

AN INVESTIGATION OF LEISURE SATISFACTION
AND LIFE SATISFACTION IN OLDER ADULTS

by

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(ABSTRACT)

A three part survey instrument was distributed to 84 adults over the age of 60, to assess leisure satisfaction and life satisfaction. The specific areas of investigation were i) the relationship between leisure satisfaction and life satisfaction, and ii) the relationship between leisure satisfaction and income, health, quality of friendship and activity participation. Subjects for the study were associated with one of seven participating agencies and organizations. These groups consisted of a recreation center, nursing homes and retirement communities.

The data were analyzed using correlation coefficients, chi-squares and discriminant analysis. No systematic relationship was found between leisure satisfaction and life satisfaction (correlation coefficient of 0.17), or between leisure satisfaction and income (0.23), health (0.15), or

quality of friendship (0.10). Using chi-squares, significant differences were found between six of ten paired activities, with regard to level of leisure satisfaction.

The results of the discriminant analysis procedure indicated that length of time in current state of health was the most discriminating variable between low and high leisure satisfaction. Other discriminating variables were identified, which may provide a basis from which to consider future research.

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CHAPTER I

INTRODUCTION

1.1 BACKGROUND

For many older adults, retirement is a time of substantial change. The commitment to a job no longer exists and the gap left by what used to be work may lead to a variety of situations. For some, this gap may become a burden, fostering feelings of uselessness and boredom, but for others, retirement may provide the opportunity to pursue old and new leisure experiences.

For those older adults whose identity and self-concept was maintained primarily by the work role, retirement may present difficulties (Miller, 1965). For such individuals, work is no longer an available means from which to derive a positive self-image and, if they are to maintain their self-image, they have to develop alternative areas of interest.

The other side of this issue is one that shows retirement to be a welcome event and not a burdensome one. Those who have regularly invested time into other interests besides work find that retirement offers a chance to develop these other areas more fully. For these older adults, leisure may become the major source of satisfaction in their lives.

Typically, satisfaction with life is considered to be a complex interaction of several components, specifically, family, work/job, and leisure (Haavio-Mannila, 1971, Rapoport and Rapoport, 1975, and Trafton and Tinsley, 1980). However, the relationships between these three components and life satisfaction in general, and the causal factors involved in this interaction, are not yet fully understood.

Although leisure is considered one of the more important components of life satisfaction, it has rarely been incorporated into the substantial amount of life satisfaction research which has been conducted. From those studies that have investigated life satisfaction and its relationship to leisure satisfaction, a positive relationship is suggested (Mancini, 1979, and Mancini and Orthner, 1980). However, the few studies in this area do not comprise a thorough base of information.

The present study is an investigation of (i) the relationship between leisure satisfaction and life satisfaction, and (ii) the relationship between leisure satisfaction and income, health, friendships, and activity participation. The following section defines leisure satisfaction, life satisfaction, and older adult, as these are the terms most pertinent to the present study.

1.2 DEFINITION OF TERMS

Life Satisfaction- an attribute of psychological well-being consisting of five components: zest, resolution and fortitude, congruence between desired and achieved goals, self-concept and mood tone (Neugarten, Havighurst and Tobin, 1961). Someone at the positive end of the life satisfaction continuum would be someone who:

a) takes pleasure from the round of activities that constitutes his everyday life; b) regards his life as meaningful and accepts(s) resolutely that which life has been; c) feels he has succeeded in achieving his major goals; d) holds a positive image of self; and e) maintains happy and optimistic attitudes and mood (Neugarten et al. 1969, p.137).

Leisure Satisfaction- Ragheb and Beard's (1980) definition is as follows:

The positive perceptions or feelings which an individual forms, elicits or gains as a result of engaging in leisure activities and choices. It is the degree to which one is presently content or pleased with his/her general leisure experiences or situations (Ragheb and Beard, 1980, p.330).

Retired Older Adult- Male or female over the age of 60, not working at a paying job more than 10 hours per week.

1.3 RATIONALE

Even though it is acknowledged that leisure constitutes a major part of life for older adults, the relationship between life satisfaction and leisure is only marginally

understood. A recent study by Mancini and Orthner (1980) has indicated a positive relationship between leisure satisfaction and life satisfaction, but one study does not constitute a body of theory and the area needs much additional exploration.

This relationship is also believed to be worthy of investigation because leisure typically constitutes a substantial portion of life for retirees and the information obtained from an investigation of this sort may prove useful in recreation programming for older adults. A more thorough understanding of the relationship between leisure satisfaction and life satisfaction, and of leisure and older adults in general, can aid personnel in the leisure services field in tailoring their programs to meet the individual needs of their clients.

In summary, therefore, this study is intended to provide information which will (i) supplement the existing body of knowledge and (ii) help remedy the "hit or miss" approach to leisure programming for older adults which is unfortunately prevalent.

1.4 STATEMENT OF THE PROBLEM

The relationship between leisure satisfaction and life satisfaction in older adults has only recently begun to be

explored. As mentioned earlier, the work of Mancini and Orthner(1980) concluded that a positive relationship exists between leisure satisfaction and life satisfaction. However, this conclusion was based on data from the Philadelphia Geriatric Center Morale Scale and a two-item leisure satisfaction assessment instrument, which the authors do not identify.

The problem as perceived by this author, therefore, is that there is an apparent lack of empirical research on (i) the relationship between leisure satisfaction and life satisfaction, and (ii) leisure satisfaction and older adults in general. It is these relationships which the present study reexamines.

1.5 HYPOTHESES

The following hypotheses reflect the two major areas of concern in the present study - the relationship between leisure satisfaction and life satisfaction, and the relationship between leisure satisfaction and a number of variables known to be positively correlated with life satisfaction, namely, income, health, friendships and type of activity.

Hypothesis 1 - Leisure Satisfaction and Life Satisfaction

H₀: There will be no systematic relationship between leisure

satisfaction and life satisfaction.

H₁: There will be a positive relationship between leisure satisfaction and life satisfaction.

The basis for this first hypothesis is evidence suggesting that leisure satisfaction and life satisfaction are positively related (Mancini and Orthner, 1980). Given that retired older adults have more discretionary time to pursue leisure interests and are more likely to gain their sense of accomplishment and worth from such interests, it seems reasonable that satisfaction with leisure might contribute to satisfaction with life in general. Additionally, testing this hypothesis should serve either to lend or not to lend further support to the hypothesis that leisure is a significant influence on life satisfaction as the literature indicates (Havighurst, 1972, Atchley, 1977, and Mancini and Orthner, 1980).

Hypothesis 2 - Leisure Satisfaction and Income

H₀: There will be no systematic relationship between leisure satisfaction and current income level.

H₁: There will be a positive relationship between leisure satisfaction and current income level.

Whereas the literature on life satisfaction maintains that income is strongly related to life satisfaction, with

higher income corresponding to higher satisfaction, research by Mancini (1978) indicates that leisure satisfaction and income are not strongly related. However, if leisure satisfaction and life satisfaction correspond, then one would expect that those factors influencing life satisfaction would also influence leisure satisfaction.

Hypothesis 3 - Leisure Satisfaction and Health

H₀: There will be no systematic relationship between leisure satisfaction and health status.

H₁: There will be a positive relationship between leisure satisfaction and health status.

Like income, health has been shown to have substantial influence over life satisfaction. Those people in better health appear to be more satisfied with their lives. This same type of relationship is investigated in the present study, with the focus on leisure satisfaction rather than life satisfaction. Although in the Mancini (1978) study it was determined that health did not have a significant effect on leisure satisfaction, by retesting this hypothesis further information concerning the nature of this relationship will be made available.

Hypothesis 4 - Leisure Satisfaction and Quality of Friendship

H₀: There will be no systematic relationship between leisure satisfaction and quality of friendship.

H₁: There will be a positive relationship between leisure satisfaction and quality of friendship.

Quality of friendship is the third and final variable that the literature maintains influences life satisfaction to a large extent. The reasons for investigating the quality of friendship relative to leisure satisfaction are the same as for investigating income and health. Since the literature reports that having meaningful relationships indicates high life satisfaction, one might reasonably expect it to indicate high leisure satisfaction as well; provided, of course, that these two are also related, as reported.

Hypothesis 5 - Leisure Satisfaction and Type of Activity

H₀: There will be no significant relationship between type of activity and leisure satisfaction.

H₁: There will be a significant relationship between type of activity and leisure satisfaction.

There is conflicting information concerning the relationship between type of activity and leisure

satisfaction and, for this reason, no direction is implied in this hypothesis. Activity type has been defined in numerous ways, ranging from social involvement to specific activities. For the purpose of the present study, type of activity is defined in terms of specific recreational activities. The purpose of this hypothesis is to determine if leisure satisfaction and type of activity are significantly related and, if so, to identify which activities correspond with which levels of satisfaction.

1.6 LIMITATIONS OF THE STUDY

The present study possesses two principal limitations: the sample and the length of the survey instrument used. Regarding the sample, it has to be recognized that individuals participating in this study came exclusively from the Southwest Virginia area and, since the demographic characteristics of this sample differed significantly from the national norms, the sample cannot be considered representative of the total older adult population. As a result, the generalizability of the results is limited accordingly.

Limitations were also discovered in the administration and coding phase of this study which might be attributed to the length of the survey instrument. Specifically, it was

found that some of the respondents seemed to lose interest in answering the questions on the last two pages of the survey. In some cases this meant that the entire survey was so incomplete as to be of no practical use. As a result, even though 115 surveys were distributed and collected, only 84 of them were usable in the present study.

Despite these limitations, however, this author believes that this study will still contribute to both the theoretical body of knowledge and the resources available to the practitioner. Chapter Two, which follows, presents a summary of the more salient literature on life satisfaction and leisure satisfaction in older adults.

CHAPTER II

LITERATURE REVIEW

The six areas of literature being examined in the present study are as follows:

Characteristics of Older Adults

Work, Retirement and Leisure

Dimensions of Satisfaction

Measurement of Satisfaction

Dimensions of Life Satisfaction

Dimensions of Leisure Satisfaction

2.1 CHARACTERISTICS OF OLDER ADULTS

Older adults are more than just people who have lived a long time. They are characterized by many dimensions which make them a unique part of the total population.

In the past, it seems that the most prevalent description of older adults focused upon physical and mental decline. As Tibbits (1960) emphasizes, older adults were considered "old" when "general decline or debilitating disease have resulted in extreme frailty, disablement or invalidism" (p. 10).

Today, this description is less prevalent. A 1981 poll conducted by Harris and Associates shows that 39 percent of people over age 65 say that the age a person becomes "old"

depends on the individual. People under age 65 say that most people are "old" when they reach the 60-64 age range. This difference in perception is only one illustration of how older adults differ in their view of themselves from that of younger adults.

The nationwide Harris study (1981) investigated several variables related to growing old. Generally, they found that today's older adults consider themselves healthier, better educated and more financially secure than young adults consider them to be. The following characteristics describe the sample used in the 1981 Harris survey, which is considered representative of American older adults and is presented here for purposes of illustration.

Category	65 and over (percent)
Geographical location	
East	27
Midwest	26
South	31
West	16
Sex	
Male	40
Female	60
Employment Status	
Labor Force	7
Retired	78

Income	
Less than \$5,000	21
\$5,000 - \$14,999	39
\$15,000 - \$24,999	10
\$25,000 - \$34,999	5
\$35,000 and over	4
Race	
White	88
Black	8
Hispanic	4
Education	
Less than High School Graduate	53
High School Graduate	30
College Graduate	16
Occupation	
Professional/Managerial/Proprietor	23
Clerical/Skills	17
Skilled Craftsman/Foreman	8
Unskilled/Service	29
Religion	
Protestant	66
Catholic	25
Jewish	2
Other	5
Housing Situation	
Own House, Mortgage Paid Off	66
Own House, Still Paying Mortgage	11
Rent House	7
Rent Apartment	10
Own Apartment, Mortgage Paid Off	1
Other Housing Arrangements	5

Hendricks and Hendricks (1981) further characterize older adults by stating that most males 65 and older are married (79.3 percent), while most females in this age range are widowed (52.5 percent). In 1977, the average life expectancy for males was 69.3 years, and for females 77.1 years. These figures continue to increase, a phenomenon which is attributed to advances in medicine and industrialization (Hendricks and Hendricks, 1981). Not only are older adults living longer, most (69 percent) are describing themselves as in good or excellent health (1981 White House Conference on Aging). The reason for addressing these characteristics is to illustrate that older adults, generally speaking, are a healthy group of individuals. This does not seem to have been the case several years ago, as Tibbits (1960) indicated. It is understandable that the study of leisure and older adults was not very prominent years ago, because people were neither living as long nor in such good health. Years ago, it seems, old age was considered synonymous with decline. Today, the focus is more positive and is far wider in scope than just physical condition, including such areas as socialization, role status, and activity level. Investigation into all these aspects of aging provides a more complete view of older

adults. Today, the study of leisure and older adults is more applicable because today older adults are more apt to pursue the leisure aspect of their lives.

2.2 WORK, RETIREMENT, AND LEISURE

Many of the investigations on retirement involve the phenomenon of role loss. Miller (1976) maintains that work is "the basis of social identity" (p.269) in America. It is often through work that individuals develop and sustain their self-identity and feelings of accomplishment. This pattern is reinforced by society and is oftentimes reflected by the dreaded anticipation of retirement. In retirement individuals can no longer derive feelings of self-worth through their job. They must look to other aspects of their lives - such as leisure. One of the problems with this is that leisure is generally not valued by society as a worthwhile use of time, even for the retiree. This attitude encourages feelings of wastefulness and depression as older adults find themselves faced with nothing but free time. Miller (1976) elaborates on this point in the following excerpt:

The older person in order to establish a new identity and acceptable self-concept on the basis of leisure must first establish a rationale for the activity on which he bases that new or altered identity. He must legitimize it in some manner other than in those terms which sanction leisure for

the very young and the old. The leisure activity of the retired and elderly must, therefore, be in some way appropriate in terms of traditional and contemporary values which do not apply specifically to the aging but to the population in general. (Miller, 1976, p.272)

This suggests that leisure should be considered an on-going part of life and not a part that suddenly emerges only upon retirement. Certainly, the amount of time for leisure increases with retirement, but the concept and practice of pursuing leisure experiences is something that continually develops throughout life.

A concise explanation of how leisure relates to the life cycle is given by Rapoport and Rapoport (1980), who propose that there are three dominant "strands" of life: work, family and leisure. These three strands, they claim, are all interconnected, although they are not necessarily all present to the same degree throughout life. This is significant to the present study because leisure is said to be the "dominant strand" (p. 14) in the later part of life. Because of this dominance, understanding and accepting leisure as a positive aspect of retirement is important.

Atchley (1978) reviewed how older adults adjusted to retirement and found that approximately 30 percent of telephone company employees felt they would never get used to retirement. This figure compares with 33 percent in the

1975 Harris poll.

Reasons given for the adjustment problems involved primarily the loss of income and missing one's job. According to Atchley (1978), adjustment to retirement is easier provided the retiree is in good health, can maintain an adequate income, and can leave his job "gracefully".

Parker (1982) hypothesizes that retirement can be prepared for and anticipated in a positive manner. He proposes three types of work/leisure relationships and illustrates each of them. The three types of work/leisure relationships are extension, opposition and neutrality.

Extension means that there is no distinction between work and leisure. They are both part of each other. Opposition means that leisure and work are in no way related and do not resemble each other. Neutrality is characterized by a "detachment from active involvement in either work or leisure" (p. 10). An illustration of how these relationships reflect preparation for retirement is shown below.

PREPARATION	WORK/LEISURE		
	Extension	Opposition	Neutrality
Yes	A new adventure	Big adjustment to be made	Likely to work out well
No	Feel everything lost	Will miss the tension	Danger of boredom

These styles or attitudes toward retirement may well influence the degree of satisfaction with retirement.

Parker (1982) supports the Rapoport and Rapoport (1980) observation that leisure is something that exists in varying degrees throughout life. The transition from the work role to the leisure role is easier for those who have consistently developed leisure interests as well as work interests throughout life. Those who do not experience a satisfying leisure role before retirement are unlikely to experience one after retirement. Parker (1982) emphasizes this view in the following statement:

How they [retirees] adapt to retirement is markedly influenced by how well they are prepared for it and by their previous type of work/leisure relationship. The person who has integrated his work and leisure in earlier life is likely to have developed resources to cope with retirement well, provided he has not rejected the idea of it. But the person who has kept his work and leisure separate - probably because he was bored with his job - may find it hard to cope with the loss of routine, which retirement brings (Parker, 1982, p.148).

Kaplan (1979) investigated the relationship between work and leisure and suggested that in the future the number of years spent in education, work, and retirement will shift. In 1978, these three areas looked like this:

AGE 0	<u>Education</u>	<u>Work</u>	<u>Retirement</u>	AGE 85
	about 20 years	about 40 years	about 15 years	

This division is based on retirement at age 65 and a shorter life span. By the year 2000 the line is hypothesized to look like this:

AGE 0	<u>Education</u>	<u>Work</u>	<u>Retirement</u>	AGE 85
	about 20 years	about 30 years	about 35 years	

This illustration suggests that, in the future, more time will be spent on leisure than work and is based on the assumption that retirement age and life expectancy will increase. Kaplan (1979) attributes this increase in leisure to technological advancements and the healthier status of older adults.

Although the leisure role is projected to occupy more time in the future, Kaplan (1979) elaborates on some of the problems associated with this trend, particularly for the "old old" person. The first problem has to do with the context in which leisure has been viewed in the past, namely, a negative context. It was seen as a wasteful use of time and primarily existing for the elite who had no need to work. The second problem Kaplan (1979) identified was the problem that leisure does not lend itself to being a pastime that requires "the whole range of commitment and intensity" (p.28). Typically, this dedication was reserved for work. A more positive attitude about leisure would be one that views it as a separate, equally valid pastime,

requiring the same intensity as work. This attitude is one that may need to emerge from a societal standpoint before it is actually integrated. The last problem that Kaplan (1979) identified was the problem of "growth and service". Growth and service were seen as closely tied to the work role and play or leisure were not seen as an opportunity to achieve either of these.

Today, older adults may still experience some of Kaplan's (1979) barriers to recognizing leisure as a legitimate pastime. A current view is one that regards leisure as a positive and integral part of everyone's life, and not an idle pastime, particularly for retirees who have a great deal of discretionary time available.

The relationship between work, retirement and leisure is a relationship that is colored by one's past experiences and attitudes. Currently, leisure is being viewed more positively and it appears that there is a movement from one view of leisure as luxury to a view of leisure as a necessary component contributing to the whole of life.

2.3 DIMENSIONS OF SATISFACTION

The concept of satisfaction is an elusive one that requires careful definition. A general overview of satisfaction will be presented here, with a more specific

description of life satisfaction and leisure satisfaction presented in sections 2.5 and 2.6.

Campbell, Converse and Rodgers (1976) investigated the concept of satisfaction relative to American life. In their study, satisfaction was composed of a number of different components, each a "subjective perception, expectation and feeling" of the individuals involved. Instead of being some external criterion, satisfaction was that which was formed and maintained internally.

The Campbell et al. (1976) study maintained that life satisfaction was not a singular item, but consisted of a multitude of domains. Campbell et al. (1976) discussed many aspects of satisfaction, the first one being one of applicability. What one person finds satisfying is quite different from what another person finds satisfying. Thus, attempts to generalize about satisfactions were difficult. A second point was that satisfaction is a "highly personal experience, heavily influenced by the individual's past experience and current expectations" (p.10). In this sense, there are different types of satisfaction, specifically, satisfaction of success and satisfaction of resignation (Campbell et al. 1976). The following excerpt illustrates this more clearly.

An individual who has achieved an aspiration toward which he has been moving may be said to experience the satisfactions of success. Another person may have lowered his aspiration level to a point which he can achieve, and he might be said to experience the satisfaction of resignation. The two individuals might be equally satisfied in the sense of fulfilled needs, but the affective content associated with success and resignation may well differ (Campbell, 1976, p. 10).

The last point emphasized in the Campbell et al. (1976) study is one that questions the appropriateness of defining quality of life in terms of needs satisfaction. No assessment of what constitutes needs satisfaction is attempted by Campbell et al. (1976), as it would be a subjective determination. Even though the term satisfaction may generally evoke similar thoughts, it is subject to individual interpretation and description.

2.4 MEASUREMENT OF SATISFACTION

There are various methods which researchers use to study satisfaction.

The research by Campbell et al. (1976), mentioned earlier, investigated life satisfaction in terms of 12 specific domains: health, marriage, family life, feelings about the country, friends, housing, work, residence, religion, hobbies, finances and organizations. These 12 domains illustrated that Campbell et al. (1976) saw life

satisfaction not as a uni-dimensional concept, but a many-faceted one. This approach to measuring satisfaction has not always been typical (Havighurst and Albrecht, 1953, Cavan, Burgess, Havighurst and Goldhammer, 1949). The reason for obtaining a multi-dimensional measurement for life satisfaction involves an attempt by Campbell et al. (1976) to gather detailed information on the quality of life, which a uni-dimensional approach would not facilitate. Although this detailed investigation was conducted by Campbell et al. (1976), an effort was also made to obtain some sort of general life satisfaction measurement by asking the question, "How satisfied are you with life in general?"

A third form of measurement used in the Campbell et al. (1976) study was called the Index of General Affect, a semantic differential format where people were asked to describe their lives. An interview format was used to obtain the data for this study.

Another means of measuring satisfaction was described by Neugarten et al. (1961), who developed a life satisfaction scale. These authors discussed two approaches to measurement, one using an external frame of reference and the other using an internal frame of reference.

The first approach focused on "overt behavior of the

individual and utilized social criteria of success or competence" (Neugarten et al. 1961, p. 134).

The second approach considered primarily the "individual's internal frame of reference" (p.134). Instead of using a social criterion to define success, the person's own "evaluation of his present or past life, his satisfaction or his happiness" (p.134) was used. Two examples of this type of measurement are the Life Satisfaction Index A, which utilized a self-report instrument, and Cantril's (1965) self-anchoring scale of life satisfaction.

A combination of these two approaches makes for a rather complete assessment of life satisfaction, where both external and internal frames of references are utilized. This combination was utilized by Havighurst (1957) in a study on life satisfaction. He included variables such as socio-economic status, family situation, friendships, and health as components of overall life satisfaction.

In the present study, the Life Satisfaction Index - Z, developed by Wood, Wylie and Sheaffor, (1969) was used to measure general life satisfaction. The author chose this scale because it was concise and useful in association with the rural elderly (Wood et al. 1969).

The measurement of leisure satisfaction differs from that of life satisfaction in that a quantitative approach has been used more frequently than a qualitative approach.

More recently, leisure satisfaction has been assessed in a variety of ways, namely "frequency, locus, social context, and value of these (leisure) behaviors" (Bull, 1982, p. 481). This more complete focus, like the life satisfaction focus, is one that reflects a multi-dimensional approach. Leisure satisfaction is a compilation of many satisfactions, as illustrated by Beard and Ragheb's (1980) Leisure Satisfaction Scale (LSS) which is more fully described in section 2.6 of this paper.

Bull (1982) made the observation that leisure satisfaction is an area where measurement is not very thoroughly researched. It is perhaps not surprising, therefore, that few assessment instruments actually exist. Those that are currently utilized, such as the LSS (Beard and Ragheb, 1980), are of a multi-dimensional nature.

One reason the LSS (Beard and Ragheb, 1980) was used in the present study was its comprehensiveness in covering many aspects of leisure.

2.5 DIMENSIONS OF LIFE SATISFACTION

In much of the research on life satisfaction, specific correlates have been the major focus. The common factors influencing life satisfaction seem to be health, financial status, marital status, friendship, and employment status (Larson, 1978). The consistent conclusion has been that perceived health, financial security and relationships with others influence life satisfaction the most (Edwards and Klemmack, 1973; Spreitzer and Snyder, 1974; Larson, 1978). These conclusions support the contention that life satisfaction is a multi-dimensional concept, as Knapp (1976) and Campbell et al. (1976) concluded.

Although there appears to be agreement among researchers in the field of gerontology that life satisfaction is multi-dimensional, sometimes opinions regarding the specific dimensions of that multi-dimensionality differ. In some cases, the dimensions seem to center around personal variables, such as the ones mentioned above. In other cases, the dimensions seem to center around activity or time-use, as in research by Seleen (1982) and Hoyt, Kaiser, Peters, and Babchuk (1980). Still others center on more abstract dimensions such as the five components proposed by Neugarten et al. (1961) in their life

satisfaction investigation.

The personal variable approach is summarized above, showing that health, finances and meaningful relationships are the influencing factors or dimensions of life satisfaction.

The time-use or activity approach reveals conflicting conclusions. Seleen (1982) investigated time-use as it related to life satisfaction and found that those "persons who were spending their time as they wished seemed to be more satisfied with life than those who wanted to make changes in their allocation of time, regardless of the direction of those shifts" (p.98). These conclusions imply that utilization of time by older adults can influence life satisfaction.

Lemon, Bengston and Peterson (1972) concluded from their research that "only social activity with friends was in any way related to life satisfaction" (p.522). Other types of activity did not seem to relate to life satisfaction.

Ray (1979) investigated activity and life satisfaction and concluded that caution should be exercised when stating that activity alone is the key to satisfaction with life. Likewise, Larson (1978) cited two studies (Lowenthal and

Haven, 1968, and Rosow, 1963) that also challenged the contention that activity alone, regardless of quality, is related to well-being. There are conflicting views in the gerontological literature as to the impact of activity and disengagement (Cumming and Henry, 1961) on life satisfaction. Despite the inconsistencies, activity level is often investigated as a possible dimension of life satisfaction.

The last approach to defining the dimensions of life satisfaction is a more abstract one which considers several components of psychological well-being, such as zest vs. apathy, resolution and fortitude, congruence between desired and achieved goals, positive self-concept, and mood tone (Neugarten et al. 1961). These components represent more of an internal dimension of life satisfaction than either activity or personal variables. The five components take into account the developmental stage of older adults, which influences self-perceived satisfaction.

Another example of the Neugarten et al. (1961) approach to measuring life satisfaction was a study by Wood et al. (1969). These authors revised the Life Satisfaction Index A to a 13 item instrument called the Life Satisfaction Index - Z (LSI-Z) The same five components were the basis for the

LSI-Z, utilizing again the same developmental life stage approach as Neugarten et al. (1961). Its development is explained in more detail in section 3.2.

Life satisfaction has been investigated extensively by gerontologists who seem to take one of three approaches: personal variables, activity or disengagement, and internal affective factors associated with development. Each approach deals with life satisfaction as a multi-dimensional concept and differs from the others in terms of dimensions emphasized.

2.6 DIMENSIONS OF LEISURE SATISFACTION

The development of a leisure satisfaction scale by Beard and Ragheb (1980) involved close scrutiny of the philosophical and theoretical components of leisure satisfaction, six of which ultimately were chosen as representative of leisure satisfaction: psychological, educational, social, relaxational, physiological, and aesthetic. The basis for each of these six subscales is briefly described below.

The psychological component of leisure included such elements as intrinsic motivation, a sense of challenge and freedom of choice, self-actualization, a sense of accomplishment, a feeling of pleasure derived from the

experiences, and a sense of discovery and exploration. Some of these same psychological elements overlap into the educational component of leisure. Individuals seek new learning experiences in order that they may "satisfy curiosities" and broaden their perspective of themselves and their surroundings.

In terms of the social component, leisure experiences afford individuals the opportunities to make and maintain relationships with new people. Walshe (1977) termed this a "need for belongingness, to identify with groups, and to gain attention and recognition which help individuals to gain social respect and others esteem" (Beard and Ragheb, 1980, p.23).

The relaxational and physiological dimension of leisure satisfaction was derived from the larger dimension, recreation. A familiar view of leisure is one that depicted it as "restorative, and relief [from] the stress generated from work and the strain of life" (Beard and Ragheb, 1980, p. 23). Another familiar view of leisure is one that recognized its role as one that people engage in for health purposes. Here, leisure was seen as somewhat preventative, in that it developed physical fitness and generally encouraged people to get and remain healthy.

The last dimension of leisure satisfaction was the aesthetic dimension. This area encompasses the actual physical environments in which leisure occurs. A concise explanation of the aesthetic component is given by Beard and Ragheb (1980).

Environments where individuals choose to engage in their leisure are more satisfying if they are beautiful and well designed. Therefore, the leisure experiences become interesting and pleasing (p. 23).

In an investigation of leisure and lifespan Kaplan (1979) explored several dimensions of what he considered to be activity experience. These dimensions included aesthetics, intellectual, physical, social, spiritual, civic, mass media and touristic. It is evident that some overlap exists between Beard and Ragheb's (1980) dimensions and Kaplan's (1979) dimensions. Although Kaplan's (1979) focus was on leisure and the aged, most of his dimensions could be applied to all ages. One fundamental difference between the two was in the characteristics of activity and leisure. Activity implied a more overt perspective while leisure implied a more inward perspective.

Crandall (1980) investigated motivation for participating in leisure activities. The researcher developed seventeen motivation categories, using information

obtained from college students. Reasons given for engaging in leisure activities included the following:

1. Enjoying nature, escaping civilization
 2. Escape from routine and responsibility
 3. Physical exercise
 4. Creativity
 5. Relaxation
 6. Social contact
 7. Meeting new people
 8. Heterosexual contact
 9. Family contact
 10. Recognition status
 11. Social power
 12. Altruism
 13. Stimulus seeking
 14. Self-actualization (feedback, self-improvement, ability utilization)
 15. Achievement, challenge, competition
 16. Killing time, avoiding boredom
 17. Intellectual aestheticism
- (Crandall, 1980, p.49)

Again, many of these dimensions are similar to those mentioned by Beard and Ragheb (1980) and Kaplan (1979).

A slightly different view of the dimensions of leisure satisfaction was presented by Pierce (1980). He maintained that intimacy, relaxation, achievement and power were the primary dimensions of leisure, with novelty, intellectualism, sociability, time filling and constructiveness being secondary. The purpose of Pierce's (1980) study was to investigate the dimensions of both work and leisure, relative to one another.

Pierce (1980) found that, generally, there was a

positive correlation where satisfaction in one area tended to mean satisfaction in the other area.

Each of the studies related to the dimensions of leisure satisfaction has considered leisure satisfaction a multi-faceted concept and not definable in terms of a single dimension. By contrast, research by Mancini (1978) utilized a two-item scale to assess leisure satisfaction. The two items asked were: "How do you generally feel about the way you spend your available free time?" and "Would you say that your present recreational pattern meets your needs?" Although these questions are thought-provoking, they do not intentionally drive at what motivates people to participate in certain leisure experiences. For this reason, this type of assessment does not take into account the multi-dimensionality of leisure and is, therefore, considered limited in its value.

The concept of leisure satisfaction, like life satisfaction, has been considered multi-dimensional, incorporating several facets. Research in the area of leisure satisfaction has identified a comprehensive list of the dimensions of leisure satisfaction which contributes to a more complete understanding of the concept.

An understanding of past research on life satisfaction

and leisure satisfaction provides a basis from which to consider the current research. The following chapter defines more specifically the methods and procedures used to obtain and analyze data in the present study.

CHAPTER III

METHODOLOGY

The methods and procedures followed in this study are described in detail under four headings: subjects, instruments, procedures, and methods of analysis.

3.1 SUBJECTS

In 1980 the United States had 25.5 million people who were 65 and older (Select Committee on Aging, 1982). This figure represented 11.3 percent of the total United States population. Of that 25.5 million, 505,000 or 18.2 percent lived in the state of Virginia, where the present study was conducted.

The Select Committee on Aging (1980) and the Chartbook on Aging in America (1981 White House Conference on Aging) characterize older adults as follows: follows:

Age (61.0 percent of all people over the age of 65 are under 75 years old).

Residence (72.4 percent of older adults over age 65 are living in a home they own).

Sex (There are 148 women per 100 men for older adults 65 and over).

Marital status (81.6 percent of males 65-74 are married; 50.1 percent of females 65-74 are married. Widowhood percentages are 8.5 for males and 40.3 for females in the 65-74 age group).

Health status (68 percent of older adults reported their health good or excellent compared to "others their own age". Approximately 22 percent reported their health as fair, or average, and almost 9 percent reported their health as poor. Minority older adults living in the south, residents of non-metropolitan areas, and persons with low incomes were more likely to report poor health).

Educational status (Approximately 50 percent of people 65 years and older have less than a 10th grade education).

Employment status (Less than 5 percent of people 65 and older are employed full-time).

Income (The average monthly benefit for retired workers and their dependents was \$383.30).

Income Adequacy (32 percent of two person husband-wife families 65 years and older had less than an "intermediate" budget of \$181.00 per week. Sixteen percent of these couples had less than a "lower" budget of \$128.00 per week).

The sample used in the present study was living in the Southwest Virginia area during the period of July 11-July 31, 1983, specifically in Salem, Christiansburg, Roanoke, Pulaski, and Blacksburg. The geographical location of the sample is representative of non-metropolitan areas with populations between 2,500 and over 25,000, containing approximately 36.5 percent of Americans 65 years and older.

Although 115 subjects completed surveys, 84 were acceptable for use in the present study. Subjects were

obtained through the cooperation of local organizations and agencies serving older adults and are grouped according to residence or senior center use. There were primarily six cooperating agencies and organizations who willingly participated in the present study:

Pulaski Health Care Center
The League of Older Americans in Roanoke
The Christiansburg Senior Center
Richfield Retirement Community
Warm Hearth Retirement Community
Heritage Hall Nursing Home

Participants in the study were at least 60 years old and not working at a paying job for more than 10 hours per week.

3.2 INSTRUMENTS

Three survey instruments were used in the present study, two of which were designed to obtain measures of satisfaction: life satisfaction and leisure satisfaction. These two instruments were validated by the individuals who designed and tested them, namely Wood et al, (1969) and Ragheb and Beard, (1980). The third instrument, a personal data inventory, was designed by the author and was used to obtain personal demographic data.

3.2.1 LIFE SATISFACTION SCALE

The life satisfaction scale used in the present study, the Life Satisfaction Index - Z, evolved from the Life Satisfaction Ratings of Neugarten et al. (1961) by way of the LSI-A. Initially, the LSR was developed to represent five components of what Neugarten et al. (1961) termed psychological well-being (a term which has been used synonymously with the term life satisfaction), each of which is described below:

Finally operational definitions of the following components were obtained: zest (vs. apathy); resolution and fortitude; congruence between desired and achieved goals; positive self-concept; and mood tone. An individual was regarded as being at the positive end of the continuum of psychological well being to the extent that he: A) takes pleasure from the round of activities that constitutes his everyday life; B) regards his life as meaningful and accepts resolutely that which life has been; C) feels he has succeeded in achieving his major goals; D) holds a positive image of self; and E) maintains happy and optimistic attitudes and moods (Neugarten et al. 1961, p.137).

However, the LSR was found to be a lengthy instrument, utilizing interviews and a self-report procedure and, in an effort to design a shorter instrument that would obtain the same type of data, Neugarten et al. (1961) developed the Life Satisfaction Index A (LSIA)

The Wood et al. (1969) version, the LSI-Z, came about

as a result of two further modifications. The first change related to the scoring procedure. Whereas in the LSIA which utilized a "1" for a correct response, the scoring procedure in the LSI-Z consisted of giving a "1" for a question mark or no response, a "2" for a correct answer, and a "0" for an incorrect answer. In this way, the respondent is not penalized for being unable to decide between an agree or disagree response.

The second change that occurred as a result of item analysis was the deletion of seven items from the LSIA. These changes produced a revised 13 item instrument (see Appendix A) which had correlations of between 0.45 and 0.57 with the original LSR. Wood et al. (1969) made the following observation about the revised Life Satisfaction Index - Z' (LSI-Z):

The size of the correlations between LSR and LSI-Z suggests that it is a useful self-report instrument in cases where a reasonable approximation of level of psychological well-being will suffice (p.467).

The LSI-Z was appropriate for use in the present study primarily because of its concise form, making it reasonable to administer in terms of time, while still obtaining a sufficient measurement of satisfaction level to permit comparison (Wood et al. 1969).

3.2.2 LEISURE SATISFACTION SCALE

In the present study Ragheb and Beard's (1980) Leisure Satisfaction Scale (LSS) Short Form was used to assess level of leisure satisfaction in older adults. The LSS Short Form is comprised of 24 statements regarding the psychological, educational, social, relaxational, physiological and aesthetic components of leisure, each of which is described below:

psychological - part report that their leisure activities provide psychological benefits, such as sense of freedom, enjoyment, involvement and intellectual challenge.

educational - part report that their leisure activities provide intellectual stimulation and help them to learn about themselves and their surroundings.

social - part report that their leisure activities provide rewarding relationships with other people.

relaxational - part indicate that leisure activities provide relief from the stress and strain of life.

physiological - part indicated that leisure activities are engaged in to develop physical fitness, stay healthy, control weight and otherwise promote physical well-being.

aesthetic - part view the areas in which they engage in their leisure activities as being pleasing, interesting, beautiful and generally well designed. (Ragheb and Beard, 1980, p.337)

The six subscales represent a compilation of various theories and models of leisure, for a description of which

the reader is referred to Section 2.5 of Chapter II.

Ragheb and Beard (1980) calculated the correlation coefficients for the subscales of this LSS Short Form and found that each of the six components possessed a "unique variance", with reliabilities of 0.84 (psychological); 0.82 (educational); 0.80 (social); 0.85 (relaxational); 0.93 (physical); and 0.83 (aesthetic). The total LSS Short Form reliability was 0.93 (Ragheb and Beard, 1980).

The LSS Short Form was derived from a larger leisure satisfaction instrument created by the same research team (Ragheb and Beard, 1980) and evolved primarily because the longer version took too long to administer. Ragheb and Beard (1980) described the LSS Short Form as "designed to be efficient in terms of the subject's time for response, [and] yet which provides measures having sufficient reliability for research purposes" (p.344). The LSS Short Form was validated on 343 females and 237 males who varied in age from under 25 to over 66. Although the age range varied significantly, it should be made clear that only 16 people comprised the "over 66" age group. While this is not suggesting that leisure satisfaction was not accurately represented for the "over 66" age group, it does suggest that further use of the LSS Short Form is needed in this age

range. In fact, this type of further investigation was invited by Ragheb and Beard (1980) and constitutes one reason for using the LSS Short Form in the present study. There does not appear to be a leisure satisfaction scale designed specifically for older adults and indeed there may not even be a need for such an instrument, since it is not the general concept of leisure that changes with age, but the amount of time acquired through retirement to pursue leisure experiences.

3.2.3 PERSONAL DATA INVENTORY

A personal data inventory was designed by the author to obtain demographic information about the sample. The variables examined were: sex, age, marital status, socio-economic status, occupation, type of residence, activity participation, and health status. This instrument was piloted to insure its clarity and appropriateness for use in the present study. Information obtained from the personal data inventory was useful in determining trends in responses as they relate to life satisfaction and leisure satisfaction and in determining the representativeness of the sample.

3.3 PROCEDURES

Data were collected in the present study using the following procedures:

1. Researched and constructed the survey instrument for use in the present study. The life satisfaction and leisure satisfaction scales were validated instruments and the personal data inventory was of the author's own design.

2. Located 15 retired older adults to pilot test the survey instrument. The purpose of conducting the pilot study was to ensure that, in their final form, the survey questions were unambiguous and appropriate for use with rural older adults.

3. Contacted agencies and organizations serving older adults, such as churches, nursing homes, senior centers and retirement communities. These agencies and organizations provided a sample of 115 for the major study.

4. Administered the survey instrument to sample. After the initial contact had been made with cooperating agencies and organizations, appointments were arranged to administer the survey. The author introduced the study and distributed and collected the surveys. Where appropriate, the survey was given prior to the beginning of an activity so as to reduce the effects of that act on the survey

responses. The survey was administered in the same manner at each of the cooperating agencies and organizations to insure test reliability. The only criterion for inclusion in the sample was that the subjects be at least 60 years old and not working for more than 10 hours per week. This information was given to the contact person in each of the cooperating agencies and organizations. Pencils and clipboards were provided by the author to aid in completing the survey. The procedures followed for data collection with each of the cooperating agencies and organizations is described below:

Pulaski Health Care Center

Pulaski Health Care Center is primarily an intermediate care facility that is associated with the new Pulaski Retirement Community. Ms. Elise Brown, the social director of the center arranged for six residents of the center to meet as a group for approximately 30 minutes. The survey was explained and distributed to each of the residents, who then completed the survey with some assistance from the author and Ms. Brown. The type of assistance was mechanical in nature, such as circling responses, for those people who did not have use of their hands. Three of the six residents required this type of assistance.

The League of Older Americans in Roanoke

Data collection was carried out in a group at The League of Older Americans (LOA) in Roanoke, where six members of the service organization, RSVP, completed the survey. The participants were not gathered specifically for the purpose of the survey, but rather were volunteering at the time. Ms. Barbara Lemons, the director of RSVP was the contact person with whom the

data collection was arranged.

The Christiansburg Senior Center

Participants from the Christiansburg Senior Center cooperated through five different activities - two covered dish luncheons, a senior volunteer services meeting, a natural remedies class, and a retired senior volunteer program (RSVP) meeting. Total number of participants throughout these activities was 32. For each of the five activities the author arranged with Fran Hart, the director of the Center, to be present to explain and distribute the survey. On three of the five occasions, the survey was distributed and collected prior to the beginning of the activity.

Richfield Retirement Community

Data collection at the Richfield Retirement Community was completed through the cooperation of Kathy Miller and Linda Burgess, members of the activity staff, who arranged meetings for residents of Knollwood, Ridgecrest and The Oaks Home for Adults. Knollwood and Ridgecrest are independent living facilities, and The Oaks is a home for those adults unable to live independently. Each of the meetings was arranged specifically for the purpose of completing the survey with data being collected on two different days, one with the residents of Knollwood and Ridgecrest and one with the residents of The Oaks. The total number of participants for the Richfield Retirement Community was 25.

Warm Hearth Retirement Community

Data were collected on two consecutive days at the Warm Hearth Retirement Community. The two activities facilitating data collection were a pot luck dinner and a blood pressure screening, both in the activity room at Warm Hearth. The total number of participants was 12. Distributing the survey at the pot luck dinner was relatively unsuccessful because there was no quiet area to call the group together or speak to residents individually. The blood screening activity was more successful because the author was able to set up a table in the waiting area of the activity room where

residents were waiting to see the nurse. The survey were distributed and explained to individuals as they waited. Most were able to complete the survey in the time that they were waiting. Arrangements were made through Ms. Barbara Fintel, resident manager at Warm Hearth.

Heritage Hall Nursing Home

Participants for data collection at Heritage Hall were obtained by choosing every seventh person from the total list of residents. This figure produced a total of 27 people, only three of whom were able to complete the survey independently. The other 24 residents were either unavailable or unable physically or mentally to comprehend and complete the survey. In the case of the three residents who could complete the survey, two had to have the items read aloud. Arrangements for data collection were made through Deb MacDonald, the assistant recreation director. All three residents who completed the survey did so in their rooms with the author present.

5. Analyzed the collected data using the statistical procedures outlined in Section 3.4. These statistical procedures were conducted by the author using computer facilities at Virginia Polytechnic Institute and State University.

6. Reported and discussed results and conclusions of the study. The analyzed data were presented in numerical form, as well as in discussion form, with a section on conclusions and recommendations for future studies.

3.4 METHODS OF ANALYSIS

The data obtained in the present study were analyzed in four separate parts.

The first analysis was a chi-square test which enabled comparisons to be made between the present study sample and national normative data. In making these comparisons, the generalizability of the results of the present study was assessed.

The second analysis involved several crosstabulations between life satisfaction and leisure satisfaction and variables such as income, health, and quality of friendship. By examining this information, relationships between these various concepts were analyzed and, where applicable, trends noted.

The third analysis examined each of the five hypotheses consecutively, using correlations and crosstabulations. Based on the results of these analyses, the null hypotheses were either rejected or retained.

The last analysis used in the present study involved an examination of interesting relationships not directly related to the hypotheses. This section, labeled "Other Analyses", utilized crosstabulations and a discriminant analysis in an examination of leisure satisfaction and number of activities participated in and of leisure satisfaction and the 14 personal data variables. All analyses were performed using the Statistical Package for

the Social Sciences (Nie, Hull, Jenkins, Steinbrenner and Bent, 1977) and are summarized in Chapter IV below.

CHAPTER IV

RESULTS

The following results section is comprised of four sets of analyses. The first set describes the study sample and compares it to national normative data from the 1981 Harris study and the 1981 Chartbook on Aging. The second set further describes the sample in terms of responses on the life satisfaction and leisure satisfaction instruments. In the third part of this chapter each of the hypotheses is analyzed, and the fourth and final part presents the results of secondary analyses not directly related to the hypotheses or the description of the sample.

4.1 DESCRIPTION OF SAMPLE WITH REGARD TO PERSONAL DATA VARIABLES

A sample of 84 older adults, 60 years old and older from the Southwest Virginia area, was used to obtain data for the present study. The chi-square test of significance was computed so that the sample data could be compared to national normative data, to determine differences and similarities. The sample was found to be significantly different from the national norms in terms of five particular variables: sex, income, education, health status, and occupation. However, the sample was not found

to be significantly different with regard to age. Tables 1 - 6 show more precisely the relationship between the study sample and national norms.

Table 1 presents data on age and shows that no significant difference was found between the age of the study sample and the national norms, based on a sample size of 74. Four subjects chose not to answer this question, and six subjects indicated that they were between the ages of 60 and 64, a category for which no expected frequencies were available. Therefore, no comparison could be made.

A significant difference was found between the proportion of males and females in the study sample and the national norms in Table 2. The computations were calculated using a sample size of 83, as one subject chose not to answer this question. The present study seemed to have a higher proportion of females and a lower proportion of males than the national norms.

The question on income had an unusually high "no response" rate, with 37 percent of the subjects not giving an answer. Therefore, the reader is cautioned as to the true significance of the differences shown in Table 3. The computations for the income chi-square table were based on 63 percent of the total number in the sample and indicated a

TABLE 1 - Chi-Square for Age Variable

Variable	fo* ¹	fe* ²	fo-fe	(fo-fe) ²	(fo-fe) ² /fe
65-74	55.4	61.0	-5.6	31.36	0.51
75-84	39.1	30.0	9.1	82.81	2.76
85+	5.4	9.0	-3.6	12.96	1.44
df = 2					Σ = 4.71

*¹Values for Chi-square tables are based on percentages.

*²Expected frequencies were obtained from the 1981 Chartbook on Aging.

TABLE 2 - Chi-Square for Sex Variable

Variable	fo* ¹	fe* ²	fo-fe	(fo-fe) ²	(fo-fe) ² /fe
Male	21.5	32.4	-10.9	118.8	3.66
Female	78.3	67.1	11.2	125.4	1.86
df = 1					$\chi^2 = 5.52^{**}$

*¹Values for Chi-square tables are based on percentages.

*²Expected frequencies were obtained from the 1981 Chartbook on Aging.

**Significant at the 0.05 level.

TABLE 3 - Chi-Square for Income Variable

Variable	fo* ¹	fe* ²	fo-fe	(fo-fe) ²	(fo-fe) ² /fe
<\$5,000	41.5	21.0	20.5	420.25	20.01
5-14,999	47.1	39.0	8.1	65.61	1.68
15-24,999	9.4	10.0	-0.6	0.36	0.04
25-34,999	1.9	5.0	-3.1	9.61	1.92
df = 3					$\Sigma = 23.65^{**}$

*¹Values for Chi-square tables are based on percentages.

*²Expected frequencies were obtained from Harris and Associates, 1981.

**Significant at the 0.05 level.

TABLE 4 - Chi-Square for Education Variable

Variable	fo* ¹	fe* ²	fo-fe	(fo-fe) ²	(fo-fe) ² /fe
<high school	40.0	53.0	-13.0	169.0	3.18
high school	36.0	30.0	6.0	36.0	1.2
college grad	25.3	16.0	9.3	86.5	5.4
df = 2					$\Sigma = 9.78^{**}$

*¹Values for Chi-square tables are based on percentages.

*²Expected frequencies were obtained from Harris and Associates, 1981.

**Significant at the 0.05 level.

TABLE 5 - Chi-Square for Occupation Variable

Variable	fo* ¹	fe* ²	fo-fe	(fo-fe) ²	(fo-fe) ² /fe
Professional	34.6	23.0	11.6	134.6	5.85
Clerical	25.0	17.0	8.0	64.0	3.76
Skilled	5.7	8.0	-2.3	5.3	0.12
Unskilled	34.6	29.0	5.6	31.4	1.08
df = 3					$\Sigma = 10.81^{**}$

*¹Values for Chi-square tables are based on percentages.

*²Expected frequencies were obtained from Harris and Associates, 1981.

**Significant at the 0.05 level.

TABLE 6 - Chi-Square for Health Variable

Variable	fo* ¹	fe* ²	fo-fe	(fo-fe) ²	(fo-fe) ² /fe
Poor	20.7	13.0	7.7	59.29	4.56
Average	45.1	30.0	15.1	228.01	7.6
Good	30.4	39.0	-8.6	73.96	1.9
Very Good	3.6	17.0	-13.4	179.56	10.56
df = 3					$\Sigma = 24.62^{**}$

*¹Values for Chi-square tables are based on percentages.

*²Expected frequencies were obtained from Harris and Associates, 1981.

**Significant at the 0.05 level.

significant difference between the study sample and the national norms.

A significant difference was also found between the level of education of the study sample and the national norms (see Table 4). Computations for the observed frequencies were based on a sample size of 76 as five subjects chose not to respond to this question (5.9 percent) and 3 subjects chose the vocational-technical training category (3.6 percent) for which normative data were unavailable.

Table 5 does not reflect five of the occupations responded to on the survey by 25 subjects. These other five categories included unemployed, housewife, and a variety of "other" responses. Seven subjects chose not to respond to this question at all. Therefore, the chi-square was computed on a sample size of 52, with significant differences found.

Finally, the study sample and the norms (see Table 6) were also found to be significantly different in terms of health status. In this case a sample size of 82 was used, as two subjects chose not to respond to this question.

Because of the significant differences found between the present study sample and the national norms, the results

of this study cannot be considered generalizable to all older adults. However, since the study was conducted in the Roanoke Valley area, perhaps a more appropriate generalization would be to older adults living in similar rural settings. Indeed, although the study sample differs from the national norms, it still possesses certain unifying characteristics.

The sample in the present study was predominantly female, between the ages of 65 and 74, with little education and an annual income of between \$5,000 and \$14,999. The occupations identified in the sample ranged from professional/managerial to unskilled labor. Most respondents described themselves to be in average or good health. Within these bounds, therefore, the results of this study are still generalizable - both within the Roanoke Valley and beyond.

The following section describes how the study sample scores on the life satisfaction and leisure satisfaction surveys compared to the scores of the Harris and Associates (1981) sample and the Ragheb and Beard (1980) sample.

4.2 DESCRIPTION OF SAMPLE WITH REGARD TO LIFE SATISFACTION AND LEISURE SATISFACTION

The life satisfaction scores for the 1981 Harris study were similar to the life satisfaction scores for the present study in terms of medians and distribution. Harris and Associates (1981) had data for 1,837 people who were 65 and older, responding to an 18-item LSI-Z scale, while the present study sample size was 84, age 60 and older and responding to a 13-item LSI-Z scale, which is explained more fully in section 3.2 of this paper. The median score for Harris and Associates (1981) was 24.7 with a range of 0 - 36. This compared to a median score of 17.0 for the present study, with a range of 0 - 26. The present study also had a mean score of 17.2 and a standard deviation of 4.613. Figures 1a and 1b show the distributions of the present study LSI-Z scores and the Harris and Associates (1981) LSI-Z scores. The similarity of the distributions suggests that the present study scores are not altogether different from other studies using the LSI-Z.

Leisure satisfaction data for the present study were compared to the Ragheb and Beard (1980) data, with samples of 84 and 53 respectively. The mean score for the present study was found to be 3.83 with a standard deviation of

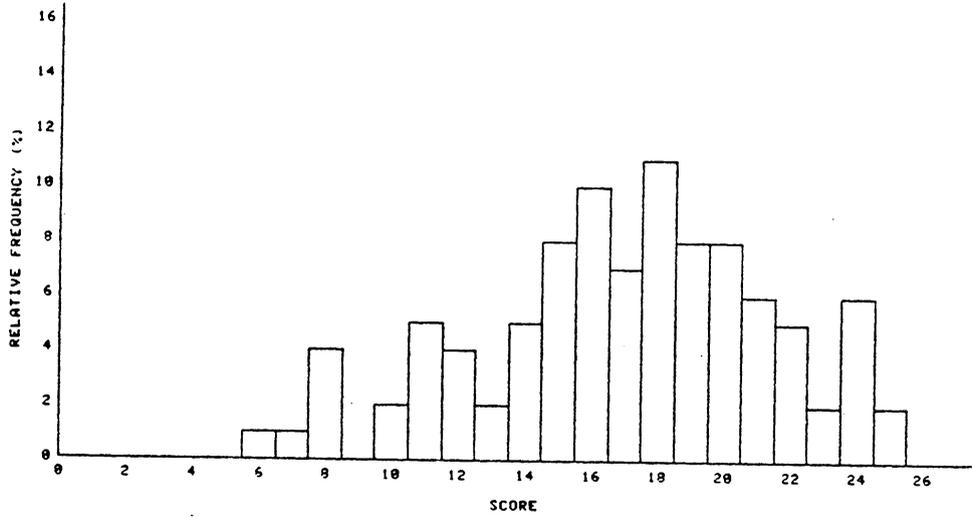


Figure 1a
Study Sample LSI-Z Scores

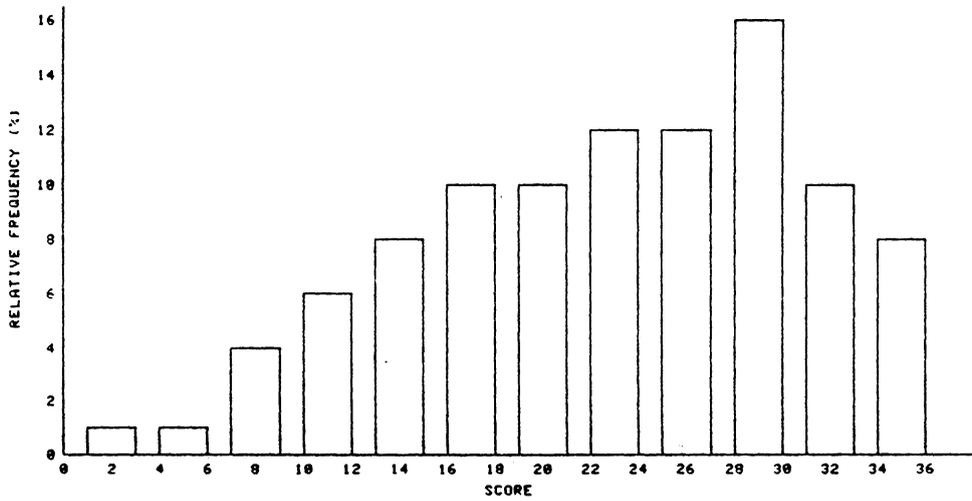


Figure 1b
Harris Sample LSI-Z Scores

1.204, which compared to a mean score of 3.79 for the Ragheb and Beard (1980) study. The Ragheb and Beard (1980) study standard deviation information was not available for comparison.

A t-test for the significant difference between two means was computed for the total LSS and for each of the six subscales of the LSS. However, the reader should be aware that the variance computed for the t-test was the variance of the study sample only, since the variance was not available for the Ragheb and Beard (1980) data. Since the sample sizes and the mean scores were quite similar, this action was not believed to be too distortive. However, any interpretation of the significance of these t-tests should be more cautious as a result. Table 7 presents the differences between mean scores on the LSS and the six subscales of the LSS.

The results of these t-tests suggest that in the two components of physiologic and aesthetic satisfaction the study sample and the Ragheb and Beard (1980) sample were significantly different. Therefore, the generalizability of these two particular subscales is limited. However, the study sample does not differ significantly from the Ragheb and Beard (1980) sample in four of the six subscales and in

TABLE 7 - T-Test for Significant Differences
Between Two Means

Variable	X ₁	X ₂	df	t-value
LEISAT*	3.833	3.79	135	0.16
PSYCSAT	3.643	4.09	135	-1.5
EDUSAT	3.357	3.96	135	-1.6
SOCSAT	3.738	3.68	135	0.21
RELAXSAT	3.857	3.80	135	0.20
PHYSAT	3.286	4.05	135	-2.5**
AESTSAT	3.976	3.28	135	2.5**

Note: X₁ = study sample mean

X₂ = Ragheb and Beard (1980) sample mean

*LEISAT = Leisure Satisfaction
 PSYCSAT = Psychological Satisfaction
 EDUSAT = Educational Satisfaction
 SOCSAT = Social Satisfaction
 RELAXSAT = Relaxation Satisfaction
 PHYSAT = Physiological Satisfaction
 AESTSAT = Aesthetic Satisfaction

**significant at the 0.01 level

the overall leisure satisfaction scale, thus permitting less cautious generalization in these areas

4.3 ANALYSIS OF HYPOTHESES

In the following section each of the five hypotheses identified in Chapter 1 is analyzed using correlations and crosstabulations. The null hypothesis was either rejected or retained as a result of these analyses.

Hypothesis 1 - Leisure Satisfaction and Life Satisfaction

H₀: There will be no systematic relationship between leisure satisfaction and life satisfaction.

H₁: There will be a positive relationship between leisure satisfaction and life satisfaction.

Since the units of measurement for the life satisfaction and leisure satisfaction scores were interval level, the Pearson r correlation index was used to determine a correlation coefficient.

Eighty-four paired scores for the life satisfaction and leisure satisfaction surveys were compared and a correlation coefficient of 0.17 was produced, which was non-significant. This coefficient suggests that there is little, if any, systematic relationship between leisure satisfaction and life satisfaction and, therefore, the null hypothesis was not rejected. Figure 2 illustrates more clearly the nature

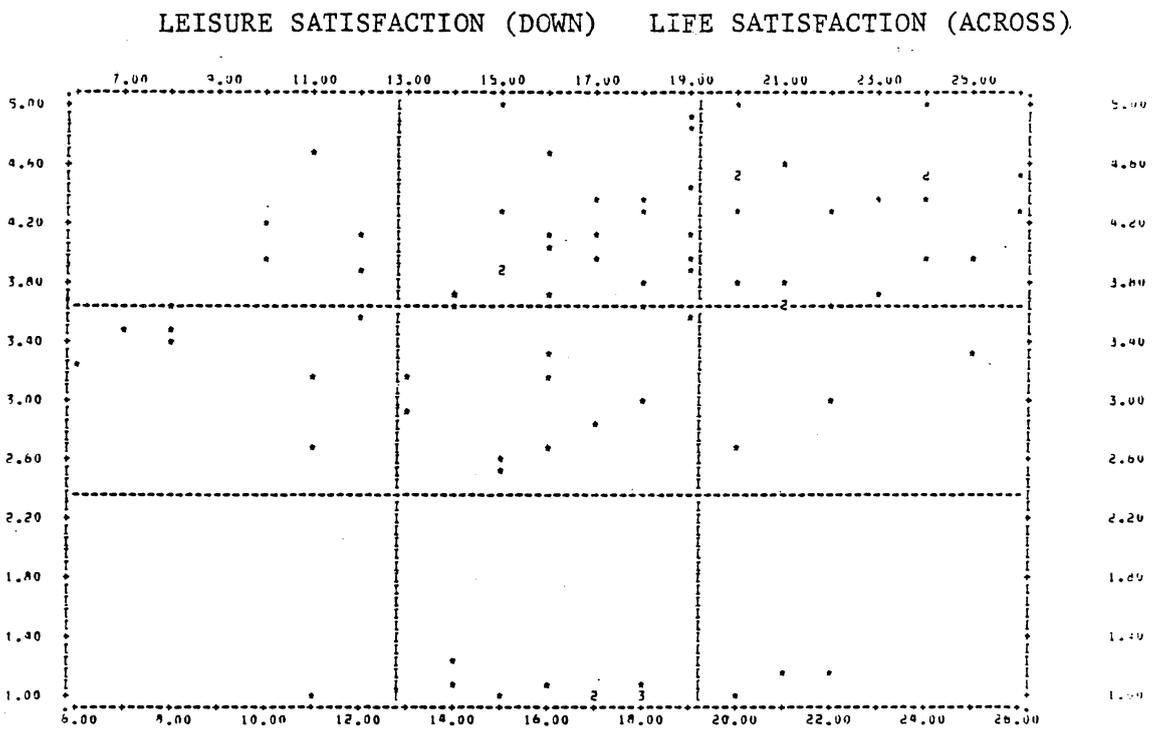


Figure 2

Correlation Between Leisure Satisfaction and Life Satisfaction

of the relationship between leisure satisfaction and life satisfaction.

In addition to computing the correlation coefficient, a crosstabulation was used to compare the low, medium and high leisure satisfaction scores with the low, medium and high life satisfaction scores. Low, medium and high scores for both the leisure satisfaction and life satisfaction scale were derived by dividing the range of scores into equal thirds. By doing so, the following values represented the low, medium and high categories of scores:

LSS - Low = 1 - 2.33,

Medium = 2.33 - 3.66,

High = 3.66 - 5.

LSI-Z - Low = 0 - 8.66,

Medium = 8.66 - 17.33,

High = 17.33 - 26.

Table 8 shows that low satisfaction with either life or leisure does not necessarily predict a low score in the other. However, most of those who reported high life satisfaction also tended to report high leisure satisfaction (69 percent).

Of all those who reported low life satisfaction, 80 percent claimed medium leisure satisfaction. Respondents

TABLE 8 - Crosstabulation Between Leisure Satisfaction
and Life Satisfaction

		LEISAT			
		Low	Medium	High	Row Total
LIFESAT	Count				
	Row % Column % Total %	1.	3.	5.	
Low	1.	0	4	1	5
		0.0	80.0	20.0	6.0
		0.0	19.0	2.0	
		0.0	4.8	1.2	
Medium	3.	7	11	18	36
		19.4	30.6	50.0	42.9
		50.0	52.4	36.7	
		8.3	13.1	21.4	
High	5.	7	6	30	43
		16.3	14.0	69.8	51.2
		50.0	28.6	61.2	
		8.3	7.1	35.7	
Column Total		14	21	49	84
		16.7	25.0	58.3	100.0

who reported low leisure satisfaction were evenly distributed between high and medium life satisfaction, and most (52 percent) of those reporting medium leisure satisfaction also reported medium life satisfaction.

Although the correlation between leisure satisfaction and life satisfaction is not statistically significant, the crosstabulations suggest a tendency for people high in leisure satisfaction to be also high in life satisfaction. Unfortunately, it was not possible to make this same type of comparison between those low in both leisure satisfaction and life satisfaction, because this category had an n of 0.

Hypothesis 2 - Leisure Satisfaction and Income

H_0 : There will be no systematic relationship between leisure satisfaction and current income level.

H_1 : There will be a positive relationship between leisure satisfaction and current income level.

The strong positive relationship between life satisfaction and income is well documented in the literature. However, this second hypothesis, tested using the Pearson r correlation index, indicated only a weak relationship between leisure satisfaction and income. A correlation coefficient of 0.23 was found for 53 paired scores on the LSS and income information. This coefficient

was significant at the 0.05 level, which suggested an extremely low correlation. Therefore, it was again not possible to reject the null hypothesis. A scattergram is reproduced in Figure 3 showing more clearly this relationship between leisure satisfaction and income.

Leisure satisfaction scores were also crosstabulated with income to describe this relationship further (see Table 9). Although some subjects claimed an annual income of less than \$5,000, they still reported high leisure satisfaction (63.6 percent). Eighty percent of those in the \$15,000 - \$24,999 income range claimed high leisure satisfaction, although this did not seem to be a predictable relationship. Those people in the low income bracket also reported medium to high leisure satisfaction, indicating that low income did not necessarily correspond to low leisure satisfaction in the same way that higher income seemed to correspond to high leisure satisfaction.

Hypothesis 3 - Leisure Satisfaction and Health

H₀: There will be no systematic relationship between leisure satisfaction and health status.

H₁: There will be a positive relationship between leisure satisfaction and health status.

Like income, health was reported to be a major

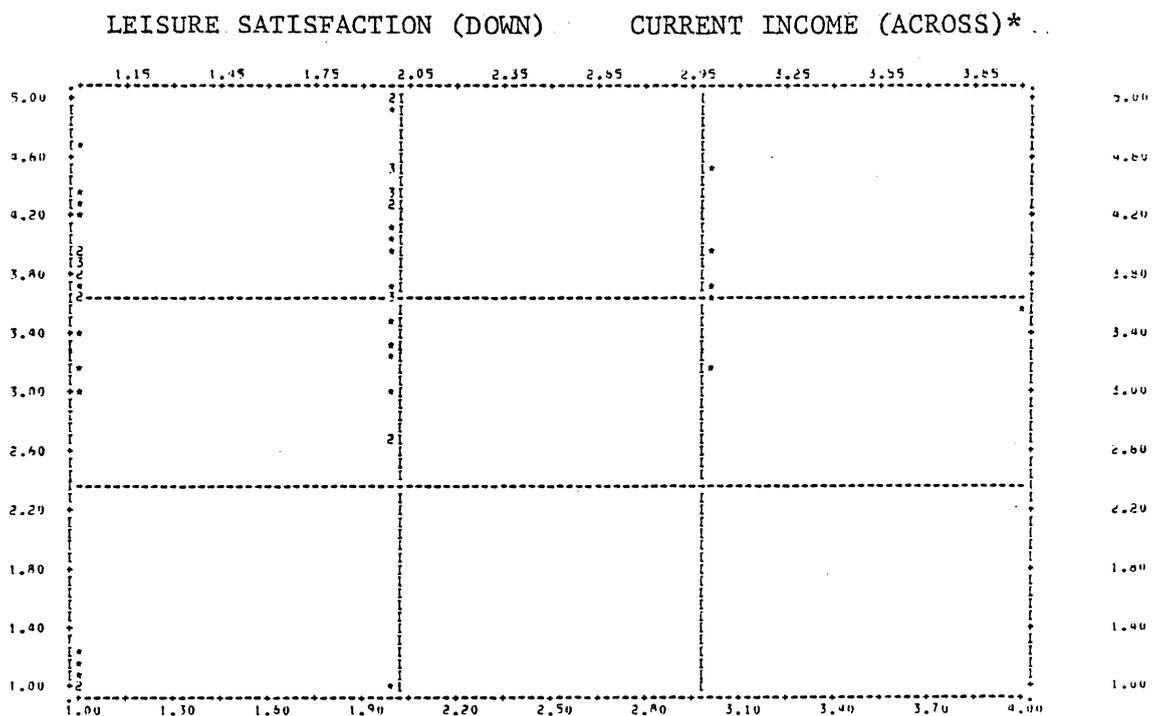


Figure 3

Correlation Between Leisure Satisfaction
and Current Income

*Values for current income were coded accordingly: 1) under \$5,000, 2) \$5,000 - \$14,999, 3) \$15,000 - \$24,999, 4) \$25,000 - \$34,999

TABLE 9 - Crosstabulation Between Leisure Satisfaction
and Current Income

		INCOME					
LEISAT	Count	No	<\$5000	\$5000-	\$15000-	\$25000-	Row
	Row %	Response	1.	14999	24999	34999	Total
	Column %	0.		2.	3.	4.	
	Total %						
Low	1.	8	5	1	0	0	14
		57.1	35.7	7.1	0.0	0.0	16.7
		25.8	22.7	4.0	0.0	0.0	
		9.5	6.0	1.2	0.0	0.0	
Medium	3.	9	3	7	1	1	21
		42.9	14.3	33.3	4.8	4.8	25.0
		29.0	13.6	28.0	20.0	100.0	
		10.7	3.6	8.3	1.2	1.2	
High	5.	14	14	17	4	0	49
		28.6	28.6	34.7	8.2	0.0	58.3
		45.2	33.6	68.0	80.0	0.0	
		16.7	16.7	20.2	4.8	0.0	
	Column Total	31	22	25	5	1	84
		36.9	26.2	29.8	6.0	1.2	100.0

influence on life satisfaction. However, analysis of this third hypothesis showed very little relationship between health and leisure satisfaction. Using the Pearson r index on 82 paired scores, a correlation of 0.15 was found, ($p < 0.07$). This coefficient indicated very little direction or magnitude regarding the relationship between leisure satisfaction and health status and, therefore, the null hypothesis was again not rejected. Figure 4 illustrates this relationship in a scattergram.

Crosstabulation of leisure satisfaction and health status revealed that good health did not necessarily indicate a high level of leisure satisfaction. Table 10 shows that a substantial number of subjects who reported very poor to poor health also reported a high level of leisure satisfaction (42.9 percent and 60 percent). Both the correlation coefficient and the crosstabulation, therefore, suggest a weak relationship between leisure satisfaction and health status.

Hypothesis 4 - Leisure Satisfaction and Quality of Friendship

H_0 : There will be no systematic relationship between leisure satisfaction and quality of friendship.

H_1 : There will be a positive relationship between leisure

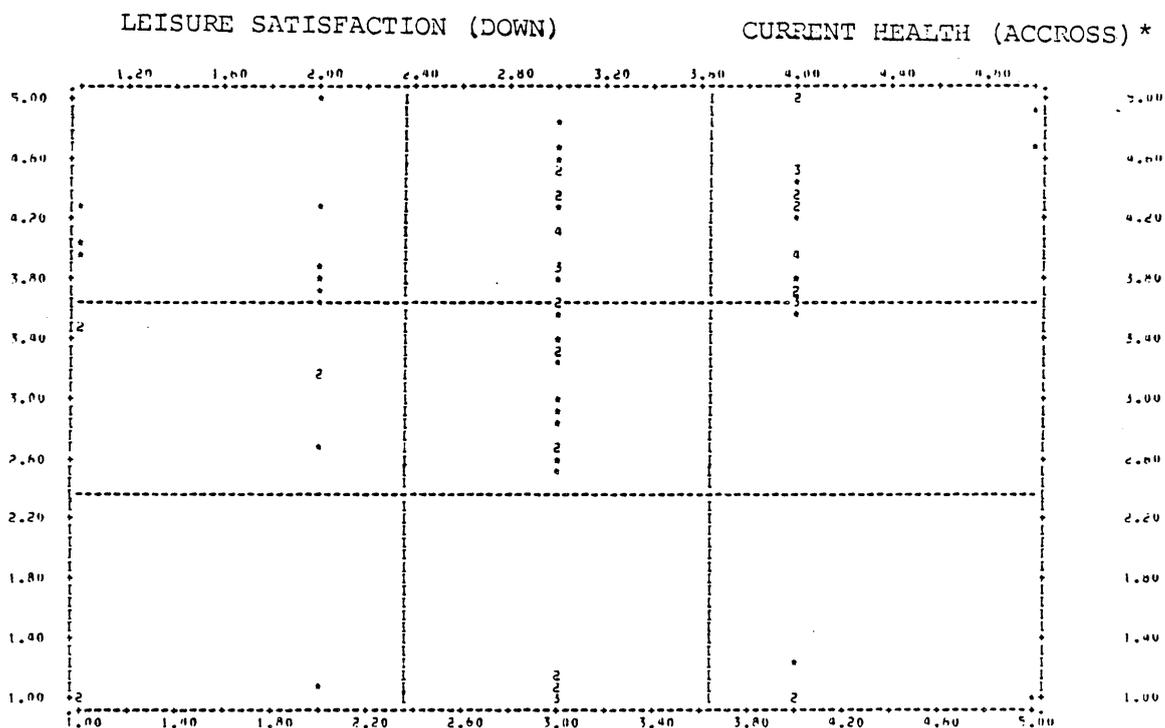


Figure 4

Correlation Between Leisure Satisfaction
and Current Health

*Values for health were coded accordingly: 1) very poor, 2) poor, 3) average, 4) good, 5) very good

TABLE 10 - Crosstabulation Between Leisure Satisfaction
and Health Status

		HEALTH STATUS						
LEISAT	Count	No	Very	Poor	Average	Good	Very	Row
	Row %	Response	Poor				Good	Total
	Column %	0.	1.	2.	3.	4.	5.	
	Total %							
Low	1.	0	2	1	7	3	1	14
		0.0	14.3	7.1	50.0	21.4	7.1	16.7
		0.0	28.6	10.0	18.9	12.0	33.3	
		0.0	2.4	1.2	8.3	3.6	1.2	
Medium	3.	2	2	3	12	2	0	21
		9.5	9.5	14.3	57.1	9.5	0.0	25.0
		100.0	28.6	30.0	32.4	8.0	0.0	
		2.4	2.4	3.6	14.3	2.4	0.0	
High	5.	0	3	6	18	20	2	49
		0.0	6.1	12.2	36.7	40.8	4.1	58.3
		0.0	42.9	60.0	48.6	80.0	66.7	
		0.0	3.6	7.1	21.4	23.8	2.4	
	Column Total	2	7	10	37	25	3	84
	Total	2.4	8.3	11.9	44.0	29.8	3.6	100.0

satisfaction and quality of friendship.

Quality of friendship is the third and final variable believed to influence life satisfaction. Because the measurement for quality of friendship was of ordinal status, the Spearman rho correlation index was used to compute the coefficient. Once again, unlike its relationship with life satisfaction, quality of friendship was found not to be significantly related to leisure satisfaction. A coefficient of 0.10, ($p < 0.20$), was found for 72 paired scores on the LSS and information on the quality of friendship. The null hypothesis was not rejected since the significance level of the correlation was too low.

Although it was not possible to produce a scattergram with ordinal level data, a crosstabulation was computed (see Table 11) to show more clearly the nature of the relationship between leisure satisfaction and quality of friendship. These results indicated a wide range of distributions between leisure satisfaction and quality of friendship. None of the subjects reported having both no friends and low leisure satisfaction. However, the one person who did report having no friends claimed medium leisure satisfaction. Perhaps the most interesting product of this crosstabulation was the observation that the

TABLE 11 - Crosstabulation Between Leisure Satisfaction
and Quality of Friendship

		FRIENDSHIP				
		No	No	Few	One	Row
		Response	Friends	Acquain	Special	Total
		0.	1.	2.	3.	
Count	Row %					
Column %	Total %					
LEISAT						
	1.	3	0	0	11	14
Low		21.4	0.0	0.0	78.6	16.7
		25.0	0.0	0.0	19.6	
		3.6	0.0	0.0	13.1	
	3.	4	1	7	9	21
Medium		19.0	4.8	33.3	42.9	25.0
		33.3	100.0	46.7	16.1	
		4.8	1.2	8.3	10.7	
	5.	5	0	8	36	49
High		10.2	0.0	16.3	73.5	58.3
		41.7	0.0	53.3	64.3	
		6.0	0.0	9.5	42.9	
	Column	12	1	15	56	84
	Total	14.3	1.2	17.9	66.7	100.0

majority (73.5 percent) of those reporting high leisure satisfaction also reported having a special friend.

Hypothesis 5 - Leisure Satisfaction and Type of Activity

H₀: There will be no significant relationship between type of activity and leisure satisfaction.

H₁: There will be a significant relationship between type of activity and leisure satisfaction.

The five activities most often responded to on the survey were compared to each other using chi-square tests to determine if any significant differences existed between types of activity with regard to level of leisure satisfaction. In order to make activity type a manageable variable, only those activities which were responded to by seven or more subjects were included in the analysis. Tables 12 - 21 show the chi-square values computed between level of leisure of satisfaction and these activities: walking, crafts, music, cards, and bingo, chess and cribbage.

In six of the ten tests, significant differences in leisure satisfaction were found between types of activity (see Tables 12, 16, 17, 18, 20, and 21). Based on these results, the null hypothesis was rejected and the conclusion was reached that type of activity does indeed influence

TABLE 12 - Chi-Square for Walking and Crafts Variables

Variable	(fo)* ¹ (fe)		fo-fe	(fo-fe) ²	(fo-fe) ² /fe
	Walking	Crafts			

LEISAT					
Low	17.8	4.5	13.3	176.89	39.3
Medium	15.6	4.5	11.1	123.21	27.4
High	66.7	90.9	-24.2	585.64	6.4
df = 2					Σ = 73.1**

*¹Values for Chi-square tables are based on percentages.

**Significant at the .05 level.

TABLE 13 - Chi-Square for Walking and Music Variables

Variable	(fo)* ¹ (fe)		fo-fe	(fo-fe) ²	(fo-fe) ² /fe
	Walking	Music			
LEISAT					
Low	17.8	0.0	17.8	316.84	0
Medium	15.6	26.7	-11.1	123.21	4.61
High	66.7	73.3	- 6.6	43.56	.59
df = 2					Σ = 5.2

*¹Values for Chi-square tables are based on percentages.

**Significant at the .05 level.

TABLE 14 - Chi-Square for Walking and Cards Variables

Variable	(fo)* ¹		(fe)		fo-fe	(fo-fe) ²	(fo-fe) ² /fe	
	Walking	Cards	Walking	Cards				
LEISAT								
Low	17.8	0.0	17.8	0.0	17.8	316.84	0	
Medium	15.6	26.7	15.6	26.7	-11.1	123.21	4.61	
High	66.7	73.3	66.7	73.3	- 6.6	43.56	.59	
df = 2							Σ = 5.2	

*¹Values for Chi-square tables are based on percentages.

**Significant at the .05 level.

TABLE 15 - Chi-Square for Walking and Bingo, Chess,
Cribbage Variables

	(fo)* ¹	(fe)			
Variable	Walking	Bingo, etc.	fo-fe	(fo-fe) ²	(fo-fe) ² /fe

LEISAT					
Low	17.8	13.3	4.5	20.25	1.52
Medium	15.6	13.3	2.3	5.29	.40
High	66.7	73.3	- 6.6	43.56	.59
df = 2					Σ = 2.58

*¹Values for Chi-square tables are based on percentages.

**Significant at the .05 level.

TABLE 16 - Chi-Square for Crafts and Music Variables

	(fo)* ¹	(fe)			
Variable	Crafts	Music	fo-fe	(fo-fe) ²	(fo-fe) ² /fe
<hr/>					
LEISAT					
Low	4.5	0.0	4.5	20.25	0
Medium	4.5	26.7	-22.2	492.84	18.45
High	90.9	73.3	17.6	309.76	4.22
df = 2					$\Sigma = 22.67^{**}$

*¹Values for Chi-square tables are based on percentages.

**Significant at the .05 level.

TABLE 17 - Chi-Square for Crafts and Cards Variables

	(fo)* ¹	(fe)			
Variable	Crafts	Cards	fo-fe	(fo-fe) ²	(fo-fe) ² /fe
<hr/>					
LEISAT					
Low	4.5	0.0	4.5	20.25	0
Medium	4.5	26.7	-22.2	492.84	18.45
High	90.9	73.3	17.6	309.76	4.22
df = 2					$\Sigma = 22.67^{**}$

*¹Values for Chi-square tables are based on percentages.

**Significant at the .05 level.

TABLE 18 - Chi-Square for Crafts and Bingo, Chess,
Cribbage Variables

	(fo)* ¹	(fe)			
Variable	Crafts	Bingo, etc.	fo-fe	(fo-fe) ²	(fo-fe) ² /fe
<hr/>					
LEISAT					
Low	4.5	13.3	- 8.8	77.44	5.8
Medium	4.5	13.3	- 8.8	77.44	5.8
High	90.9	73.3	17.6	309.76	4.22
df = 2					$\Sigma = 15.82^{**}$

*¹Values for Chi-square tables are based on percentages.

**Significant at the .05 level.

TABLE 19 - Chi-Square for Music and Cards Variables

	(fo)* ¹	(fe)			
Variable	Music	Cards	fo-fe	(fo-fe) ²	(fo-fe) ² /fe
<hr/>					
LEISAT					
Low	0.0	0.0	0	0	0
Medium	26.7	26.7	0	0	0
High	73.3	73.3	0	0	0
df = 2					Σ = 0

*¹Values for Chi-square tables are based on percentages.

**Significant at the .05 level.

TABLE 20 - Chi-Square for Music and Bingo, Chess,
Cribbage Variables

Variable	(fo)* ¹		fo-fe	(fo-fe) ²	(fo-fe) ² /fe
	Music	Bingo, etc.			

LEISAT					
Low	0.0	13.3	-13.3	176.89	13.3
Medium	26.7	13.3	13.4	179.56	13.5
High	73.3	73.3	0	0	.0
df = 2					Σ = 26.8**

*¹Values for Chi-square tables are based on percentages.

**Significant at the .05 level.

TABLE 21 - Chi-Square for Cards and Bingo, Chess,
Cribbage Variables

	(fo)* ¹	(fe)			
Variable	Music	Bingo, etc.	fo-fe	(fo-fe) ²	(fo-fe) ² /fe
<hr/>					
LEISAT					
Low	0.0	13.3	-13.3	176.89	13.3
Medium	26.7	13.3	13.4	179.56	13.5
High	73.3	73.3	0	0	0
df = 2					$\Sigma = 26.8^{**}$

*¹Values for Chi-square tables are based on percentages.

**Significant at the .05 level.

level of leisure satisfaction.

The reader is reminded that type of activity can be operationalized in a number of ways. The way in which activity type was operationalized in the present study did not permit any analysis of what might be the reason(s) that some activities related more strongly to high leisure satisfaction than others. The analysis permitted comparisons to be made between types of activity, although, the more meaningful causal perspective was not assessed.

The last analysis section describes the results of analyses which, while did not directly apply to the hypotheses or the description of the study sample, provided additional information which might be useful in determining future research directions.

4.4 OTHER ANALYSES

The first of two other analyses was a crosstabulation between number of activities participated in and leisure satisfaction. This particular crosstabulation was interesting in that it provided additional information on the nature of the relationship between leisure satisfaction and activity.

Results of the crosstabulation in Table 22 suggest that those who participated in several activities (six or more)

TABLE 22 - Crosstabulation Between Number of
Activities Participated In and
Leisure Satisfaction

		NUMBER OF ACTIVITIES			
		2 or less	3-5	6 or more	Row Total
LEISAT	Count				
	Row %				
	Column %				
	1.	13	1	0	14
Low		92.8	7.1	0.0	16.7
		21.6	5.0	0.0	
	3.	23	3	0	
Medium		88.4	11.5	0.0	26
		38.3	15.0	0.0	31.0
	5.	24	16	4	
High		54.5	36.3	9.1	44
		40.0	80.0	100.0	52.4
	Column Total	60	20	4	84
		71.4	23.8	4.8	100.00

also claimed high leisure satisfaction. However, the inverse of this was not true. Those who participated in two or fewer activities had a wide range of leisure satisfaction scores. Although 21.6 percent of the sample participating in two or fewer activities claimed low leisure satisfaction, 38.3 percent claimed medium satisfaction and 40 percent claimed high satisfaction. These results indicate that the relationship between number of activities and leisure satisfaction is not rectilinear. However, it strongly suggests that the more activities participated in, the higher the leisure satisfaction.

The final analysis, SPSS subprogram "discriminant", was computed in order to determine which of the personal inventory variables was/were most significantly related to high and low leisure satisfaction. If the responses on the personal data inventory were the same for those high and low in leisure satisfaction, one might expect them not to be particularly influential. However, the discriminant analysis indicated that those high and low in leisure satisfaction responded differently to the personal data inventory, as Table 23 illustrates.

Results of the discriminant analysis suggest that the length of time in the current state of health was the most

TABLE 23 - Discriminant Analysis for Leisure Satisfaction
and Personal Variables

Variable	Variable Label	Wilks' Lambda*
HEALTH2	Length of time in current health	0.806
TIMERES	Length of time at current residence	0.686
EDUCAT	Highest level of education completed	0.643
AGE	Current age	0.601
SEX	Male or Female	0.551
INCOME2	Current income	0.520

*The Wilks' Lambda is an inverse measure of the discriminating power in the original variables which has not yet been removed by the discriminant functions - the larger lambda is the less information remaining.

influential factor related to leisure satisfaction, with length of time at current residence, educational level, age, sex, and current income the next most influential in that order.

A more detailed discussion, concerning each of these variables and the other analyses conducted, appears in Chapter 5 of this paper.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

In the previous chapter the results were reviewed in terms of their statistical significance. This chapter is more discursive and is arranged in four sections: sampling considerations, measurement considerations, hypotheses, and recommendations for future research.

5.1 SAMPLING CONSIDERATIONS

When the present study sample was compared to normative data, significant differences were found in five areas: sex, income, education, health, and occupation. Reasons for these differences may generate from the particular geographical location where the study was conducted especially, since most of the sample seemed to have low incomes, and poor health status. Subjects for the study lived in various settings ranging from their own homes to nursing homes. Approximately 30 percent of the total sample lived in a nursing home or home for adults and required some level of medical care. Approximately 40 percent of the sample lived in government subsidized housing, which required a minimum income. It seemed reasonable to attribute the differences between the sample and the national norms to the homogeneity of the sample. The fact

that the entire sample was obtained from one specific geographic location may have made it more unlikely for a wide distribution of demographic characteristics to emerge.

In addition to the differences in housing environments and health, the sample came from two atypical geographical areas. Thirty-seven percent of the sample lived in Roanoke or Salem, while 63 percent lived in Christiansburg, Blacksburg or Pulaski. The Roanoke and Salem locations were perhaps more "urban" than the Christiansburg, Blacksburg and Pulaski areas. Normally, these areas would both be considered rural, but in this case they appear to be quite different. The difference found between the occupations of the study sample and the national norms may be attributed to this dichotomy. Those in the Roanoke and Salem areas may have been more likely to have retired from professional or clerical type jobs, while those in Christiansburg, Blacksburg and Pulaski may have held primarily unskilled labor jobs. In the author's conversations with subjects during the data collection phase of the study, it was evident that many of the "rural" older adults had farmed all their lives. Therefore, when these two particular groups were compared to each other, more people than expected were in the professional and unskilled labor categories.

To summarize, the sample in the present study might appropriately be considered generalizable to rural older adults, rather than to all older adults because of its unique characteristics.

5.2 MEASUREMENT CONSIDERATIONS

The scores on both of the satisfaction surveys were compared for the study sample and samples from published studies. Figures 1a and 1b suggest that the distribution of life satisfaction scores for the present study and scores for the 1981 Harris study were similar, making generalization possible. Most people in both studies reported at least average satisfaction with scores somewhat skewed towards the high end of the continuum. Subjects at different types of agencies reported similar results. For example, there seemed to be a feeling on the part of the nursing home residents in particular that life was nearly over and that being content with all that had been was the best philosophy to adopt. It was not known whether the nursing home residents held this attitude prior to being admitted to a nursing home or not. This observation may suggest that the way in which people arrive at an assessment of life satisfaction may differ at various stages of life. The "non-nursing home" subjects seemed less inclined to feel

that everything in life was satisfying simply because time was running out.

Most of the means on the Leisure Satisfaction Scale and the six subscales were similar to those found by Ragheb and Beard (1980). However, two of the six components were significantly different: physiological satisfaction and aesthetic satisfaction.

The physiologic mean of leisure satisfaction was lower for the study sample than the Ragheb and Beard (1980) sample. Many respondents felt that their bodies were no longer able to be kept in good physical condition and, therefore, did not seek activities fostering this. Although many people reported that walking was one of their main activities, the reasons for walking did not seem to stem from a physical fitness perspective. Rather, the motivation seemed to come from a relaxational perspective.

A higher mean was computed for aesthetic satisfaction in the present study when compared to the Ragheb and Beard (1980) study. Perhaps one factor contributing to this difference was that three of the settings were less than one year old. Consequently, they were designed recently and still looked quite new. The three settings included one nursing home and two retirement communities. It was evident

from the author's observations that a substantial effort had been made by the administration of these settings to convey an aesthetically pleasing environment.

Another interesting observation came from the nursing home patients. They seemed reluctant to express any dissatisfaction with their immediate environment, for reasons that were not clear. The author's interpretation of that reluctance was that the patients often felt they were burdensome to the nursing home staff and, therefore, hesitated to question any of the procedures, etc. The patients seemed to feel that being cared for in a basic manner was all they could expect, and they were quite grateful for that. Perhaps the lack of complaints evolved from a fear of being removed from the nursing home, with no other place to go.

Each of the settings in which the subjects lived had some kind of leisure opportunities available, whether scheduled or not. However, the range of opportunities differed significantly from place to place. The Christiansburg Senior Center and people at the League of Older Americans had the most comprehensive recreation programs. It is important to note here that those two particular organizations also catered to people who lived

entirely independently. In each of the other settings, the leisure opportunities were more restricted and subject to a recreation director's plans. Those in retirement communities and nursing homes seemed to depend more on someone else to program leisure activities for them, rather than pursue them on their own. Such dependency may relate to the nature of these settings, that is, most of them were self-contained, making opportunities outside the complex more difficult to pursue, primarily because of transportation problems.

Scores on the LSS were generally high, but there was some variance between the seven agencies and organizations. People at the retirement communities and nursing homes reported lower leisure satisfaction than people living independently. This may have been due to the fact that all but one of either the nursing homes or retirement communities was new and had not yet established a substantial recreation program. The League of Older Americans and the Christiansburg Senior Center participants seemed to enjoy a comprehensive recreation program and, therefore, it was reasonable to expect these groups to claim high leisure satisfaction more often.

In addition to analyzing the sample characteristics and

satisfaction scores, each hypothesis was investigated and either rejected or not rejected based on the statistical evidence. The following section presents a discussion of the five hypotheses which were tested in the present study.

5.3 HYPOTHESES

Four of the five hypotheses tested showed that leisure satisfaction was not systematically related to life satisfaction, income, health, or quality of friendship. The fifth hypothesis showed that type of activity related significantly to leisure satisfaction.

In the first hypothesis, no significant relationship was found between leisure satisfaction and life satisfaction. One might have expected that, if leisure was one of several components of life satisfaction, a positive relationship would exist. Data from the present study show that one could be satisfied with either life or leisure, but not necessarily with both to the same extent.

The reader is referred to Table 8 for a crosstabulation of life satisfaction and leisure satisfaction. This table shows that most people were highly satisfied with both life and leisure (69.8 percent and 61.2 percent), although more people were dissatisfied with leisure than life (16.7 percent compared to 6.0 percent). If one considers leisure

to be a component of life as the literature indicates, then one would expect satisfaction with leisure to indicate satisfaction with life. However, satisfaction with life may not necessarily mean satisfaction with leisure since work and family are also reported to be important components of life. In other words, perhaps satisfaction in any one of these three areas may be strong enough to influence overall life satisfaction, regardless of satisfaction in the other areas.

One possibility for those who are satisfied with life, but not with leisure, may be that they have not incorporated leisure into their lives. In reflecting on their leisure experiences, many of the subjects gave the impression that there was very little time for leisure as they were growing and aging. This seemingly unimportant use of time seems to have carried over into their retirement years, even though in retirement there is plenty of unobligated time. An additional observation is that older adults may pursue certain activities, but without considering them to be leisure. Taking this into consideration, it was understandable how some people could consider life to be quite satisfying without leisure being part of it. Perhaps this view of leisure is one that is becoming less prevalent

as people strive for a balance between family, work and leisure today.

The results of testing the first hypothesis suggest that leisure satisfaction and life satisfaction were not significantly related. This finding is important to the next three hypotheses, which investigated the relationship between leisure satisfaction and three variables reported to be highly influential to life satisfaction. One might expect that, if a significant relationship had been found between leisure satisfaction and life satisfaction, then the variables influencing life satisfaction would also influence leisure satisfaction. Likewise, if no relationship was found, one might expect these three variables not to be significantly related to leisure satisfaction.

The following discussion on the second, third, and fourth hypotheses shows that, indeed, no relationship was found between leisure satisfaction and income, health or quality of friendship. One might have expected this given the results of the first hypothesis analysis.

The first relationship that was investigated was leisure satisfaction and income. In the present study, most of the leisure opportunities for the nursing home patients did not require money. However, for each of the other

settings activities may or may not have required money. The Christiansburg Senior Center group often planned traveling activities which required a substantial amount of money. However, they also planned activities such as quilting that did not. In addition, those agencies and organizations associated with local or state governments often had funds allocated to offset some of the activity expenses, which enabled more people to attend.

The implications of this finding may be considered encouraging for both recreation personnel and people participating in leisure activities. Programmers may plan a wide range of activities knowing that their cost may not necessarily affect the amount of pleasure derived from them. In fact, perhaps this might encourage recreation personnel to rely more on their own creativity than funds to develop leisure programs. Certainly, the amount of money available dictates what leisure options are available, but not the amount of satisfaction derived from them. Likewise, people living on limited incomes could find and enjoy leisure activities just as people with unlimited incomes. Money perhaps influences the types of activities pursued, but not the potential satisfaction derived from them.

The second variable investigated was state of health,

which was also shown not to be systematically related to leisure satisfaction. These findings suggest that satisfaction with leisure may be high or low, regardless of health status. A rational assumption might be that those in poor health would have limited opportunities to enjoy leisure experiences. However, this was shown not to be the case, as some of those people who were ill found their leisure experiences to be highly satisfying. The reasons for these results are not clear, although most of those who were ill also lived in nursing homes and, as indicated before, these particular subjects seemed hesitant to express any negative comments.

Aside from this, these results were encouraging. They indicated that people may enjoy leisure through many different states of health. Thus, illness may not necessarily be considered a major deterrent to leisure enjoyment. This information could be of some practical value for the personnel who care for older adults. Perhaps the nature of leisure pursuits becomes altered when health status changes in any direction, but leisure pursuits themselves need not end because of changes in health.

On the other hand, some of the subjects claimed good to very good health, yet also claimed low leisure satisfaction.

In these cases perhaps the particular leisure opportunities available were unsatisfactory, since their health presumably permitted them to do much more than was available. Again, the somewhat restricted environment of the retirement communities (as perceived by the subjects) may have fostered feelings of frustration. The resources needed to achieve maximum satisfaction may not have been readily available.

Those in good health claiming low leisure satisfaction may simply not have found leisure in general to be very satisfying. This feeling may have related to a lack of emphasis on leisure throughout life and may not have been peculiar to a specific time of life, such as retirement.

Health could be considered a physical asset or limitation, whereas friendship could be considered a social one. Nonetheless, results of investigation of the fourth hypothesis again showed no significant relationship between leisure satisfaction and quality of friendship.

This variable was perhaps most closely associated with the social component of leisure satisfaction. In the study sample 87.5 percent claimed high social satisfaction, yet the correlation between quality of friendship and overall leisure satisfaction was low.

Most of the recreation activities conducted by

recreation directors seemed to be intended for group interaction and socialization, although often they were not perceived this way by the participants. For example, even though bingo is played in a group, there is very little socialization between players. In fact, the competition often inhibits such interaction.

Five of the seven settings in the present study were either retirement communities or nursing homes and these settings may have been temporary and/or new to the residents. Perhaps few, if any, solid friendships had yet been established. Sometimes, the choice to relocate to these types of environments is not always optimistic, nor are they necessarily places where people are surrounded by familiar friends. In fact, special friends are more likely to be located elsewhere. Therefore, many leisure activities may have been pursued alone or with no one in particular because no special friends happened to live in that same environment. Rather than do nothing, people may choose to engage in solitary leisure activities or to engage in activities with other residents.

Those people who lived in their own homes may have been afforded more choice with regard to whom they engaged in leisure activities and, therefore, special friends may have

been a more central issue to leisure satisfaction for these people.

The conclusion drawn from these results may indicate that people pursue leisure activities with special friends as well as with acquaintances or alone. Friends may influence what leisure activities are pursued, but lack of special friends does not seem to necessarily prohibit people from experiencing high leisure satisfaction. The practical implications of this conclusion may be significant to those people moving into new settings such as nursing homes or retirement communities, where no special friends were likely to live. As time goes on, perhaps lasting friendships develop and grow in these situations.

Although income, health and quality of friendship related significantly to life satisfaction, they were shown not to relate to leisure satisfaction. The conclusions mentioned here may have practical implications for both recreation personnel and older adults.

In addition to these hypotheses, a final hypothesis was tested, regarding type of activity and leisure satisfaction.

Significant differences were found between type of activity and leisure satisfaction, which suggests that some activities may be more indicative of high leisure

satisfaction than others.

The sample in the present study came from varied living environments, all of which had a unique arrangement for recreation and leisure opportunities. Although this author feels that those opportunities were rather limited, the residents did participate in them and seemed to derive satisfaction from them.

In each agency or organization a variety of activities was provided, however limited they might be. This variety is important not only from a common sense perspective, but from a leisure satisfaction perspective as well. In other words, not only are a variety of activities being participated in, varying levels of leisure satisfaction are being derived from them, indicating that older adults are not all alike and need and appreciate leisure experiences in unique ways. The common thought that categorizes older adults as bingo players is inaccurate and a conscious effort should be made to end its perpetuation. Information of this type may help to do so.

A related analysis was conducted on the relationships between number of activities participated in and leisure satisfaction. Again, no qualitative data were obtained, but the available data suggested that the more activities

participated in, the higher the leisure satisfaction. Interpretation of these results is limited in a practical sense, yet it provides a framework from which to consider more qualitative data.

The way in which one chooses to participate in activities differs from person to person such that it cannot be determined if participation in just one activity necessarily indicates low leisure satisfaction, or vice versa. The details involved in choosing and experiencing the activities one does is more informative than just number of activities participated in.

The last analysis in the study examined several variables with regard to high and low leisure satisfaction. The purpose of this was to determine which variables most discriminated between high and low leisure satisfaction.

In order of importance, these discriminating variables were: length of time in current state of health, length of time at current residence, education level, age, sex, and current income.

However, although length of time in current state of health was the most discriminating, it was not known either if being in good health for a long time indicated high leisure satisfaction or if being in poor health for a long

time indicated low leisure satisfaction.

A crosstabulation between length of time in current health and leisure satisfaction can be found in Table 24. The data in this table show that being in a current state of health for over five years corresponds to a high level of leisure satisfaction, it is not known whether this is also true regardless of quality of health.

It seems reasonable, however, to conclude that being in a good state of health for a long period of time would correspond to high leisure satisfaction. Likewise, abrupt changes in health, for the worse, would seem to relate more closely to low leisure satisfaction.

The discriminant analysis showed that five additional variables were also significant to high and low leisure satisfaction, although only one of these, namely income, was included in the present study. The four other variables, length of time at current residence, educational level, age and sex, have yet to be explored more fully and would be suitable subjects for related investigations in the future.

5.4 RECOMMENDATIONS FOR FUTURE RESEARCH

Although several discriminating variables were found to be related to high and low leisure satisfaction, the specifics of those variables were not determined. Perhaps

TABLE 24 - Crosstabulation Between Leisure Satisfaction
and Length of Time in Current Health

		HEALTH2					
		No	<1 Year	1-5 Years	>5 Years	Row	
Count	Row %	Response				Total	
Column %	Total %	0.	1.	2.	3.		
LEISAT							
Low	1.	3 21.4 42.9 3.6	2 14.3 28.6 2.4	4 28.6 16.0 4.8	5 35.7 11.1 6.0	14 16.7	
Medium	3.	4 19.0 57.1 4.8	3 14.3 42.9 3.6	7 33.3 28.0 8.3	7 33.3 15.6 8.3	21 25.0	
High	5.	0 0.0 0.0 0.0	2 4.1 28.6 2.4	14 28.6 56.0 16.7	33 67.3 73.3 39.3	49 58.3	
Column Total		7 8.3	7 8.3	25 29.8	45 53.6	84 100.0	

an investigation of each variable individually may prove to be informative.

One suggestion for future research might be to investigate leisure satisfaction more specifically, without regard for life satisfaction. A more focused investigation may prove to be more useful in determining what predicts high and low leisure satisfaction in older adults. Another suggestion for future research on this topic is to examine leisure satisfaction longitudinally. In an investigation of this sort, it could be determined how leisure satisfaction changes as individuals age. This information would be useful in helping practitioners to prepare for changes in leisure as they grow older.

Practical suggestions and considerations for future research relate to the limitations already mentioned. In conducting the present study, the author found processes and areas which could be expanded and/or improved. The first limitation mentioned in Chapter 1 was the sample size. Although 84 seemed adequate for the purposes of this study, it may have had an influence on the generalizability of the results.

The second limitation mentioned in Chapter 1 was the length of the survey instrument. It proved to be too long

for many older adults, particularly those in nursing homes. The author found that many subjects lost interest and failed to complete the entire survey. A more appropriate way might be to administer the same survey in three parts, although for this to work the researcher would have to secure individuals willing to meet at three different times. Moreover, this procedure might also be vulnerable to external factors which could influence the reliability of the responses. Another alternative might be to measure leisure satisfaction and life satisfaction using shorter instruments.

It was found that the survey instruments used in the present study were not entirely appropriate for nursing home patients, unless read out loud which reduces the reliability of the results. Subjects needed to be able to read the survey on their own and to respond individually. Although the nursing home patients did not seem to comprehend the extent of the survey, they did provide interesting comparative data. In the future, it might behoove the researcher to construct an instrument and pilot test it on the least independent subjects in the sample. The present study did just the opposite and problems were encountered when the least independent sample was answering the survey.

In meeting with the subjects during the data collection phase of the present study, the author tended to overlook some of the opportunities for verbal interaction with the subjects. Such interaction could have provided more of a basis from which to consider survey responses. From the limited interaction that did take place, a great deal of insight was gained with regard to the people themselves. This not only fostered a more personable experience, it also gave the subjects an opportunity to express concerns with their leisure experiences. The author found this information revealing and helpful to the analysis of survey responses.

In the future, perhaps equal emphasis should be placed on both the objective and subjective aspects of data collection. The subjects in any study can contribute in more ways than just responding to a survey and thereby provide further useful information.

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APPENDIX A

LIFE SATISEACTION AND LEISURE SATISFACTION
SURVEY INSTRUMENT

Life Satisfaction and
Leisure Satisfaction....

*Patty Davis
Virginia Tech
July 1983*

TO WHOM IT MAY CONCERN:
I WOULD APPRECIATE YOUR ASSISTANCE
IN FILLING OUT THIS SURVEY INSTRUMENT
ON LIFE SATISFACTION AND LEISURE
SATISFACTION. PLEASE COMPLETE ALL
FIVE PAGES. IF AT ANY TIME YOU DO
NOT FEEL COMFORTABLE ANSWERING ANY
OF THE QUESTIONS, PLEASE FEEL FREE TO
OMIT THAT QUESTION. THERE ARE DIRECTIONS
AT THE TOP OF PAGES 1, 2, AND 4 TO
ASSIST YOU. THANK YOU VERY MUCH FOR
YOUR COOPERATION.

-1-

LIFE SATISFACTION SCALE

HERE ARE SOME STATEMENTS ABOUT LIFE IN GENERAL THAT PEOPLE FEEL DIFFERENTLY ABOUT. WOULD YOU READ EACH STATEMENT ON THE LIST AND IF YOU AGREE WITH IT CIRCLE 1 IN THE SPACE UNDER "AGREE". IF YOU DO NOT AGREE WITH A STATEMENT, CIRCLE 2 IN THE SPACE UNDER "DISAGREE". IF YOU ARE NOT SURE ONE WAY OR THE OTHER, CIRCLE 3 IN THE SPACE UNDER "UNCERTAIN". YOUR COOPERATION IN COMPLETING THIS QUESTIONNAIRE IS APPRECIATED.

	AGREE	DISAGREE	UNCERTAIN
1. As I grow older, things seem better than I thought they would be.	1	2	3
2. I have gotten more of the breaks in life than most people I know.	1	2	3
3. This is the dreariest time of my life.	1	2	3
4. I am just as happy as when I was younger.	1	2	3
5. These are the best years of my life.	1	2	3
6. Most of the things I do are boring or monotonous.	1	2	3
7. The things I do are as interesting to me as they ever were.	1	2	3
8. As I look back on my life I am fairly well satisfied.	1	2	3
9. I have made plans for things I'll be doing a month or a year from now.	1	2	3
10. When I think back over my life, I didn't get most of the important things I wanted.	1	2	3
11. Compared to other people I get down in the dumps too often.	1	2	3
12. I've gotten pretty much what I expected out of life.	1	2	3
13. In spite of what people say, the lot of the average man is getting worse, not better.	1	2	3

PLEASE TURN THE PAGE AND CONTINUE WITH PART 2. THANK YOU.

-2-

LEISURE SATISFACTION SCALE

PLEASE CIRCLE ONE OF THE FOLLOWING RESPONSES FOR EACH QUESTION BELOW.

- 1 - IF THE ITEM IS ALMOST NEVER TRUE FOR YOU
 2 - IF THE ITEM IS SELDOM TRUE FOR YOU
 3 - IF THE ITEM IS SOMETIMES TRUE FOR YOU
 4 - IF THE ITEM IS OFTEN TRUE FOR YOU
 5 - IF THE ITEM IS ALMOST ALWAYS TRUE FOR YOU

	ALMOST NEVER TRUE	SELDOM TRUE	SOMETIMES TRUE	OFTEN TRUE	ALMOST ALWAYS TRUE
1. My leisure activities are very interesting to me.	1	2	3	4	5
2. My leisure activities give me self-confidence.	1	2	3	4	5
3. My leisure activities give me a sense of accomplishment.	1	2	3	4	5
4. I use many different skills and abilities in my leisure activities.	1	2	3	4	5
5. My leisure activities increase my knowledge about things around me.	1	2	3	4	5
6. My leisure activities provide opportunities to try new things.	1	2	3	4	5
7. My leisure activities help me to learn about myself.	1	2	3	4	5
8. My leisure activities help me to learn about other people.	1	2	3	4	5
9. I have social interaction with others through leisure activities.	1	2	3	4	5
10. My leisure activities have helped me to develop close relationships with others.	1	2	3	4	5
11. The people I meet in my leisure activities are friendly.	1	2	3	4	5
12. I associate with people in my free time who enjoy doing leisure activities a great deal.	1	2	3	4	5

-3-

	ALMOST NEVER TRUE	SELDOM TRUE	SOMETIMES TRUE	OFTEN TRUE	ALMOST ALWAYS TRUE
13. My leisure activities help me to relax.	1	2	3	4	5
14. My leisure activities help relieve stress.	1	2	3	4	5
15. My leisure activities contribute to my emotional well-being.	1	2	3	4	5
16. I engage in leisure activities simply because I like doing them.	1	2	3	4	5
17. My leisure activities are physically challenging.	1	2	3	4	5
18. I do leisure activities that develop my physical fitness.	1	2	3	4	5
19. I do leisure activities that restore me physically.	1	2	3	4	5
20. My leisure activities help me to stay healthy.	1	2	3	4	5
21. The areas or places where I engage in my leisure activities are fresh and clean.	1	2	3	4	5
22. The areas or places where I engage in my leisure activities are interesting.	1	2	3	4	5
23. The areas or places where I engage in my leisure activities are beautiful.	1	2	3	4	5
24. The areas or places where I engage in my leisure activities are well designed.	1	2	3	4	5

PLEASE TURN THE PAGE AND COMPLETE THE LAST PART OF THIS QUESTIONNAIRE. THANK YOU.

APPENDIX B

ADDRESSES OF COOPERATING AGENCIES AND ORGANIZATIONS

The Christiansburg Senior Center
Ms. Fran Hart
665 Montgomery Street
Christiansburg, Virginia 24073

Heritage Hall Nursing Home
Ms. Deb MacDonald
Blacksburg, Virginia 24060

The League of Older Americans
Ms. Barbara Lemons
706 Campbell Avenue, Southwest
Roanoke, Virginia 24016

The Oaks Home for Adults
Ms. Linda Burgess
Richfield Retirement Community
Salem, Virginia 24153

Pulaski Health Care Center,
Ms. Elise Brown
Pulaski, Virginia 24301

Richfield Retirement Community
Ms. Kathy Miller
Salem, Virginia 24153

Warm Hearth Retirement Community
Ms. Barbara Fintel
Blacksburg, Virginia 24060

**The vita has been removed from
the scanned document**