The Relationship Between Postretirement Activity and Life Satisfaction

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THE RELATIONSHIP BETWEEN POSTRETIRED ACTIVITY AND LIFE SATISFACTION

by

Dorothy Jane Gould Nelson

A thesis submitted in partial fulfillment of the requirements for the degree of
MASTER OF SCIENCE
in
Family and Human Development

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1995
ABSTRACT

The Relationship Between Postretirement Activity and Life Satisfaction

by

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Utah State University, 1995

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The purpose of this study was to examine the relationship between the types of activities people engage in after they retire, how often they participate, how or with whom they participate, and how these independent variables influence the dependent variable of life satisfaction. The majority of the research done to date on postretirement activity focuses primarily on recreational activities. This study examined the effects of including some type of substantive or service activity in addition to hobbies and recreational activity. Participants were surveyed concerning their health, mobility, and financial conditions so that these variables could be controlled for in determining life satisfaction. They were questioned about their activities, and given the Life Satisfaction Index to measure life satisfaction.
The results indicate that those who have no activities that they participate in on a regular basis--no hobbies, no forms of recreation, and no service-related activities--have a relatively high level of life satisfaction. Also those who have a high level of hobby and recreational activity combined with regular service activities have a higher level of satisfaction. Those who only occasionally engage in hobby and recreational activity and have no service-related activity have a moderate level of satisfaction.

The results of this study confirm the hypothesis that life satisfaction is positively influenced by both hobbies and service activities. Age and gender of respondents are not important variables, but the issues of mobility, health, and economic status do impact life satisfaction. The importance of hobby and recreational activity has been frequently studied under the guise of activity theory, and found to be of significance in feelings of well-being and in life satisfaction. The role of service activity has not been thoroughly explored, but is believed to fill the need for exchange as postulated in exchange theory.
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Without the patience and support of my loving family, I would not have been able to return to school to pursue my dream. I give them my thanks and my love.

Dorothy Nelson
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CHAPTER I
INTRODUCTION

The overall purpose of this research was to assess satisfaction with life in the retirement years as related to activity levels of people. With improvements in health and medicine, combined with healthier lifestyles, many people can look forward to 20 to 30 years of relatively good health and activity after retirement. As the "baby-boom" generation ages, there will also be an increase in the number of elderly in proportion to the population in general, and a decrease in the proportion of people in young adulthood. Increasing life expectancy and changing fertility patterns have changed the American society from a pyramid, wider at the bottom, to a vertical tower, and will soon become an inverted pyramid, wider at the top (Stevens-Long & Commons, 1992). By the year 2000, 13% of the population will be 65 or older. That is three times the percentage in 1990, and the greatest increase will be among those over age 75 (Bruno, 1985).

The implications of this demographic pattern are a proportionately smaller labor force and a growing population of retirees. This major demographic change creates diverse social problems for the nation as a whole and for the social context of life satisfaction of the elderly in modern
The purpose of this research was to determine what kind of activities retired people are now engaged in, how often they participate in them, and to determine how life satisfaction is influenced by the type and level of such activities. Specifically, activity patterns of retirees were assessed in terms of perceived life satisfaction to see if there is a correlation between the types and amounts of activities and life satisfaction. The general hypothesis was that there is a positive relationship between the type of activity, the amount of time given to activity, and life satisfaction.
Rather than taking up new leisure activities after retirement, retirees often spend more time pursuing the same activities they had engaged in prior to retirement (Long, 1987; Vinick & Ekerdt, 1991). While 54% of the retirees in a study by Carp (1990) believed that participation in leisure activities improved their health, a study by Kaufman (1988) suggested that lower levels of anxiety among retirees is associated with greater participation and satisfaction in leisure activities. Another study by Russell (1987) indicated that the frequency of participation in leisure activities is not as significant as the satisfaction associated with the activity. This corresponds with findings by Steinkamp and Kelly (1985) that seeking challenges and a continuing concern for recognition and reward are systematically related to life satisfaction. This would seem to suggest that finding satisfaction in activity is more important than just finding something to do. In another study (Kolanowski & Gunter, 1985), 73% of respondents who described self-practices that helped preserve physical and mental well-being mentioned contributing to the evolutionary survival of the group. Over 50% mentioned physical activity, and 42.3% referred to mental activity. Setting goals and actively seeking to
reach the goals were mentioned by 34.6% of the respondents.

Palmore, Burchett, Fillenbaum, George, and Wallman (1985) listed four conditions that are related to higher life satisfaction among retirees: higher levels of education attainment, higher levels of income adequacy, lower levels of health limitations, and increased time pursuing solitary leisure activities. They also found that increased participation in formal organizations is also related to higher life satisfaction. The pairing of solitary activities with participation in formal organizations is explained by both the need to recognize that partners in group activities will not always be available, and that social involvement is essential. The implications, they suggested, are that programs for retirees and potential retirees should focus on maintaining health, income, opportunities for education, social activities, and marriage or remarriage.

Several studies have been done in reference to activity theory and life satisfaction in older people. In assessing the amount of activity older people engage in, these studies have looked at voluntary associations as a measure of personal and social integration. It was generally believed that interaction in voluntary associations relates to psychological well-being of the elderly, and is related to higher levels of morale, adjustment, and life satisfaction.
(Havighurst & Albrecht, 1953; Jeffers & Nichols, 1961; Kutner, Fanshel, Togo, & Langner, 1956; Palmore, 1968; Pihlblad & McNamara, 1965). These studies looked at membership in a variety of voluntary organizations such as Masons, Lions, Elks, American Legion, and American Association of Retired Persons. They measured how many such organizations a person belonged to and the amount of cross over in types of organizations. They also gauged the degree of participation as measured by the number of meetings attended.

The majority of individuals interviewed in a study by Babchuk, Peters, Hoyt, and Kaiser (1979) belonged to more than one such organization. Four out of 10 were found to belong to three or more groups. A sharp drop in memberships was not indicated with aging even beyond the age of 80, but the degree of activity within the organizations did diminish. Although there was disparity in the types of organizations by sex, both males and females were highly represented in memberships. The most common type of membership for both sexes was in organizations described as instrumental-expressive, those that seek to be integrative both for the personality system and the social system (American Legion, Shriners, etc.), and expressive, those that pursue objectives that are immediately gratifying to members (dance, music, card clubs).
The findings of these studies generally showed that those thus engaged have a higher life satisfaction score on the Life Satisfaction Index (Newgarten, Havighurst, & Tobin, 1961). However, when these studies were replicated and reexamined (Cutler, 1973; Bull & Aucoin, 1975; Edwards & Klemmack, 1973), some doubt was introduced as to the validity of the findings. When socioeconomic and health factors were held constant, participation in these organizations was found to be only minimally and non-statistically associated with life satisfaction. This raises the question whether people who join such groups achieve higher life satisfaction because of the association, or if the people who join such organizations already exhibit the characteristics of higher life satisfaction.

These studies looked only at participation in formal organizations as levels of activity, and not at the element of exchange provided by that activity. They are clubs members join. Although some of them provide opportunities for service to others, they do not generally provide the feelings of exchange that allow individuals to feel that they are contributing to the general welfare of their community on a continuing basis. The desire to be needed, to be an active participant in life, was not measured.

Over the past 25 years there has been a large increase in the number of retired people who are engaged in volunteer
activity. The percentages have risen from 11% of people over age 65, in 1965, to 41% of people over age 60, and almost one in three over age 75, in 1990 (Chambre, 1993). Stevens reported that there are more than 8 million volunteers, (35%) age 65 and over, who are giving service in the United States (Stevens, 1991). Three government-sponsored volunteer programs designed for the elderly have seen dramatic growth in the number of volunteers over age 70, during the last decade. They are Retirement Services Volunteer Program (45% to 66%), Foster Grandparent (49% to 62%), and Senior Companion (41% to 53%) (Chambre, 1993). Demographic changes in society have been responsible for most of this increase in volunteerism. The larger number of elderly available, combined with a decrease in the number of younger people, has increased the need for older volunteers and influenced many organizations that once limited their numbers of elderly volunteers, or that put an age limit on volunteers, to increase their recruitment of the elderly. Today’s cohort of elderly are better educated than in past generations, giving them more skills to offer. They are more affluent and thus able to volunteer where they might otherwise have required paid work. They have fewer children to occupy their time and fulfill their need to be needed. They also have longer periods of retirement, time that needs to be filled (United States Department of Health and Human
Services, 1991). They are looking for ways to structure meaningful social roles.

Chambre also reported that an increasing number of retirees are actually returning to work. They either continue in their former occupations on a part-time basis, or begin new careers. Figures from the U. S. Department of Health and Human Services publication, Aging America (1991), show that 25% of men and 16.4% of women between the ages of 65 and 69 were in the labor force in 1989. Thirty percent of men returned to the labor force after retirement, and remained for about 2 years (American Association of Retired Persons, 1989).

Changes in social policy promote volunteerism among the elderly today. The past 25 years have seen a new interest and need for older volunteers, and a number of public and private programs have been developed to provide opportunities.

Today, older volunteers provide social and emotional support to potential child abusers, abused or neglected children, patients in mental hospitals, retarded children and adults, families with chronically ill or retarded members, and boarder babies, including some with AIDS. Older volunteers work in day care centers, schools, prisons, and hospitals. Other roles include consulting with small business owners, mentoring young people, participating in VISTA or the Peace Corps, providing services to other long-lived people in their own communities and in nursing homes, parent education, health education to other elders, working as auxiliary police, doing income tax returns, working as consumer advocates, and engaging in lobbying and voter registration. (Chambre, 1993, p. 224)
The number of programs promoting elderly volunteerism has risen from 16 in the mid-sixties to a number too large to estimate. Many of these have been initiated by, or are sponsored by senior groups themselves. The AARP (American Association of Retired Persons) began the Widowed Person’s Service in 1973 and the Volunteers in Tax Assistance (VITA) program. The National Executive Service Corps and The National Retiree Volunteer Center are two groups begun by retired professionals and technicians, as ways to share their accumulated skills with younger entrepreneurs. Stevens (1991) has reported that the majority of volunteers indicate relatively high levels of life satisfaction and stable health during the period of volunteer service. This supports the postulate of activity theory that in older people, the level of activities is positively related to subjective well-being. It also supports other studies that suggest a relationship between physical activity and physical health, and activity and cognitive functioning (Herzog, Kahn, Morgan, Jackson, & Antonucci, 1989).

It should be noted that even though the number of elderly volunteers has increased, they are not "new" volunteers. Few older people who do not have a history of volunteering decide to become volunteers after retirement (Herzog et al., 1989). Most older volunteers are continuing a practice they have engaged in over the years. They now
have more time to commit, and so may volunteer in more areas than previously. As noted above, there are now more opportunities to volunteer, and more interest in recruiting older volunteers.

Herzog et al.'s (1989) study of productive activity and age indicates that many types of activity engaged in by younger people are continued into old age. The activities may no longer be designated as productive activity, because they no longer involve pay, but they are still performed by the elderly. Herzog examined the levels of paid regular work, paid irregular work, housework, child care, household maintenance, volunteer work, help to friends and relatives, help for chronic problems, and help for acute problems. The number of hours spent in each of these activities was compared for younger and older persons. The finding was that people 45 to 75 years of age spend approximately equal time in housework, child care, and home maintenance as younger persons, and a greater amount of time in volunteer work, such as help to friends and relatives, help for chronic problems and help for acute problems. These data were interpreted as demonstrating that "today's older adults do contribute in productive ways to this society by performing formal volunteer work and providing informal help to family members and friends at levels of effort roughly comparable to those for young and middle-aged adults"
Many retired people change their residence to retirement communities. Duff and Hong (1993) reported that life satisfaction among retirement community dwellers was associated with the amount of participation in community activities and the amount of socialization they had with friends. Hong and Duff's 1994 study of widows in retirement communities supports this finding. Widows who lived in retirement communities that had a majority of single members reported greater life satisfaction than those who lived in communities of mostly married couples. The reasons given for the difference centered on the types of activities provided. In communities that contained a majority of married couples, most of the activities were couple oriented. This left the widows, who did not have partners, out of many of the activities. Other activities that were not specifically couple oriented were still mostly dominated by couples, and widows reported that they did not feel comfortable attending alone. In communities where singles predominated, most activities were single oriented. Widows felt comfortable attending these functions and reported an increase in the number of friendships they made. They reported a subsequent increase in life satisfaction (Hong & Duff, 1994).
Similar findings were found for men in a study of the effects of location on life satisfaction. The sample included 1,654 men living in central city, suburban, and nonmetropolitan areas. One of the findings was that location indirectly influences well-being through the availability for participation in formal, informal, and recreational activities. This supports the activity theory that participation increases well-being by

(a) reducing a person’s sense of anomie and powerlessness; (b) offering satisfying primary group relations and/or (c) increasing a sense of social integration and reducing loneliness. (Reitzes, Mutran, & Pope, 1991, p. 197)

Interviews with retirees provide some interesting insights into the discoveries of what adds to life satisfaction, by those who are experiencing retirement (Prentis, 1992): A 69-year-old male with a high school education, has suggested that retirees give themselves 6 months to do all of the things they want to do, and some of the things they think they are going to be able to do for the rest of their lives. He says they will find it becomes monotonous. "'Then,' he says, 'begin looking at those things you can do for others'" (p. 170).

Another 67-year-old male high school graduate warns people to develop hobbies before they retire, and to pursue hobbies that they can project into retirement. Many activities that younger people engage in are not compatible
with aging, such as field hockey, and some require partners or skills that fade with age. These words are echoed by a 68-year-old college graduate who advises retirees to stay busy. "You will get old doing nothing....You’ve got to plan what you’re going to do with your time. Time will kill you. You have so much of it, and you don’t know what to do with it" (Prentis, 1992, p. 195). He goes on to tell about service work that he does, "I get so much joy out of seeing the eyes of people light up when you do something for them" (Prentis, 1992, p. 196). Volunteering on a regular basis provides structure to one’s life--something to look forward to.

Samdahl (1987) found that what distinguishes free time from empty time is the ability to choose which activities will fill that time. Retirement is not so much a time when all of the constraints of roles are abandoned, as it is a time when the individual has the ability to choose the activity, the time to perform the activity, and the duration of the activity. Allen and Chin-Sang (1990) found this to be true when they interviewed aging Black women concerning their ideas on leisure activity. Most of these women reported that they continued many of the same labors as previously, but that now they were voluntary, in that they were not compelled by the constraints of a "job" to perform them. Since many of them had been employed as domestic
help, they found they were still performing these same tasks for their own families. Some of the women interviewed established their own businesses doing the same tasks they had once done in the employ of others. One woman told of opening a flea market stand:

I got tired of staying home and I told my husband we had to do something. I thought it would be good for us to be out of the house. You just can’t sit around all the time doing nothing. so I thought of having a stand at the flea market. Sometimes we make money, sometimes none, but we have a good time. At least we’re not sitting home feeling sorry for ourselves. When we’re out there we forget about our aches and pains. (Allen & Chin-Sang, 1990, p. 738)

The women interviewed stated that they engaged in a variety of activities that included hobbies, recreation, and service activities that were performed alone or in groups. The reciprocal function of church and community work was important to these women. One woman said of church work that "I wanted to do something other than sitting here. I had gotten in a rut." (Allen & Chin-Sang, 1990, p. 739)

Most researchers of retirement activity have looked only at recreational activities and their effects on life satisfaction. Their findings support the hypothesis that increased activity among the elderly is positively related to life satisfaction.

Although no direct studies were found, the literature does suggests, incidentally, that people who engage in a variety of activities, including some service activities,
have richer, more meaningful, and thus more satisfying lives. The variety, it implies, should include some group activities, as well as solitary activity, to provide social contact. These findings are suggested through interviews with retired persons, and not direct studies.

The literature also suggests that not only does health influence activity, but activity also influences health, as many of the older people interviewed mentioned that they felt better when they were doing things, and their health seemed to be worse when they were not. The studies on volunteerism support the hypotheses that age and sex do not have a significant influence on activity, as volunteerism did not decline until extreme old age. None of the studies found dealt directly with the effects of finances and mobility among the elderly in relationship to activity, but did imply, through association, that all of those included in the studies were fairly affluent and mobile.

In light of the expected future need for more involvement on the part of older people, there is a need for more direct studies of the effects of service-oriented activity on their perceptions of life satisfaction. What types of service are most compatible with their expectations for retirement? What types of service meets their need for reciprocity? How are they best able to serve; with the youth, young adults, or other elderly? Are there ways in
which even those who are not as healthy, mobile, or financially secure may serve? Will that service have a positive effect on them? The literature suggests that serving is not something people suddenly begin to do when they retire, but an ongoing activity. Therefore, what needs to be done before someone retires to set the stage for future service?

This study addresses the issue of types of activity as well as mere numbers. It asks about service activity specifically, and separately from hobby or recreational activity, and examines the effect of a combination of these types of activity on life satisfaction. Through a series of questions, the study examines the hobbies, forms of recreation, and types of service activities this sample of retired people engage in. Although it was not the direct purpose of this study, information was gathered on how retired people engage in activities--are they done alone or with others? How often are they engaged in? The study also asked about their favorite activity in each category. Since the literature confirms that retired people do not generally begin new activities, but continue those they have previously participated in, this information can be used to plan activities around the things older people find most satisfying.

The study gathered information on age, sex, health,
finances, and mobility and relates them to activity as well as to life satisfaction. Each of the variables is examined separately, and in combination, to determine its effect on the other variables as well as the dependent variable.
CHAPTER III
DATA DESCRIPTION

Rationale

Contingencies of age usually make older people more dependent on others than when they were younger, thus exchange becomes an important aspect of maintaining dignity and self-esteem. Old age has traditionally been seen as a second period of dependency. By providing opportunities to participate in substantive activities, seniors are more likely to feel that they are contributing to society in a meaningful way. As productive members of society, the requirements of reciprocity (social exchange) are met. Satisfaction with life will be increased, because self-esteem will be enhanced.

Theories

Two theories are used in this research: social exchange and activity theory. Social Exchange Theory as postulated by George Homans (1974) refers to the balance of costs and benefits incurred in transactions between individuals or societies. Homans defined social behavior as an exchange of rewards (and costs) between two or more persons, which means that when people act in certain ways, they are at least rewarded or punished by the behavior of
another person. This is a necessary condition. "The exchange framework focuses on how relationships develop on how relationships are experienced, on the patterns and dynamics that emerge within ongoing relationships, and on the factors mediating the stability of relationships" (Boss, Doherty, Rossa, Schumm, & Stienmetz, 1993, p. 385).

Homans postulated four propositions in regard to exchange theory. The first is that if a behavior has been rewarded in the past, then future similar situations are likely to elicit the same behavior. The second is that the more frequently a behavior is rewarded by another person, the more frequently the behavior will occur. Third, the more the reward is valued, the more frequently the behavior will occur; and the fourth, the more frequently a reward is received, the less value it will have. A later fifth proposition involves the proportion of the rewards to the costs. If the rewards are seen as fair in proportion to the costs, the behavior will continue to occur. The last proposition is perhaps the crux of the exchange theory. If individuals count the rewards of their dealings with others to be worth the costs involved, they will continue to interact with that person or group (Homans, 1974). This holds true whether dealing one on one with another individual, a family, an organization, or a society.

Activity theory is also considered important to this
research project. Activity theory, postulated in the 1960s, was actually the first theory of aging, and is still a dominant theoretical perspective. It states that successful aging is characterized by continuing the activities of middle age as long as possible; that personal adjustment to aging is congruent with maintaining a high level of physical, mental, and social activity; and that those who do so will not only be better adjusted, but will have higher self-esteem and life satisfaction. One of the earliest social gerontologists, Burgess (1960), although primarily a social exchange theorist, also believed that the elderly should not be excluded from social activity, but should be given new roles that would allow them to continue to play a productive role in society.

Activity theory and exchange theory work together in suggesting that the elderly need to be actively involved in society in such a way that they feel they are a contributing member. By participating in service activities, the elderly make an exchange for the benefits they receive from society. The need for reciprocity is fulfilled.

Methods

Definitions

Several terms that are often encountered in the literature and that are used to describe the activities
studied here are subjective in their meanings. In order to have consistency and understanding of these terms, the following definitions are given.

Retirement: refers to individuals who have left their usual employment, whether full-time or part-time, and who collect either a regularly paid pension, Social Security, or both. Nonworking spouses are considered retired when the primary "breadwinner" retires.

Leisure time activities: refer to time spent in recreational and hobby activities, which may be engaged in alone or with others, that are for the purpose of filling time in a meaningful way, or just for amusement.

Social activities: are those engaged in specifically in the company of others. They might include games, such as Bingo, cards, or board games, dances, parties, and so forth, where more than one person is required for the activity. They might also include activities such as crafts, which could be done alone, but are being done in a group setting.

Solitary activities: include any activities performed alone, not in the company of others. These could be craft activities, hobbies such as painting, sewing, quilting, fishing, gardening, and so forth.

Substantive (service) activities: are those activities that provide essential services to and for others that enrich their lives and that they are unable to provide for
themselves. Examples might be providing transportation for someone who is unable to drive; helping someone with shopping, cleaning, or yard work; serving as an aide or helper in a school; teaching a skill to a youth or youth group; or volunteering in a hospital, home, or institution.

**Life satisfaction:** considers the level of subjective well-being and happiness reported by the respondent and also asks if they have achieved those goals or expectations they had when they were young.

**Hypotheses**

This research tests the hypothesis that people who engage in a variety of substantive activities, in combination with leisure activities, on a regular basis, have higher life satisfaction than those who engage predominantly in leisure activities. Three null hypotheses are tested:

1. There is no relationship between perceived life satisfaction and the number of activities engaged in by retired individuals;
2. There is no relationship between life satisfaction, sex, age, health status, financial status, and mobility of individuals;
3. There is no difference in perceived life satisfaction between those who engage in activities of only a leisure nature, and those who engage in a wide variety of activities.
that include substantive activity as well as leisure.

Design

The study was correlational, using a cross-sectional design with retired individuals or their spouses. The independent variables of age, marital status, self-reported health of respondent, number of activities engaged in on a regular basis, and the types of activities engaged in were correlated with the dependent variable--the perceived life satisfaction of the individual.

Sample

The study included a systematic random sample of senior citizens residing within the boundaries of Hyrum City, Utah. The investigator was aided in this study by the Hyrum Senior Citizen Center, which furnished a list of all persons living in Hyrum City, over the age of 60. From this list of 244 persons, beginning with the nth name, every seventh name was chosen. Those selected were mailed a questionnaire and asked to participate. One hundred names were selected, 50 males and 50 females. The selections were not exclusive. Husbands were not disqualified because their wives had been chosen. Six such couples were actually chosen. Three of these couples returned both questionnaires, and two couples returned only one questionnaire; in both cases the males' questionnaires were the ones returned. In one case neither
questionnaire was returned. Eighty-five of the questionnaires in all were returned. Of these, 77 had been filled out and were usable for this study. There is no way to know who actually filled out the questionnaires. Although it was hoped they would be answered by the chosen participant, it is possible that the respondent was assisted by a spouse, adult child, or other individual. Although this sample could not be generalized to the total United States population, or even to all of Utah, appropriate implications could be made to these populations.

Measurement

A demographic section examined sex, marital, health, and financial status of the respondent. These were used as control variables. An activity section asked about the types of activities engaged in and the frequency of these activities. These were used as the independent variables.

Satisfaction items came from the Life Satisfaction Index by Neugarten et al. (1961), form A. It consists of 20 statements with which the respondent either agrees or disagrees. This index is widely used in the social sciences, and has established itself as a valid measure. Validity correlations of these measures with other indicators of life satisfaction range from .385 to .883 (Mangen & Peterson, 1982, vol. 1). An additional five items, dealing directly with the question of how satisfied
the respondent is with his or her life today, were taken from the *Philadelphia Geriatric Center Morale Scale* (1975), by M. P. Lawton. This measure is also widely used and has established its credibility.

**Data Collection Procedures**

Data were collected by means of a mailed questionnaire. Each questionnaire contained a cover letter explaining the purpose of the study and the importance of their completing and returning the questionnaire. To encourage the return of the questionnaire and to thank them for doing so, a new one-dollar bill was included. A stamped, self-addressed envelope was also provided. This was addressed to be returned to the Department of Family and Human Development at Utah State University. The investigator was a resident of Hyrum City, and it was believed that cooperation and participation would be enhanced if it were mailed to the major professor in the Department of Family and Human Development at Utah State University in Logan, Utah, rather than directly to her. If the questionnaire was not returned within one week, a phone call to the individual was made, with a request for the information over the phone or to request the individual to complete the form and mail it. The cover letter made assurances of anonymity and confidentiality. To assure this anonymity and confidentiality, each questionnaire was assigned a number.
The only time the number was to be associated with a name was to determine if the questionnaire had been returned.

The questionnaire contained items dealing with present age, marital status, sex, length of retirement (stated factually); income bracket prior to retirement, retirement income bracket (given in categories: under $10,000, $10,000 to $19,000, etc.), perceived financial well-being, and self-reported health (on a Likert-type scale). These questions provided background information. Subsequent questions addressed the issues of number and types of activities, frequency of participation, and involvement with others in participation. These were categorized as hobby, recreational, and service activities. The life satisfaction scales were also included.

Ethical considerations

A cover letter was included explaining the purpose and goals of the study. Respondents were informed of their right not to participate in the study, but were encouraged to do so. Anonymity and confidentiality were assured by each questionnaire and respondent being assigned a number. The number was used to check off each questionnaire as it was received. The questionnaire and identifying number were separated, and never again connected.
Data Preparation

As the questionnaires were returned, they were gathered by the investigator and the number on the envelope was checked off against the mailing list. The envelopes were then opened and discarded. The questionnaires were checked for completeness, and those that had not been filled out were separated from those that were. The remaining questionnaires were again sorted according to gender of the respondent.

Each response on the questionnaire was assigned a value from 0 to 4 that was used for data entry. For ages and number of years retired, the actual number was used. The coding was done so that all positive responses were coded at the higher levels (0,1), and all negative responses at the lower levels (0,1,2,3). The purpose for this was to allow categorizing for some of the analysis. Since the study was basically descriptive, methods of analysis used were frequencies, means, t tests, ANOVAs, and Pearson’s correlations. All data were analyzed using the SPSS system for statistical data analyses. SPSS is a comprehensive tool for managing, analyzing, and displaying data. The level of significance used for this study was a probability of ± .05.
The purpose of this study was to determine how post-retirement activity affects life satisfaction. To make this determination, the investigator looked at what kind of activities retired people are now engaged in, how often they participate in them, and how they do them, alone or with others. The investigator also looked at the level of satisfaction with their lives, to determine how life satisfaction is influenced by the type and level of such activities. The guiding hypothesis was that there is a positive relationship between the type of activity, the amount of time given to activity, the social involvement associated with the activity, and general life satisfaction.

One hundred people (50 males and 50 females) were mailed questionnaires. Of these, 85 were returned. Seventy-seven had been filled out and were usable. The remaining 12 were either returned undeliverable, or were not filled out because the individual had died, was institutionalized, or no longer lived in the area. Forty-two of the returned questionnaires came from males and 35 from females. The average age of the respondents was 72.53 years, the youngest being 61 (female) and the oldest 92 (female). The average age for the males was 71.9, and for the females 73.3. They, or their spouse, had been retired
for an average of 9.52 years. This figure does not include an outlier of 53 years. The respondent, born in the year 1924 (71-year-old female), reported retiring in 1942. This would have been at the age of 18. Perhaps this was her age at marriage when she left the paid work force. Of the respondents, 69.4% (50) are completely retired and no longer work. Seven (9.7%) still work at home, nine (12.5%) work part-time, and six (8.3%) are working full-time. Two people did not choose to answer this question. Table 1 shows an overview of the sample.

Table 1

Demographic Profile of Respondents

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>61-92</td>
<td>72.5</td>
<td>6.89</td>
</tr>
<tr>
<td>Male</td>
<td>63-88</td>
<td>71.9</td>
<td>6.04</td>
</tr>
<tr>
<td>Female</td>
<td>61-92</td>
<td>73.3</td>
<td>7.87</td>
</tr>
<tr>
<td># Years Retired</td>
<td>0-38</td>
<td>9.52</td>
<td>8.08</td>
</tr>
</tbody>
</table>

There were 17 widowed participants, 12 females and 5 males. All except two of the widowed females live alone, both with an adult child. Three males are separated or
divorced. One lives with a roommate or sibling, one lives alone, and one lives with an adult child. The remaining 55 are all married and living with their spouse. Since the survey included only senior citizens living in Hyrum City, and there is no nursing home in the city, none of the respondents is a resident of a nursing home.

The health of these respondents is unusually good. Perhaps this is because those whose health is really poor, chose not to respond, and may have been represented by those who returned the survey unanswered. Seventy-two (89.6%) reported their health to be average or above, with 35 (45.5%) reporting better than average or very good. Sixty-nine (89.6%) said that their doctor would agree that their health is average or above, and 32 (41.5%) said their doctor would agree that their health is better than average or very good. Forty-five (58.4%) reported being ill not at all or fewer than an average number of times. Fifty (64.9%) had not been hospitalized during the past year, and 14 (18.2%) were hospitalized only once. This is consistent with government reports that northern Utahns enjoy better health than the population in general.

Table 2 depicts the response to a category called Health (health status) which was created by combining the questions on self-reported health. Low health equaled responses of very poor or average. High health equaled
responses of better than average or good. It is divided according to sex, and age is divided to form two categories of "young-old" (61-70) and "old-old" (71-92).

Table 2

Comparison of Health and Sex by Young-Old and Old-Old

<table>
<thead>
<tr>
<th>Health Levels</th>
<th>Young-Old</th>
<th>Old-Old</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>low</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>high</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td>Column Total</td>
<td>20</td>
<td>17</td>
</tr>
</tbody>
</table>

As Table 2 shows, there is virtually no difference in reported health due to either sex or age.

In keeping with the good health of these respondents, they also enjoy better than average mobility. Mobility was divided into five categories: wheelchair dependent, need help from another person to walk outside the home, use a cane or walker, walk alone, and drive. Sixty-eight (88.3%) are able to walk alone, unaided, and to drive a vehicle. An additional 11 (14.3%) are able to walk with the aid of a cane or walker. Only five (6.5%) need the help of another person to walk outside their home, or require a wheelchair.
Table 3 shows that 94.4% of the young-old scored the maximum five points on the mobility scale in that they are able to drive a car. This compares to 82.1% of the old-old. T values for independent samples of sex on mobility ($t = .262$) and health ($t = .422$) indicate that there is not a significant difference in the means of respondents due to either age or sex.

Table 3  
Comparison of Sex on Mobility Young-Old and Old-Old

<table>
<thead>
<tr>
<th></th>
<th>Young-Old</th>
<th>Old-Old</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Mobility</td>
<td>1.00</td>
<td>1</td>
</tr>
<tr>
<td>Levels</td>
<td>2.00</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3.00</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4.00</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>5.00</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Column</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>14</td>
</tr>
</tbody>
</table>

These variables do not seem to be significant in determining the self-reported health of the individual. Neither is there a significant difference between the ability of males to drive (in either age category) and the ability of females.
Another measure sought to determine how these seniors perceive themselves to be financially. In this regard, answers to questions concerning their financial situation were mixed. While 70 out of 77 (90.1%) reported that their monthly income was usually or always sufficient, 53 (68.8%) reported usually or always having money for extras, 20 (26%) reported that compared to others they knew, they were financially limited. This means that thirteen of the seventy who say they have sufficient income also feel that it does not compare well with others. Still, 64% believe that they are comfortable or well off financially.

As can be seen in Table 4, 75.8% (25) of the young-old and 63.2% (24) of the old-old scored in the top one-third of the Finance scale. This compares with only 9% (3) of the young-old and 10.5% (4) of the old-old who perceived themselves to be in the lower one-third. In this sample, age does not seem to impact the perceived financial well-being. This finding is supported by $F (.279)$ and $t (.319)$ scores that show means are not significantly different for the two groups. However, females did report a higher perceived level of financial well-being than males, in both age categories in this sample. The difference is significant on the $F$ Value ($F = .000$), but only marginally so on the $t$ value ($0.059$).
Table 4
Comparison of Finance by Sex Young-Old and Old-Old

<table>
<thead>
<tr>
<th></th>
<th>Young Male</th>
<th>Young Female</th>
<th>Old Male</th>
<th>Old Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance Levels</td>
<td>.00 1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1.00</td>
<td>1 2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5.00</td>
<td>2 1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>6.00</td>
<td>1 2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>7.00</td>
<td>3 2 3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>8.00</td>
<td>2 2 3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>9.00</td>
<td>2 4 4 8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>10.00</td>
<td>5 1 3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>11.00</td>
<td>4 4 3 4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>12.00</td>
<td>2 2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Column Total</td>
<td>22 11 20 18</td>
<td>18</td>
<td>18</td>
<td>18</td>
</tr>
</tbody>
</table>

Considering the financial times that these seniors have lived through (the Great Depression, World War I and II, periods of recession and inflation), these answers are more meaningful than the actual dollar amounts. Sixty-six of the respondents answered the question regarding their pre-
retirement income. Eleven (14.3%) had preretirement incomes at less than $10,000 compared to 15 (19.5%) after retirement. However, one has to consider that while the poverty level for a family of two is currently $9,840, according to the Office of Family Support, this is far above poverty for the years many of the respondents were working. An income of less than $10,000, then, was not necessarily poverty or even particularly low income. In considering their perception of well-being, it must also be considered that, for most of them, there is no mortgage or rent to come from this income. A better figure to consider may be that 41 (53.3%) have retirement incomes of from $10,000 to $30,000 per year, compared to 34 (44.2%) who had preretirement incomes of $10,000 to $30,000. In addition, 86.9% (69) report that they have sufficient medical insurance for their needs, while only 8.8% (6) reported they do not.

Of particular interest to this study was the response to the question "I would participate in more activities if I had more money." Forty-six (59.7%) said no, they would not participate in more activities if they had more money, compared to 29 (37.6%) who said yes, they would. This would suggest that finances are not a deciding factor in participation in activities for most of these seniors. In fact, Table 5 shows the correlation between finances and participation in activities was negative, suggesting that
the respondents would participate more if they had less money. Since neither health nor mobility was a significant factor, it would suggest that either they are satisfied with the level of their participation, or they are unaware of other activities to become involved in or how to access these activities.

Table 5
Correlations of Participation, Finances, Health, Mobility

<table>
<thead>
<tr>
<th></th>
<th>Party</th>
<th>Finances</th>
<th>Health</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Party</td>
<td>--</td>
<td>-.3449**</td>
<td>.0011</td>
<td>.0857</td>
</tr>
<tr>
<td>Finances</td>
<td>-.3449**</td>
<td>--</td>
<td>.2206</td>
<td>.3200</td>
</tr>
<tr>
<td>Health</td>
<td>.0011</td>
<td>.2206</td>
<td>--</td>
<td>.2736*</td>
</tr>
<tr>
<td>Mobility</td>
<td>.0857</td>
<td>.2300</td>
<td>.2736*</td>
<td>--</td>
</tr>
</tbody>
</table>

*p < .05  **p < .01

The questionnaire contained three categories of activities: hobby, recreation, and service. Respondents were given a list of possible activities within these categories, and asked to list others that were of interest to them. They were then asked to identify how often they engaged in these activities (daily, several times per week, 1 or 2 times a week, 1 or 2 times a month), and with whom
(all alone, with family members, with friends, in large groups). They were also asked to identify their favorite, most satisfying activity within each group.

The most common hobbies listed were family history, caring for their yard, gardening and flower growing, sewing and needlework of varying kinds, crafts, and writing letters. Forty-three (55.8%) report that they have one or two hobbies. Forty-six (70.8%) say that they participate in them at least once a week, with 35 (53.8%) doing them alone and 30 (42.2%) doing them with family (25) and friends (5). Only 1.5% participate in hobbies with large groups. This would seem to satisfy one of the four conditions related to higher life satisfaction among retirees stated by Palmore et al. (1985), namely, increased time pursuing solitary leisure activities.

The percentages in regard to recreational activities were similar to those for hobbies. Forty-three (55.8%) reported having one to three recreational activities that they regularly participated in. Fifty-two (73.2%) said they participated at least once a week. The difference was found in how or with whom they participated. Twenty-three (33.3%) said they do them alone, while 45 (63.7%) said they do them with family (42%) and friends (21.7%). The most popular forms of recreation were walking (47); reading (45); fishing (22); games, such as cards, board games, bingo (14); sports,
both active participation and as an observer (10); and camping/RV (10). Only one person each mentioned golf or TV/movies. Reading is a solitary activity, and fishing often is also. Walking, games, sports, and camping are usually done in the company of others. The predominance of activities done with friends and family suggests that the satisfaction in these activities comes in sharing them with loved ones.

Forty-eight (62.2%) of the respondents reported having one or two service-related activities. Thirty-nine (66.1%) participate in these activities at least once a week, with an additional 19 (32.2%) participating at least once a month.

Forty-eight (62.3%) indicated that they participate in church activities, although this might be interpreted to mean merely attending services. A check with church authorities of the Church of Jesus Christ of Latter-day Saints in Hyrum City (by far the predominant religion) showed that approximately 75% of senior members are actively involved in home and visiting teaching. Several others were either temple workers or served as couple missionaries. These are indeed service-related activities. Other service activities often mentioned are the Senior Center (14 for 23.7%), and helping others, such as neighbors (12 for 20.3%). The majority of these activities were engaged in
with others (family, 32.2%; friends, 32.2%; groups, 15.3%), while only 18.6% said they do them alone. The favorite or most satisfying activities were listed as church and helping others. This suggests that service activities that are "one-on-one" are more satisfying.

In order to run statistical analysis on activities, and to test the relationship between the number of activities engaged in and life satisfaction, the investigator combined hobby and recreational activities into a new category called "newrec." Newrec has six levels: no hobbies or recreational activity, either one hobby or one recreational activity, a combination of any two hobby or recreational activities, a combination of any three hobby or recreational activities, a combination of any four hobby or recreational activities, and a combination of any five hobby or recreational activities. All of the respondents fell into one of these categories. Table 6 depicts hobby and recreational activities in terms of frequency of participation.

Fifty percent of the sample were in categories two and three; 29% fell below, in categories zero and one; and 13% were above, in categories four and five.

Table 7 shows that there is no relationship between sex and the number of hobby and recreational activities. Males and females in this sample were equally active in these
leisure activities.

Newrec was then combined with service activity to form another category called Activity (ACT). Four levels of activity were defined: no newrec activity and no service activity (no rec/no service); one or more newrec activities and no service activity, (rec/no service); one or more newrec activities and one or two service activities (rec/moderate service); one or more newrec activities, and three or more service activities (rec/high service). Table 8 shows the frequency of each of these categories.

The frequencies in Table 8 indicate that 76.6% of the individuals answering these questions fall into the rec/moderate or rec/high service categories.

Table 6

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No hobby/no rec</td>
<td>6</td>
<td>7.8</td>
</tr>
<tr>
<td>One hobby/one rec</td>
<td>11</td>
<td>14.3</td>
</tr>
<tr>
<td>Any two hobby/rec</td>
<td>24</td>
<td>31.2</td>
</tr>
<tr>
<td>Any three hobby/rec</td>
<td>26</td>
<td>33.8</td>
</tr>
<tr>
<td>Any four hobby/rec</td>
<td>9</td>
<td>11.7</td>
</tr>
<tr>
<td>Any five hobby/rec</td>
<td>1</td>
<td>1.3</td>
</tr>
</tbody>
</table>
Table 7
Correlation of Sex with Newrec (Number of Hobby and Recreational Activities)

<table>
<thead>
<tr>
<th></th>
<th>Sex</th>
<th>Newrec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>--</td>
<td>-0.126</td>
</tr>
<tr>
<td>Newrec</td>
<td>-0.126</td>
<td>--</td>
</tr>
</tbody>
</table>

*p < .05  **p < .01

Table 8
Frequency of Activity (Newrec/Service)

<table>
<thead>
<tr>
<th>Activity Value Label</th>
<th>Value</th>
<th>Freq.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>no service/no rec</td>
<td>0.00</td>
<td>5</td>
<td>6.5</td>
</tr>
<tr>
<td>rec/no service</td>
<td>1.00</td>
<td>12</td>
<td>15.6</td>
</tr>
<tr>
<td>rec/moderate service</td>
<td>2.00</td>
<td>47</td>
<td>61.0</td>
</tr>
<tr>
<td>rec/high service</td>
<td>3.00</td>
<td>12</td>
<td>15.8</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>77</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Note. Valid cases 76  Missing cases 1
Two correlations (Tables 9 and 10) were run to determine which variables impacted the activity of an individual, the first correlating activity with age and sex, and the second correlating activity with health, mobility, and finance. Health, mobility, and finance were all significantly correlated at the .01 level. Age, however, was negatively correlated so close to zero as to be nonexistant, and gender showed a very low correlation.

Finally, each of these variables (Health, Mobility, Finance, and Activity) was compared and correlated with Life Satisfaction.

Table 9
Correlation of Activity, Age, and Sex

<table>
<thead>
<tr>
<th></th>
<th>Act</th>
<th>Age</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Act</td>
<td>--</td>
<td>-.0512</td>
<td>.1426</td>
</tr>
<tr>
<td>Age</td>
<td>-.0512</td>
<td>--</td>
<td>.1036</td>
</tr>
<tr>
<td>Sex</td>
<td>.1426</td>
<td>.1036</td>
<td>--</td>
</tr>
</tbody>
</table>

*p < .05  **p < .01
The following two tables (Table 11 and Table 12) refer to satisfaction questions asked on the survey. The first is a frequency table. Each value listed refers to the number of positive responses (those responses that indicate satisfaction with life) given. The second (Table 12) is a Descriptive table showing the mean and standard deviation.

If one divides the responses into three equal groups (1-8, 9-16, and 17-24) and labels them low, medium, and high satisfaction, the data show that 35 (57.4%) of those responding ranked at the high satisfaction level. Compare this to 65.3% who ranked in the rec/high service category of activity. That many of these are represented by the same individuals is supported by the means table (Table 13, Satisfaction by Activity).
Table 11

Frequency of Satisfaction

<table>
<thead>
<tr>
<th>Value</th>
<th>Freq.</th>
<th>%</th>
<th>Cum. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>1</td>
<td>1.3</td>
<td>1.6</td>
</tr>
<tr>
<td>4.00</td>
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<td>3.3</td>
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<td>6.00</td>
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<td>1.3</td>
<td>29.5</td>
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<td>15.00</td>
<td>6</td>
<td>7.8</td>
<td>39.3</td>
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<td>16.00</td>
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<td>42.6</td>
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<td>17.00</td>
<td>4</td>
<td>5.2</td>
<td>49.2</td>
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<tr>
<td>18.00</td>
<td>2</td>
<td>2.6</td>
<td>52.5</td>
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<td>19.00</td>
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<td>60.7</td>
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<td>20.00</td>
<td>8</td>
<td>10.4</td>
<td>73.8</td>
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<td>21.00</td>
<td>7</td>
<td>9.1</td>
<td>85.2</td>
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<tr>
<td>22.00</td>
<td>6</td>
<td>7.8</td>
<td>95.1</td>
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<tr>
<td>23.00</td>
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<td>100.0</td>
</tr>
<tr>
<td>*</td>
<td>16</td>
<td>20.8</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>77</td>
<td>100.0</td>
<td></td>
</tr>
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</table>
An interesting observation seen in Table 13 is that those with no service and no recreational/hobby activities ranked nearly equal to the group mean, as well as the mean for those with recreational/hobby activities and moderate service. The reasons for this would make an additional interesting study. Aside from this discrepancy, those with moderate and high levels of service ranked significantly higher in satisfaction than those with only recreational/hobby activities and no service activities.

An analysis of the variance in satisfaction as seen in Table 14 indicates that only one fifth of the variance can be explained by activity, but that one fifth is significant at the .05 level. The other four fifths is due to other causes. A look at the correlation coefficients (Table 15) shows health, mobility, and financial status to be the main contributing variables. Each is significant at the .01 level of significance. Neither age nor gender figures significantly.

The main findings of this research in relationship to the three guiding hypotheses are as follows.

**Hypothesis 1.** The purpose of the first hypothesis was to determine the relationship between perceived life satisfaction and the number of activities engaged in by retired individuals. The data show that a relationship does exist (significant at the .05 level). In spite of this
Table 12

Descriptives of Satisfaction

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Min.</th>
<th>Max.</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT</td>
<td>16.49</td>
<td>5.22</td>
<td>1.00</td>
<td>24.00</td>
<td>61</td>
</tr>
</tbody>
</table>

Note. Number of valid observations (listwise) = 61.00

Table 13

Summary of Levels of Activity (Newrec/Service)

<table>
<thead>
<tr>
<th>Value Label</th>
<th>Mean</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entire Population</td>
<td>16.4918</td>
<td>5.2237</td>
<td>61</td>
</tr>
<tr>
<td>no service/no rec</td>
<td>16.7500</td>
<td>6.0208</td>
<td>4</td>
</tr>
<tr>
<td>rec/no service</td>
<td>12.0000</td>
<td>6.0208</td>
<td>10</td>
</tr>
<tr>
<td>rec/moderate service</td>
<td>17.3333</td>
<td>4.9401</td>
<td>38</td>
</tr>
<tr>
<td>rec/high service</td>
<td>19.1111</td>
<td>3.7231</td>
<td>9</td>
</tr>
</tbody>
</table>

Note. N = 77

Missing Cases = 16 or 20.8%
Table 14
Analysis of Variance for Satisfaction

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Squares</th>
<th>F</th>
<th>Sig of F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main</td>
<td>274.633</td>
<td>3</td>
<td>91.544</td>
<td>3.829</td>
<td>.014</td>
</tr>
<tr>
<td>ACTIVITY</td>
<td>274.633</td>
<td>3</td>
<td>91.544</td>
<td>3.829</td>
<td>.014</td>
</tr>
<tr>
<td>Explained</td>
<td>274.633</td>
<td>3</td>
<td>91.544</td>
<td>3.829</td>
<td>.014</td>
</tr>
<tr>
<td>Residual</td>
<td>1362.613</td>
<td>57</td>
<td>23.905</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1637.246</td>
<td>60</td>
<td>27.287</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. 77 cases were processed.
16 cases (20.8 pct) were missing.

significance, there was an ambiguity. Those retired persons who had no activity—no hobbies, no recreation, and no service activities—had a mean satisfaction score equal to the group mean and almost equal to the mean for those with moderate activity. The differences lay between those with low recreational and no service activity, and those with no activity at all and those with moderate and high activity. Those with high activity—high recreation and high service—were found to have the highest life satisfaction.

This analysis suggests that, among this population, those who "do nothing," who have no regular participation in
### Table 15

Correlation of Satisfaction, Activity, Sex, Age Category, Health, Mobility, and Finance

<table>
<thead>
<tr>
<th></th>
<th>Sat</th>
<th>Act</th>
<th>Sex</th>
<th>Agecat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sat</td>
<td>--</td>
<td>.3763*</td>
<td>-.0178</td>
<td>-.2363</td>
</tr>
<tr>
<td>Act</td>
<td>.3763*</td>
<td>--</td>
<td>.1426</td>
<td>.0373</td>
</tr>
<tr>
<td>Sex</td>
<td>-.0178</td>
<td>.1426</td>
<td>--</td>
<td>.0989</td>
</tr>
<tr>
<td>Agecat</td>
<td>-.2363</td>
<td>.0373</td>
<td>.0989</td>
<td>--</td>
</tr>
<tr>
<td>Health</td>
<td>.5520**</td>
<td>.3747**</td>
<td>-.0967</td>
<td>-.0821</td>
</tr>
<tr>
<td>Mobility</td>
<td>.4169**</td>
<td>.3538*</td>
<td>.0576</td>
<td>-.1303</td>
</tr>
<tr>
<td>Finance</td>
<td>.3879**</td>
<td>.3958**</td>
<td>.2008</td>
<td>-.1201</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Health</th>
<th>Mobility</th>
<th>Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sat</td>
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<td>.4169**</td>
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<tr>
<td>Act</td>
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<tr>
<td>Sex</td>
<td>-.0967</td>
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<tr>
<td>Agecat</td>
<td>-.0821</td>
<td>-.1303</td>
</tr>
<tr>
<td>Health</td>
<td>--</td>
<td>.2763*</td>
</tr>
<tr>
<td>Mobility</td>
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<td>--</td>
</tr>
<tr>
<td>Finance</td>
<td>.2206</td>
<td>.2300</td>
</tr>
</tbody>
</table>

*p < .05  **p < .01 (2-tailed)
hobbies, recreational pursuits, or service activities, find as much satisfaction in life as those who have a moderate amount of activity--at least one hobby or recreational activity and one service activity. Their satisfaction is higher than those who have at least one hobby or recreational activity, but no service activity.

**Hypothesis 2.** The second hypothesis, that there is no relationship between life satisfaction, sex, age, health status, financial status, and mobility of individuals, is rejected for health status and financial status, as they were shown to be significant at the .01 level, and for mobility, which was shown to be significant at the .05 level. The data support the assumption that those with good health and mobility are able to be more active at home and in the community. This is also true of those who have sufficient finances to support their activity. However, it was not possible to reject for sex and age. These were not shown to be significant at the .05 level.

**Hypothesis 3.** The third hypothesis, that there is no difference in perceived life satisfaction between those who engage in activities of only a leisure nature, and those who engage in a wide variety of activities that include substantive activity, was also rejected. This relationship was shown to be significant at the .01 level. This sample of retired persons reported higher levels of life
satisfaction to be positively related to a balance of leisure and service activities.
Several changes in the demographics of American society prompted this study. They include increased longevity; improved health in old age; increasing numbers, combined with a growing percentage, of elderly in the population; and the trend toward early retirement. These changes combine to provide both needs to be filled, and a possible resource to fill those needs. The needs to be filled include a growing elderly population that requires a proportionate increase in services. In addition, the proportionately smaller number of younger workers, and corresponding need for both husbands and wives to work, means fewer nonworkers to fill the need for volunteer and low-wage/part-time employment. To balance this, the retirees of the future will be healthier, better educated, and have greater expectations for retirement than previous generations; they will have many more years to fill in meaningful and satisfying ways, and will represent a resource to fill the need for part-time, lower wage, and volunteer laborers. They may also be a strong resource to fill the needs of other seniors. Younger, healthier seniors can do much to assist those who are older or may have limiting health factors. The literature supports the proposition that meaningful activity improves life satisfaction, and that improved life satisfaction positively
influences the health and independence of the elderly.

The purpose of this study was to explore the types of activities that improve life satisfaction. The research also looked at the effects of age, gender, health, financial status, and mobility on the types of activity engaged in, and the satisfaction garnered from them. The literature suggests that most of the programs designed for use with organizations that serve the elderly concentrate on leisure-type activities. Senior citizen centers and other organizations provide basic opportunities for socialization and the pursuit of hobby and recreational activities, but limited opportunities for service-oriented activities. While there are many places where seniors could share their talents and give service, there is a need for public programs that make these opportunities known, bring retired persons together with those in need of the services they could provide, and provide any training required to meet the needs. The literature also suggests that there is a problem retaining senior volunteers (Stevens, 1991). This suggests a need for more enlightened pairing of volunteers with the organizations they serve. A more thorough knowledge of the types of activities that improve life satisfaction will improve the success rate for volunteerism.

With the use of the data collected from the mailed questionnaires, this study has analyzed the relationship
between the number and types of activities retired persons engage in and their perceived life satisfaction. This section examines those findings and draws some conclusions that may be helpful to those working in the aging field.

The design of the study was correlational, using descriptive statistics (frequencies, means, crosstabs, t tests, and Pearson's correlations) to examine the relationships between the variables. Analysis of these statistics provides a picture of the relationships involved and their influences upon the variables.

The sample was a cross section of retired persons living in Hyrum City, Utah. Hyrum is a city with a population of approximately 5,000. It is a rural community, having open spaces, small intercity farms, and large building lots. Residents, primarily members of the Church of Jesus Christ of Latter-day Saints (Mormon), have larger than average families. Because Mormon towns were settled by groups of families, many of the citizens are interrelated with other Hyrum families. Cousins, aunts, and uncles abound. Hyrum is thus a family-oriented city that is very much concerned with the needs of its citizens. There are many activities for the young people--Little League, softball, soccer, and so forth. There are three public parks with picnic facilities and ball fields, as well as three schools with playgrounds, a track, and tennis courts.
The five Mormon churches also provide ball fields and gymnasiums.

The citizens of Hyrum are highly active in church sponsored activities. Members and nonmembers participate in Mormon-sponsored sports and cultural events. Service activities to family and neighbors are stressed, and have a high priority. Youth help the elderly with yard work, women bring meals to the ill and offer child care and nursing help, and the men make home repairs for those in need. Although there are no other churches in Hyrum, members of many religions do live in Hyrum. In addition to being included in Mormon activities, they are also active in activities of their own churches.

There is a very active senior citizen center for the elderly population of 244, 100 of whom were randomly chosen for the study. They were mailed a questionnaire that they were asked to complete and return. Seventy-seven percent of the questionnaires were returned completed and usable. The questionnaire contained a demographic section, asking about age, gender, marital status, health and mobility, and financial status. A second section asked about the activities the respondent regularly participated in, divided into three categories of hobby, recreation, and service. It asked how often they participated, and with whom. The third section contained the Life Satisfaction Index (Newgarten et
Three hypotheses were tested against life satisfaction: the relationship between the number of activities; the effects of age, gender, health, mobility, and financial status; and the correlation with types of activity. They were tested with the use of $t$ tests and Pearson’s correlations, looking for a significance level of .05.

The results permitted the rejection of the first hypothesis, that the number of activities is not related to life satisfaction. This study further supports the findings of others in the literature that those who participate in a number of activities report higher levels of life satisfaction than do those who participate in only a few. An interesting ambiguity discovered was that those in this sample who reported no activity also reported life satisfaction equivalent to those who reported moderate activity.

The second hypothesis, that age, gender, health, mobility, and financial status have no effect on activity or life satisfaction, was rejected in part. Health, mobility, and financial status were found to affect both activity and life satisfaction. However, neither age nor gender had a significant influence.

The third hypothesis, that the types of activity have no relationship to life satisfaction, was rejected. The
study found that with this sample, those who reported a balance of hobby, recreational, and service activities, also scored higher on the Life Satisfaction Index.

In light of these findings, the investigator concludes that life satisfaction in retirement is related to the amount and types of activities engaged in, and that a mixture of hobby, recreational, and service activities provides meaning and purpose to life, enhancing the retirement experience.

Implications

There are several implications that can be drawn from this study in relation to the previous literature on the subject. Russell (1987) found that participation and satisfaction were associated with lower anxiety levels in senior citizens. Steinkamp and Kelly (1985) concluded that seeking challenges and rewards were important to life satisfaction. Palmore et al. (1985) agreed that increased participation in formal organizations is also related, as did Havighurst (1953), Jeffers (1961), Kutner (1956), Palmore, (1968), and Pihlblad (1965). These studies were all done from the perspective of activity theory, which postulates that activity is the important variable to life satisfaction. Replicas of these studies cast doubt on the validity of their findings when controlled for health and
socioeconomic factors. It was for this reason that the investigator included these variables in this study. Here it was found that these variables were significant, although because of the exceptional good health and sound financial status of the sample, it was not possible to state with certainty how they impacted the dependent variable.

This investigator believes that exchange theory is a stronger foundation upon which to build programs for today's retired population. Although there is not a lot of strong literature, because few studies have been done on the effects of service-oriented activity, those studies conducted on volunteer activity support the premise that giving service to others fulfills the need for reciprocity, and contributes to life satisfaction for older Americans.

Such studies as those conducted by Stevens (1991), Prentis (1992), and Chambre (1993) support exchange theory by showing the importance seniors, themselves, put on service activity. These studies are more recent than those on activity theory, and may indicate a new direction for aging studies. The present study furthers this approach by adding quantitative evidence, in the form of the questionnaire, to studies that have been largely qualitative, in the form of anecdotal interviews.

An interesting observation from this study, and one that warrants further investigation, is that those reporting
no regular activity at all had the same mean satisfaction score as those with moderate activity, and higher than those with low (but some) activity. Is it because their needs are being met by family ties? Is there a difference in the personality types of these individuals that predisposes them to be satisfied with less interaction with others? Or is there an as yet unrecognized factor involved?

Significance

These findings can be used to develop programs that will provide older Americans with meaningful activities, that increase their life satisfaction by helping them to feel useful and productive. Doing so should contribute to their continued good health, delaying the need for public health care; allowing them to enjoy greater independence for a greater number of years, lessening the burden on public services; providing means for them to give service in ways that will free younger adults to take a greater role in the "productive" labor market; and sharing the knowledge and skills they have gained through a lifetime of living to improve the future of new generations.

Senior citizen centers, churches, retirement communities, and similar programs provide places for retirees to spend time and socialize with others their age. They also provide opportunities to engage in a variety of
activities. At the present time, the majority of activities offered through these centers seem to be leisure oriented. While this may fill time for retirees, the question is, is this all there is? Is it enough?

Of special importance are the findings that volunteer and service activities, as well as hobbies and recreational activities, are seldom begun after retirement. Retirement planners and aging agencies would do well to support programs that encourage the establishment of these activities during midlife. Government programs and community resource centers will benefit from giving their support to these activities as well.

Limitations

This study was done in a small Utah community of approximately 5,000 people. More than 90% of the citizens belong to the Church of Jesus Christ of Latter-day Saints (Mormons), who have a distinct lifestyle. They are very health conscious, and abstain from alcohol, tobacco, tea, and coffee. They are advocates of exercise, outdoor activity, and moderation. As a people, they are healthier than the national average. They also believe in a life of service to others. These beliefs and lifestyle are certain to have impacted the results of this study.

Because of the strong health and independence ratings
of the respondents, it was not possible to test the hypothesis that a balance of activities would add to life satisfaction regardless of the health and financial status of the individual.

Another implication of the study was that because it was done in such a small community, there were not as many opportunities for service activity as there may be in larger communities.

Recommendations

Because of the exceptionally good health and financial status of this sample, further research needs to be done on other populations and cultures, to see if these findings still hold. Research also needs to be done in the area of service activities in conjunction with leisure activities.

It would also be interesting to research the question raised by the observation that those with no service and no recreational/hobby activities ranked nearly equal to the group mean, as well as the mean of those with moderate recreational/hobby activities and service.
REFERENCES


Appendix A:
Letter

May 4, 1995

Dear Friend,

You are being asked to participate in a study of retired persons concerning their activities and subsequent satisfaction with life. The study will be conducted solely with the aid of the enclosed questionnaire. The questionnaire should take approximately 15 minutes to complete.

The study will benefit those involved in family and social programs by testing the relationship between activity level and service to others, and personal well being. Complete confidentiality and anonymity are assured as your name will not appear on the returned questionnaire.

If you do not wish to participate, simply discard the questionnaire. Feel free to contact either Dorothy Nelson (245-4479) or Dr. Jay D. Schvaneveldt (797-1501), regarding any questions or concerns you may have.

Thank you,

Dorothy J. Nelson
M.S. Graduate Student

Dr. Jay D. Schvaneveldt
Major Professor and Department Head
APPENDIX B: QUESTIONNAIRE

Page 1

1. Background Information:
I am: (check one) Male ____ Female ____
I was born in the year: _____
I (my spouse), retired in the year: _____
I still work for pay:
_____ Full time _____ Part time _____ At home _____ No

2. Marital Status: Please check the one that applies to you today.
_____ Married
_____ Widowed
_____ Separated or divorced
_____ Single, never married

3. Living arrangements: Please check the one that applies to you today.
_____ I live with my spouse, a room mate, a brother or sister
_____ I live alone
_____ I live with an adult child. If you live with an adult child;
Is the child married?  ____ Yes  ____ No
Are there children in the home?  ____ Yes  ____ No

Health:
4. I consider my overall health to be:  (check one)
   ____ Very poor  ____ Average  ____ Better than average  ____
   Good
5. Compared to others my age, I think my health is:  (check one)
   ____ Very poor  ____ Average  ____ Better than average  ____
   Good
6. My doctor would consider my health to be:  (check one)
   ____ Very poor  ____ Average  ____ Better than average  ____
   Good
7. In the past year, I have been ill:  (check one)
   ____ None  ____ Below average  ____ Average  ____ Above average
8. In the past year, I have been hospitalized  ____ times.

Which of the following are true for you:  (check yes or no)
9. I am currently able to drive a car;
   Yes  ____ No  ____
10. I am able to walk without assistance;
    Yes  ____ No  ____
11. I am able to walk with a cane or walker;
    Yes  ____ No  ____
12. I need the help of another person to walk outside my home;
Yes ___ No ___
13. I currently use a wheelchair;
Yes ___ No ___

Financial Pattern:

1. My monthly income is sufficient for my needs; (check one)
   ___ Always ___ Usually ___ Seldom ___ Never
2. Each month I have money for extra activities; (check one)
   ___ Always ___ Usually ___ Seldom ___ Never
3. Compared to other retired people I know, I am financially; (check one)
   ___ Well off ___ Comfortable ___ Limited ___ Poor
4. I have adequate income or insurance to provide for my health needs; (check one)
   ___ Yes ___ No
5. I would participate in more activities if I had more money; (check one)
   ___ Yes  ___ No

6. My retirement income comes from: (check all that apply)
   ___ Social Security
   ___ Company pension
   ___ Personal savings
   ___ Investments
   ___ Welfare
   ___ Work
   ___ Other

7. My retirement income is within the following category:
   (check one)
   Less than $10,000  ___  $40,000 to $49,000  ___
   $10,000 to $19,000  ___  $50,000 to $59,000  ___
   $20,000 to $29,000  ___  $60,000 to $69,000  ___
   $30,000 to $39,000  ___  $70,000 or above  ___

8. My pre-retirement income was within the following category: (check one)
   Less than $10,000  ___  $40,000 to $49,000  ___
   $10,000 to $19,000  ___  $50,000 to $59,000  ___
   $20,000 to $29,000  ___  $60,000 to $69,000  ___
   $30,000 to $39,000  ___  $70,000 or above  ___
**Activities:** This section refers to any type of activity you may participate in that is not a part of normal housekeeping or home repair. Such activities may be hobbies, recreation, church related, clubs or organization, gardening, volunteer work, part time employment, etc.

(From the lists below, check all activities that you have participated in during the past year. Please add to this list as needed to reflect your activities.)

<table>
<thead>
<tr>
<th>Hobbies</th>
<th>Recreation</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ Model building</td>
<td>___ Card playing</td>
<td>___ Hospital</td>
</tr>
<tr>
<td>___ Collections</td>
<td>___ Fishing</td>
<td>___ Nursing home</td>
</tr>
<tr>
<td>___ Crafts</td>
<td>___ Golf</td>
<td>___ Senior center</td>
</tr>
<tr>
<td>___ Painting, art</td>
<td>___ Reading</td>
<td>___ Youth groups</td>
</tr>
<tr>
<td>___ Sewing, knitting</td>
<td>___ sports</td>
<td>___ Schools</td>
</tr>
<tr>
<td>___ Family history</td>
<td>___ Walking</td>
<td>___ Church</td>
</tr>
<tr>
<td>___ Writing</td>
<td>___ Hunting</td>
<td>___ Child care</td>
</tr>
<tr>
<td>___ Other</td>
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<td>___ Other</td>
</tr>
<tr>
<td>___ Other</td>
<td>___ Other</td>
<td>___ Other</td>
</tr>
</tbody>
</table>
1. When thinking of your Hobby activities, how often do you engage in Hobby activities? (check one)
   ___ Daily   ___ Several times per week
   ___ 1 or 2 times a week   ___ 1 or 2 times a month

2. From your Hobby activities, how do you usually do them? (check one)
   ___ All alone   ___ With family members   ___ With friends
   ___ In large groups

3. What is your favorite Hobby activity? __________

4. When thinking of your Recreation activities, how do you usually do them? (check one)
   ___ Daily   ___ Several times per week
   ___ 1 or 2 times a week   ___ 1 or 2 times a month

5. From your Recreation activities, how do you usually do them? (check one)
   ___ All alone   ___ With family members   ___ With friends
   ___ In large groups

6. What is your favorite Recreation activity? ________
7. When thinking of your Service activities, how often do you engage in Service activities? (check one)
   ___ Daily   ___ Several times per week
   ___ 1 or 2 times a week   ___ 1 or 2 times a month

8. From your Service activities, how do you usually do them? (check one)
   ___ All alone   ___ With family members   ___ With friends
   ___ In large groups

9. What is your favorite Service activity? _______
Thinking about life: This is the final section, you are almost done. This section asks questions about how you feel about your life at this time. (Please check yes or no to each item)

1. This is the dreariest time of my life.
   Yes ___ No ___

2. I am just as happy now as when I was younger.
   Yes ___ No ___

3. My life could be happier than it is now.
   Yes ___ No ___

4. These are the best years of my life.
   Yes ___ No ___

5. Compared to other people, I get down in the dumps too often.
   Yes ___ No ___

6. As I grow older, things seem better than I thought they would be.
   Yes ___ No ___

7. I expect some interesting and pleasant thing to happen to me in the future.
   Yes ___ No ___

8. The things I do now are as interesting to me as they
ever were.
Yes ___ No ___

9. I feel old and sometimes tired.
Yes ___ No ___

10. Compared to other people my age, I make a good appearance.
Yes ___ No ___

11. I have made plans for things I’ll be doing a month or a year from now.
Yes ___ No ___

12. Most of the things I do are boring or monotonous.
Yes ___ No ___

13. As I look back on my life, I am fairly satisfied.
Yes ___ No ___

14. I would not change my past life even if I could.
Yes ___ No ___

15. I have gotten pretty much what I expected out of my life.
Yes ___ No ___

16. I have gotten more breaks in life than most of the people I know.
Yes ___ No ___

17. When I think back over my life, I didn’t get most of the important things I wanted.
18. In spite of what people say, the lot of the average person is getting worse.
Yes ___ No ___

19. I feel my age but it does not bother me.
Yes ___ No ___

20. As you get older are you less useful?
Yes ___ No ___

21. Are you as happy now as when you were younger?
Yes ___ No ___

22. As you get older are things better than you thought they would be?
Yes ___ No ___

23. Do you see enough of your friends and relatives?
Yes ___ No ___

24. How much do you feel lonely?
A lot ___ Not much ___

25. How satisfied are you with your life today?
Satisfied ___ Not satisfied ___