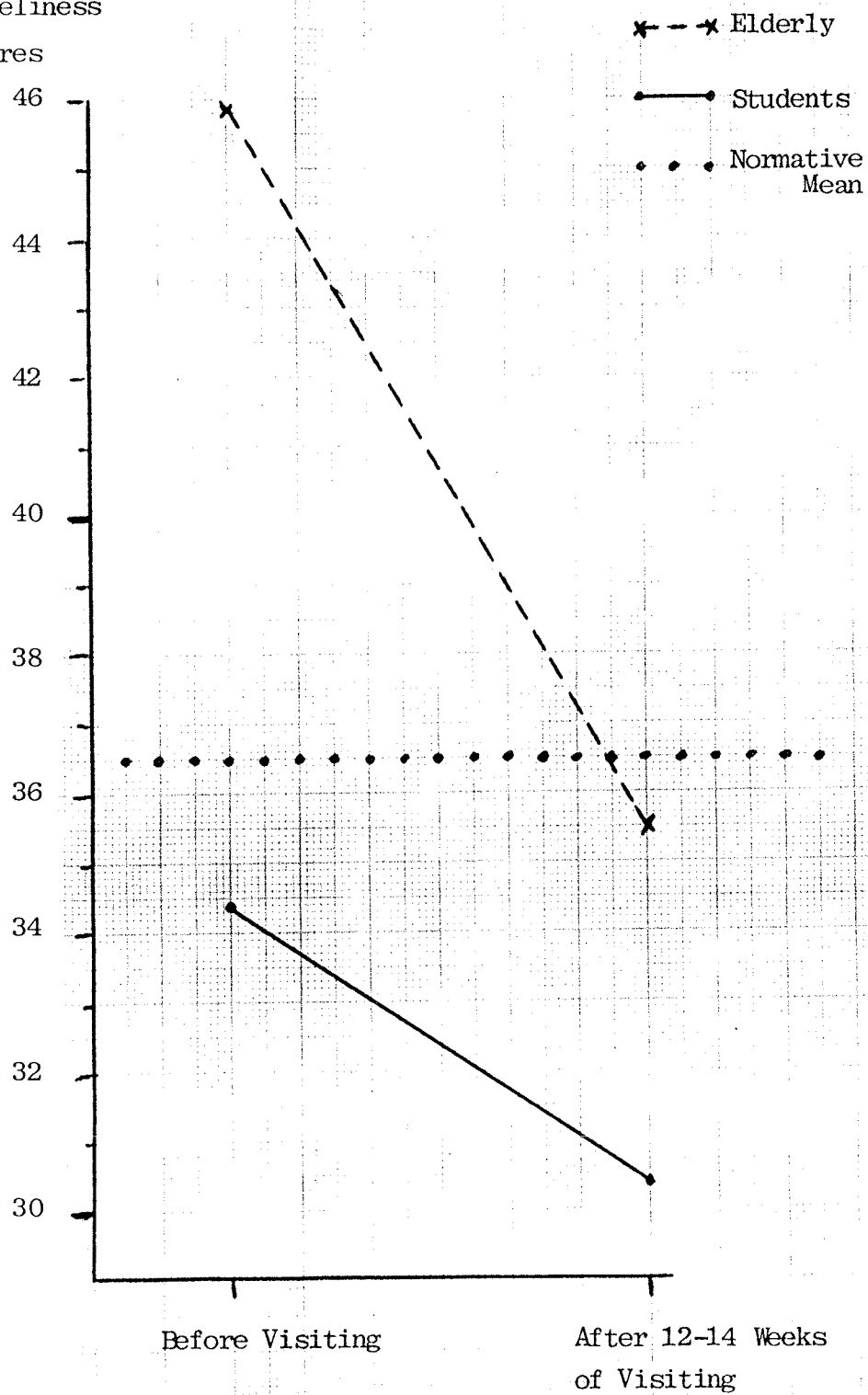
FIGURE 1

Tennessee Self-Concept Scores

Hypothesis 3 stated that the reduction of loneliness and improvement of self-esteem were expected to go hand-in-hand (i.e., the correlation between the two was expected to be large and inverse--with high loneliness associated with poor self-esteem).

The mean scores from the Tennessee Self-Concept scale for all participants are shown in Table 2. Higher scores on this test are associated with greater self-esteem. Figure 2 shows that there was a significant increase in self-esteem for both age groups after 12-14 weeks of visiting $(F_{1,50}=54.4$, $p < .001$). This was the only comparison of significance with regard to the Tennessee Self-Concept scores (as shown in Appendix F).

Correlation between loneliness and self concept. The Pearson Product Moment correlation (r) was not used to calculate degree of association between loneliness and self-esteem, because the sample size was small and it was not possible to make the assumption that this sample was drawn from a bivariate normally distributed population. Thus, self-esteem and loneliness scores were compared using Kendall's Tau. As in previous research (e.g., Goswick & Jones, 1981), a significant negative relationship was observed between these two scores ($T_c=4.5$, $p < .001$). Thus, this sample of elderly and students followed the same

Table 2

Tennessee Self Concept Scores[a]

	Mean	S.D.
Elderly		
Before Visiting	352.8	29.4
After 12-14 weeks	388.0	22.7
Students		
Before Visiting	351.9	43.5
After 12-14 weeks	379.0	41.4

[a]Note: Higher scores on this test are indicative of more favorable self-esteem or, more positive feelings about oneself.

Tennessee
Self-Concept
Scale
Scores
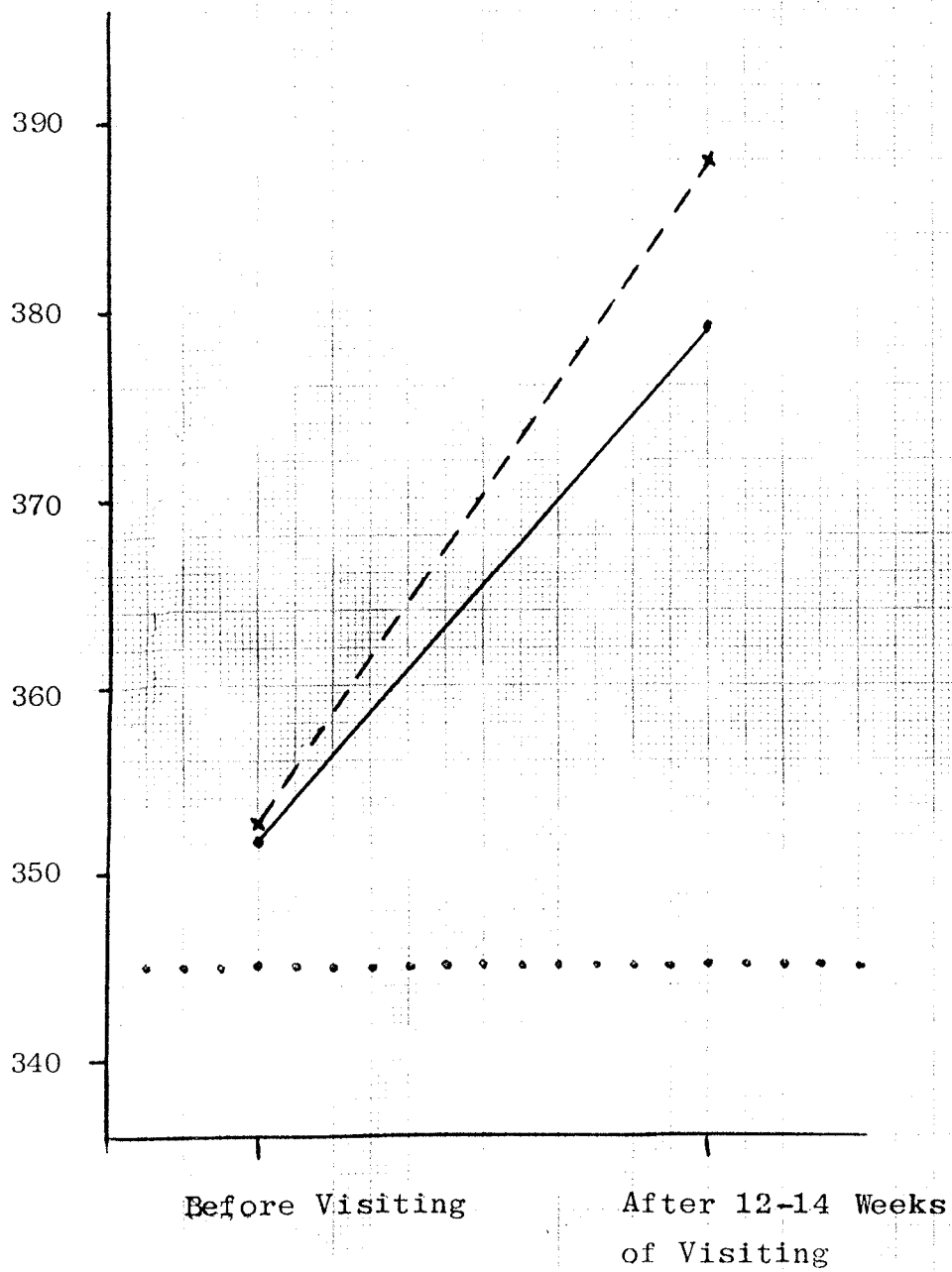
Figure 2

pattern as young adults (20-40 years old), in that high

loneliness scores are related to low self-esteem, and low

loneliness scores are related to high self-esteem. So,

hypothesis 3 is upheld.

The reader may note that the initial Tennessee

Self-Concept scores did not differ significantly between the

elderly and the student visitors. The TSC scores were, also

not significantly different after the second testing.

However, both age groups showed a significant increase in

TSC scores from time 1 to time 2 (as shown in Appendix F).

Number of Social Contacts

Subject compliance with filling out the Daily Social

Lifespace Checklist was very poor. Although subjects would

verbalize that they were filling in the daily checklist when

contacted by the experimenter, many were observed filling

them in just before they handed them to the experimenter, at

the end of the week. Many others handed in incomplete

information - with a few days being checked off, but not

others. Thus, all analyses of this variable - number of

social contacts - were taken from the Social Life Space

Index.

Hypothesis 4 stated that the elderly were expected to

show an increase in number of social contacts after 12 - 14

weeks of visiting.

The change in average number of weekly contacts for

students and elderly is shown in Table 3. Although there is

a significant difference in number of weekly contacts

between student visitors and elderly participants

Table 3

Average Number of Weekly Contacts

	Mean	S.D.
Elderly		
Before Visiting	7.5	7.2
After 12-14 weeks	7.8	6.1
Students		
Before Visiting	57.2	28.7
After 12-14 weeks	59.7	28.6

$(F_{1,50} = 84.1, \underline{p} < .001)$, there was no significant change in the number of social contacts either group had after 12-14 weeks of visiting. This information is shown in Table 4. Thus, the hypothesized increase in number of social contacts after visiting, did not occur.

Discussion

Due to the investigatory nature of this study, many design flaws were allowed to occur which, now, influence the generalizability of the results. Before proceeding with a description of the observations drawn by the results of this study, it is important to point note these major flaws in design.

Problems with Design of the Study

The major flaw in this study is the lack of a control group. The study was originally formulated with control subjects being tested at time 1 and time 2, just as the subjects involved in the Friendly Visiting Program. However, the costs involved in doing 60 additional individual visits (both time and monetary) were prohibitive. Therefore, it was decided that the study would be run using a comparison group at time 1 only for both age groups.

The comparison group for students was not too difficult to procure. Two classes (one in the junior high and the other in the high school where students were volunteering for the Friendly Visiting Program) allowed the experimenter

to test a classroom of students at time 1. However, none of these students felt any obligation to the visiting program, and since no incentives were offered for completion of the Daily Social Life Space Checklist, very few of them were done. Thus, as noted earlier, this measure could not be used in the analyses.

Finding a comparison group for the seniors involved in this program was more problematic. A set of volunteers from one of the Age and Opportunity community centres was considered. However, the elderly persons involved in these centres are some of the most mobile, healthy, and socially active elderly in the city. Whereas, the elderly who request a visitor are among the most incapacitated and socially isolated elderly in the same area. Thus, consideration was given to the fact that these two groups of elderly might be too different—that differences might arise from variables other than loneliness and self concept.

Then, a waiting list control group was considered. That would be the best kind of control for this type of study. However, in order to make it work, elderly women had to request a visitor, be tested by the experimenter, then wait for a visitor to be assigned, and before the first visit, be tested again by the experimenter. Then, the testing to determine the effectiveness of the program could be done 12 - 14 weeks after the visiting had begun. Unfortunately, the

Age and Opportunity staff were too efficient in their matching of elderly to volunteers to make this control group a reality. It was often only a matter of days between the receipt of the first phone call, requesting a visitor, the assessment of the individual as appropriate for having a student visitor, and the first visit between the pair.

The data from these comparison groups are shown in Appendix G. However, because no testing was done at time 2, these data tell us little about the subjects involved in this program, and don't substantiate any generalizability of the results. In further research, care should be taken to design an experiment which will adequately describe the data. However, even with these major shortcomings, many interesting questions have developed from this study.

<div align="center">Observations</div>

Loneliness

Loneliness scores were reduced in both the elderly and the student participants in this study from time 1 to time 2. Thus, the Friendly Visiting Program appears to do more than it attempts (i.e., reduce feelings of loneliness in the elderly), but also seems to reduce feelings of loneliness in the student volunteers. The mean of the students' initial loneliness scores was equivalent to the mean of the normative sample (Russell, Peplau & Cutrona, 1980). Yet, after 12 - 14 weeks of visiting an elderly person, the

students appeared to have a significant decrease in their feelings of loneliness. The elderly, also, showed a decrease in the mean of their loneliness scores after 12 - 14 weeks of being visited. This finding was especially interesting, as an interaction between age group membership and program participation was observed in this sample. The elderly being visited appeared to have a much greater drop in loneliness than did the student visitors. This is understandable, since the the mean of elderly's initial scores was much higher than the mean of the students at the beginning of the study, and after 12 - 14 weeks of visiting, the mean of the elderly's scores had dropped to become equivalent to the mean of the normative sample.

Moreover, 61% of the students and 100% of the elderly involved in this visiting program showed decreased in their individual loneliness scores after 12 - 14 weeks of visiting. Although there was variation in the amount of change oserved from individual to individual, the fact that a large percentage of the students and every one of the elderly changed toward feeling more positively, demonstrated a strong correlation between involvement in the program and decreased feelings of loneliness.

Further, this finding is in keeping with the discrepancy model of loneliness. According to this model, if a person would like to have more friendships than they

have at present, a discrepancy exists. The larger that
discrepancy, the greater the feelings of loneliness.
Therefore, if one increased the number of friendship
contacts a person had, that should decrease the discrepancy
between their desired and attained number of social
contacts, thus reducing loneliness.

Self-Esteem

This research confirmed previous findings (e.g.,
Goswick & Jones, 1981), that a negative relationship exists
between self-esteem and loneliness. This finding not only
substantiated previous research, but also demonstrated that
this type of relationship between loneliness and self-esteem
exists in adolescents and elderly individuals, as well as in
young adults.

Number of Social Contacts

The only hypothesis from this study which was clearly
rejected was the hypothesis that the elderly would show an
increase in number of social contacts (not counting the
visitor) after 12 - 14 weeks of visiting. Many factors
could account for the lack of this finding. For instance,
the time period monitored by this study might have been too
short to note an increase in the number of social contacts
an individual had in her week. Or, the present study may
have failed to note increasing daily activities, because
they were not social in nature. Arling's (1976) study

reported many behavioral measures of daily activity,
including increased grooming, housecleaning, and cooking.
The increases expected in social contacts might also not
have been noted because of the difficulty elderly persons
had in seeing/understanding the Daily Social Lifespace
Checklist.

On the other hand, the increase in self-esteem may not
always be associated with an increase in activites, as
asserted by Arling (1976). A recent study (Okun, Stock,
Haring, & Witter, 1984) found that informal activites and
activities with friends were not related to feelings of
well-being. Alternatively, individuals may feel like taking
part in more social activity when they feel less lonely, but
may be limited by their physical incapacities. Thus, they
can not "attend church, political gatherings or community
meetings more frequently" as Arling (1976) asserts.

Effects of the Friendly Visiting Program

The Friendly Visiting Program appears, by these data, to
be correlated with both a reduction in loneliness (and
concomitant increase in self-esteem) in the elderly and
similar changes in the student volunteers. This program
could be used (or another one like it set up) with the focus
on aiding distressed/lonely/isolated youth, just as this
program is set up with the focus on aiding isolated or
lonely elderly persons. At least, it might be advertised to

school personnel as such.

This study points to the possibility that the addition of one visit per week--even when it does not lead to increased social contacts with others outside of this visiting dyad--helps people feel less lonely and more positive about themselves. Looking at the individual data, it is easy to see that for the elderly--who have an average of 6.4 social contacts per week--an addition of one contact per week can increase their weekly social contacts by 15-20%. What is remarkable, is that the students, who have an average of 28 friendship contacts per week may also be positively affected by this increase of one weekly visit.

Suggested Improvements in Design

Studies in this area need control groups with subjects who are as comparable to the experimental subjects as possible. Testing a control group was considered too great a task for this study, due to time, energy and economic constraints. However, without testing comparison subjects at both time 1 and time 2, it is impossible to say that changes occurred due to the program participants' involvement in the Friendly Visiting Program. It could be, that both the students and the elderly would have had lower loneliness scores and greater self-esteem scores 12 - 14 weeks after the first testing, regardless of whether they were involved in Friendly Visiting. Student scores on the

Revised UCLA Loneliness scale have been found to decrease over time in many studies (e.g., Cutrona, 1982; Goldenberg, 1982; Locke, 1984).

Further, since all of the test administration to the elderly was done verbally by one experimenter (one who had a great investment in the outcome of the study), errors might have arisen in the accuracy of her recording responses (i.e., since she knew the results she wanted, might she have recorded pre-visiting responses as less positive and post-visiting responses as more positive than actually reported?) This problem could be alleviated by having a team of investigators/raters go over tapes of the testing and rescore the tests. Then, an inter-observer reliability coefficient could be calculated, and the accuracy of the recording from verbal administration insured.

Further, this particular investigator may have been enthusiastic enough about the results she expected to observe to influence the individuals she visited so that they felt more positively. Other investigators should be used to collect data to test the possibility of one experimenter's particular influence positively effecting the visitors and visitees in the program from their first to their second encounter with that experimenter.

The results of this study may or may not be generalizable to other samples of elderly women and

students. However, at present that is not known. Certainly, after seeing the magnitude of effect that this program has (or potentially has) on decreasing feelings of loneliness in isolated elderly women, it would be worthwhile to implement this sort of a program in other cities, or to test individuals involved in similar programs in other areas. This visiting program does appear to do what the anecdotal evidence has been implying--it creates conditions so that people who receive a visitor "feel better" (i.e., less lonely and with greater self-esteem). Moreover, this program has a positive effect on the students who are involved as visitors. They too "feel better" after several weeks as a visitor.

Finally, the Friendly Visiting Program has many other-aged volunteers who visit socially-isolated elderly persons. It would be interesting to test these volunteers and elderly on the same measures as were used to test the student volunteers and to compare the effects of different age groups on changes in loneliness and self-esteem.

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Appendix A:

Revised UCLA Loneliness Scale

69

PLEASE INDICATE HOW OFTEN YOU FEEL THE WAY DESCRIBED
IN EACH OF THE FOLLOWING STATEMENTS. CIRCLE ONE NUMBER
FOR EACH.

		NEVER	RARELY	SOMETIMES	OFTEN
1.	I feel in tune with the people around me.	1	2	3	4
2.	I lack companionship	1	2	3	4
3.	There is no one I can turn to.	1	2	3	4
4.	I do not feel alone.	1	2	3	4
5.	I feel part of a group of friends.	1	2	3	4
6.	I have a lot in common with the people around me.	1	2	3	4
7.	I am no longer close to anyone.	1	2	3	4
8.	My interests and ideas are not shared by those around me.	1	2	3	4
9.	I am an outgoing person.	1	2	3	4
10.	There are people I feel close to.	1	2	3	4
11.	I feel left out.	1	2	3	4
12.	My social relationships are superficial	1	2	3	4
13.	No one really knows me well.	1	2	3	4
14.	I feel isolated from others.	1	2	3	4
15.	I can find companionship when I want it.	1	2	3	4
16.	There are people who really understand me.	1	2	3	4
17.	I am unhappy being so withdrawn	1	2	3	4
18.	People are around me but not with me.	1	2	3	4
19.	There are people I can talk to.	1	2	3	4
20.	There are people I can turn to.	1	2	3	4

Appendix B:

Social Life Space Index

1. How many people live here with you, not including yourself?

    What relation is this person to you? What sex? How old?
    What is their marital status? (Write in responses.)

RELATIONSHIP	SEX	AGE	MARITAL STATUS
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

2. Of your relatives, but not including your spouse, how many do you see:

    1 - every day   _____

    2 - once a week   _____

    3 - a few times a month   _____

    4 - once a month   _____

    5 - less often than once a month but do see them   _____

    6 - never   _____

3. How many of your neighbours do you see:

    1 - every day   _____

    2 - once a week   _____

    3 - a few times a month   _____

    4 - once a month   _____

    5 - less often than once a month but do see them   _____

    6 - never   _____

4. How many people who you know do you consider close friends - that is,

    people you confide in, talk to about yourself or your problems?   _____

5. Now thinking about those close friends, how many do you see:

    1 - every day   _____

    2 - once a week   _____

    3 - a few times a month   _____

    4 - once a month   _____

    5 - less often than once a month but do see them   _____

    6 - never   _____

    NOTE: Number of close friends in 4 should add up to the same number as in 5.

6. Now, about people you see for certain specific purposes - like store
    keepers, bus drivers, waiters, sales people, mailman, banker,
    meals-on-wheels, volunteers, homemakers, etc. About how many would you
    see fairly regularly in a week, would you say?   _____

Appendix C:

Daily Social Life Space Index

Name: _____   Date: _____

PLACE A CHECKMARK IN THE APPROPRIATE BOX FOR EACH CONTACT MADE
WITH ANOTHER PERSON.

	Personal Contact	Telephone Contact
Relative		
Neighbor		
Friend		
Other		

Appendix D:

Tennessee Self-Concept Scale

		Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
		1	2	3	4	5
1	I have a healthy body................	1	2	3	4	5
2	I am an attractive person..............	1	2	3	4	5
3	I consider myself a sloppy person........	1	2	3	4	5
4	I am a decent sort of person............	1	2	3	4	5
5	I am an honest person..................	1	2	3	4	5
6	I am a bad person.....................	1	2	3	4	5
7	I am a cheerful person.................	1	2	3	4	5
8	I am a calm and easy going person.......	1	2	3	4	5
9	I am a nobody........................	1	2	3	4	5
10	I have a family that would always help me in any kind of trouble.............	1	2	3	4	5
11	I am a member of a happy family.........	1	2	3	4	5
12	My friends have no confidence in me......	1	2	3	4	5
13	I am a friendly person..................	1	2	3	4	5
14	I am popular with men..................	1	2	3	4	5
15	I am not interested in what other people do	1	2	3	4	5
16	I do not always tell the truth.............	1	2	3	4	5
17	I get angry sometimes..................	1	2	3	4	5
18	I feel good most of the time	1	2	3	4	5
19	I do poorly in sports and games	1	2	3	4	5
20	I am a poor sleeper	1	2	3	4	5
21	I do what is right most of the time	1	2	3	4	5
22	I sometimes use unfair means to get ahead ..	1	2	3	4	5
23	I have trouble doing the things that are right	1	2	3	4	5
24	I solve my problems quite easily	1	2	3	4	5
25	I change my mind a lot	1	2	3	4	5

		Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
		1	2	3	4	5
26	I ought to go to church more.............	1	2	3	4	5
27	I am satisfied to be just what I am........	1	2	3	4	5
28	I am just as nice as I should be...........	1	2	3	4	5
29	I despise myself........................	1	2	3	4	5
30	I am satisfied with my family relationships.	1	2	3	4	5
31	I understand my family as well as I should..	1	2	3	4	5
32	I should trust my family more.............	1	2	3	4	5
33	I am as sociable as I want to be..........	1	2	3	4	5
34	I try to please others, but I don't overdo it.	1	2	3	4	5
35	I am no good at all from a social standpoint	1	2	3	4	5
36	I do not like everyone I know............	1	2	3	4	5
37	Once in a while, I laugh at a dirty joke...	1	2	3	4	5
38	I like to look nice and neat all the time	1	2	3	4	5
39	I am full of aches and pains..........	1	2	3	4	5
40	I am a sick person...................	1	2	3	4	5
41	I am a religious person..............	1	2	3	4	5
42	I am a moral failure.................	1	2	3	4	5
43	I am a morally weak person..........	1	2	3	4	5
44	I have a lot of self-control...........	1	2	3	4	5
45	I am a hateful person...............	1	2	3	4	5
46	I am losing my mind.................	1	2	3	4	5
47	I am an important person to my friends	1	2	3	4	5
	and family......................	1	2	3	4	5
48	I am not loved by my family.........	1	2	3	4	5
49	I feel that my family doesn't trust me.	1	2	3	4	5
50	I am popular with women............	1	2	3	4	5

		Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
		1	2	3	4	5
51	I do not forgive others easily......	1	2	3	4	5
52	I would rather win than lose in a game	1	2	3	4	5
53	I am neither too tall nor too short....	1	2	3	4	5
54	I don't feel as well as I should.......	1	2	3	4	5
55	I should have more sex appeal.......	1	2	3	4	5
56	I am as religious as I want to be......	1	2	3	4	5
57	I wish I could be more trustworthy....	1	2	3	4	5
58	I shouldn't tell so many lies.........	1	2	3	4	5
59	I am as smart as I want to be.........	1	2	3	4	5
60	I am not the person I would like to be.	1	2	3	4	5
61	I wish I didn't give up as easily as I do	1	2	3	4	5
62	I treat my parents as well as I should (Use past tense if parents are not living)	1	2	3	4	5
63	I am too sensitive to things my family say	1	2	3	4	5
64	I should love my family more...........	1	2	3	4	5
65	I am satisfied with the way I treat other people	1	2	3	4	5
66	I should be more polite to others..	1	2	3	4	5
67	I ought to get along better with other people..	1	2	3	4	5
68	I gossip a little at times.................	1	2	3	4	5
69	At times I feel like swearing..............	1	2	3	4	5
70	I am neither too fat nor too thin...........	1	2	3	4	5
71	I like my looks just the way they are........	1	2	3	4	5
72	I would like to change some parts of my body	1	2	3	4	5
73	I am satisfied with my moral behavior.......	1	2	3	4	5
74	I am satisfied with my relationship to God....	1	2	3	4	5

		Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
		1	2	3	4	5
75	I try to run away from my problems	1	2	3	4	5
76	I do my share of work at home	1	2	3	4	5
77	I quarrel with my family	1	2	3	4	5
78	I do not act like my family thinks I should ..	1	2	3	4	5
79	I see good points in all the people I meet ...	1	2	3	4	5
80	I do not feel at ease with other people	1	2	3	4	5
81	I find it hard to talk with strangers	1	2	3	4	5
82	Once in a while I put off until tomorrow what I ought to do today	1	2	3	4	5
83	I take good care of myself physically......	1	2	3	4	5
84	I try to be careful about my appearance...	1	2	3	4	5
85	I often act like I am "all thumbs"..........	1	2	3	4	5
86	I am true to my religion in my everyday life.	1	2	3	4	5
87	I try to change when I know I'm doing things that are wrong.............	1	2	3	4	5
88	I sometimes do very bad things.............	1	2	3	4	5
89	I can always take care of myself in any situation......................	1	2	3	4	5
90	I take the blame for things without getting mad	1	2	3	4	5
91	I do things without thinking about them first...	1	2	3	4	5
92	I try to play fair with my friends and family...	1	2	3	4	5
93	I take a real interest in my family.	1	2	3	4	5
94	I give in to my parents. (Use past tense if parents are not living).........	1	2	3	4	5
95	I try to understand the other fellow's point of view......................	1	2	3	4	5
96	I get along well with other people..	1	2	3	4	5

		Completely false	Mostly false	Partly false and partly true	Mostly true	Completely true
		1	2	3	4	5
97.	I am mad at the whole world....	1	2	3	4	5
98.	I am hard to be friendly with....	1	2	3	4	5
99.	Once in a while I think of things too bad to talk about........	1	2	3	4	5
100.	Sometimes, when I am not feeling well, I am cross..........	1	2	3	4	5

Appendix E:

ANOVA Table of Revised UCLA Loneliness Scores

ANOVA Table of Revised UCLA Loneliness Scores

Before and After Visiting

Source	df	MS	F	p
Agegroup	1	1768.0	11.3	0.00**
Error	50	156.6		
Replication	1	1328.6	40.9	0.00**
AXR	1	265.6	8.2	0.01*
Error	50	32.5		

*p < .01   **p < .001

Appendix F:

ANOVA Table of Tennessee Self-Concept Scores

ANOVA Table of Tennessee Self-Concept Scores

Before and After Visiting

Source	df	MS	F	p
Agegroup	1	637.7	0.3	0.59
Error	50	792.5		
Replication	1	25062.8	54.4	0.00**
AXR	1	427.8	0.9	0.34
Error	50	136.8		

**$p < .001$