An investigation of social isolation and well-being among the elderly

Claudia Layne Mehl
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An investigation of social isolation and well-being among the elderly

Mehl, Claudia Layne, M.A.
University of Nevada, Las Vegas, 1992
AN INVESTIGATION OF SOCIAL
ISOLATION AND WELL-BEING
AMONG THE ELDERLY

by

Claudia Layne Mehl

A thesis submitted in partial fulfillment
of the requirements for the degree of

Master of Arts
in
Psychology

Department of Psychology
University of Nevada, Las Vegas
December, 1992
The thesis of Claudia Layne Mehl for the degree of Master of Arts in Psychology is approved.

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Graduate Faculty Representative, Margaret Louis, Ph.D.

Graduate Dean, Ron Smith, Ph.D.

University of Nevada, Las Vegas
December, 1992
Abstract

The present study investigated the relationship of objective indicators of social isolation and measures of well-being among the elderly. Respondents consisted of 135 elderly men and women aged 60 and older chosen from the roster of a dental office. The objective indicators included living alone, having no companions, having no confidants, closeness of confidants, having no children, and marital status. Measures of well-being included a life experience scale, a health status scale, a quality of life scale, a satisfaction scale, and a scale that measured material comforts. Results of a canonical correlation analysis revealed a significant relationship among the indicators and well-being. Further analysis using multiple regression revealed a weak relationship between perceived life satisfaction and closeness with confidants. The findings suggest that many previously used objective indicators may be unreliable in detecting the socially isolated. Reliable future research is needed.
Acknowledgements

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Introduction

The elderly American population has grown considerably larger in number in the past decade. The number of elder Americans (persons 65 years or older) increased by 5.7 million or 22% since 1980 to a total of 31.2 million in 1990 (Association of American Retired Persons [AARP], 1991). The under 65 population increased only 8% during the same period (AARP, 1991). Persons 65 and over are predicted to represent 13.0% of the population by the year 2000 and may reach 21.8% by 2030 (AARP, 1991). These trends represent, for the first time in America, a burgeoning elderly population.

With the demographic growth, the elderly age group has become more conspicuous politically and economically. Compared to the elderly living earlier in this century, today's elderly are healthier, more active, more affluent, and more involved in social activities (Murrel, Norris & Grote, 1987). As a group, today's elderly are different in health and social needs than groups of similar age in the past. The elderly are living longer: in 1990 the 65-74 age group was eight times larger than in 1900, but the 75-84 group was 13 times larger and the 85 + group was 24 times larger (AARP, 1991).

Currently, the number of health care professionals, counselors and therapists available for the elderly are
in proportion to the need that existed in 1980 (Woodruff-Pak, 1988). Consequently, there is currently a shortage of health and social services for the elderly. Moreover, an accurate profile of the needs of the elderly is required to properly provide adequate health and social services.

Adequate assessment procedures must be developed to identify the needs of the elderly. Assessment procedures based on a smaller and comparatively younger elder population are obsolete today. In addition, psychologists note repeatedly the elderly are heterogeneous and that previous assessment tools may not be appropriate (Woodruff-Pak, 1988). There is now general recognition that the elderly are different from the elderly of the past on a wide variety of demographic, social, and behavioral dimensions (Kaplan, 1992).

Typically, demographic, social, and behavioral dimensions are evaluated as extrapolated factors that influence psychological well-being (Lawton, 1991). For example, living arrangement is considered a demographic factor. Researchers have investigated the effects of living alone on perceived psychological well-being among the elderly. If living alone and psychological well-being are found to be correlated, then researchers conclude that living alone is a social indicator of psychological well-being.
Lawton (1991) defines psychological well-being as the weighted evaluated level of the person's competence and perceived quality in all domains of contemporary life. Psychological well-being, also referred to as subjective well-being or just well-being, is an important indicator of the subjective experience of aging (Woodruff-Pak, 1988). As a measure, well-being is thought to assess quality of life and is presumed to be useful in documenting the needs of the elderly and identifying targets for interventions (Woodruff-Pak, 1988).

Researchers have found a positive association between social interaction and well-being (Larson, 1978). The idea of decreased well-being correlating with decreased social contacts naturally led some researchers to examine the relationship between social isolation and well-being. As a result, a variety of studies accumulated evidence to support the premise that social isolation negatively affected the elderly (Rathbone-McCuan & Hashimi, 1982).

Unfortunately, conceptual problems emerged defining social isolation. Many different variables that would indicate an elderly individual was socially isolated were found in the research literature (Chappell & Badger, 1989). Often, the studies were contradictory. Berg, Mellstrom, Persson, and Svanborg (1981) for example,
found that loneliness was associated with isolation while Lawton, Kleban and diCarlo (1984) found that loneliness was not associated with isolation. For researchers to study social isolation empirically, it is necessary to determine what factors are associated with social isolation.

Recently the trend among social gerontologists has been to use the indicator "no or minimal contact with others" as a measure of isolation. Meanwhile, health service researchers have been using "living alone" as an indicator of social isolation (Lubbens, 1988). Lack of conceptual agreement of terms for social isolation and indicators makes comparison of studies difficult and can lead to mistakes or errors in public policy development.

Another limitation of public policy development is the prevalence of aging stereotypes and myths. Older people in general are seen as ill, slow, grouchy, unproductive, withdrawn, less likely to participate in activities, alone, and neglected by their families (McTavish, 1971). These stereotypes, myths, and biases have come to be called ageism (Gutman, Grunes, & Griffin, 1984). The tendency to view all older individuals as hapless victims of external circumstances and to consider them as suffering from the same troubles leads policy developers to apply the same general remedy (Gutman et al., 1984).
One such prevailing myth is that the elderly who live alone or apart from their children are neglected (Peplau & Perlman, 1982; Shanas, 1979, 1980), and socially isolated. Contrary to myth, most old people are satisfied with their living arrangements and social relationships (Blau, 1973; Fillenbaum & Wallman, 1984; Peplau & Perlman, 1982; Shanas, 1980; Shanas, Townsend, Wedderburn, Fries, Mihoj & Stehouwer, 1968).

Nevertheless, living alone is described as a social problem among the elderly (Rathbone-McCuan, 1982) and has been regarded as synonymous with social isolation. Isolation carries with it a negative connotation of unhappiness, poor quality of life or lowered well-being (Chappell & Badger, 1989). There is little empirical support for the claim that living alone is necessarily accompanied by a poor quality of life or lowered well-being (Fillenbaum & Wallman, 1984; Hughes & Gove, 1981; Larson, Zuzanek & Mannell, 1985; Peplau, Bikson, Rook & Goodchilds, 1982; Satariano & Ragheb, 1985; Shanas, 1979, 1980).

The majority (67%) of noninstitutionalized elderly lived in a family setting in 1990 (AARP, 1991). About 31% of all noninstitutionalized elderly lived alone in 1990 including 42% of older women and 16% of older men. The increase in number of those living alone between 1980 and 1990 was 30%, representing 9.2
million people. Because the overall number of elderly will increase in the future, the segment of those living alone may also reflect a proportionate increase. Improperly labeling these people as negatively isolated due to living alone could have an erroneous but widespread influence upon social policy for the elderly and perpetuate a stereotype that does not exist.

"Living alone" and "no or minimal contact with others" are examples of objective indicators of social isolation. These and similar objective indicators are used to predict the level of well-being. Although well-being has been found to be robustly related to objective indicators, the relationships are far from perfect (George & Clipp, 1991).

By definition, subjective well-being refers to something other than objective life indicators (George & Clipp, 1991; Lawton, 1991). Chappell and Badger (1989) have noted that some elderly who are objectively isolated need not experience lowered well-being. In several studies using "living alone" as the objective indicator, decreased well-being was not reported (Birren & Schaie, 1977; Shanas, 1979).

It is commonly assumed that the elderly living alone have been rejected by their families, lead impoverished social lives, and lack close relationships (Peplau & Perlman, 1982). However, many of the elderly
who live alone have regular family contact (Cicirelli, 1989; Field & Minkler, 1988; Seeman & Berkman, 1988; Shanas, 1979, 1980; Sussman, 1985). Studies by Shanas (1980), indicate that older people living alone usually live within 10 minutes from their children's residences. Even research by Townsend in 1957 discovered the preferences of the elderly for living separate from their children's households while maintaining regular contact.

Many of the elderly who live alone are socially active. Social support investigators report that the elderly maintain routine social ties with nonkin (Wellman & Hall, 1986). In fact, researchers have found significant levels of stability in social network size, social network satisfaction, and memberships in organizations over the lifecourses of the elderly (Field & Minkler, 1988; Kahn & Antonucci, 1985).

Close relationships are common among the elderly. Results of a growing number of studies suggest that social contact with friends has greater impact on well-being than most other relationships the elders experience (Adams & Blieszner, 1989; Blau, 1973; Cohen & Syme, 1985; Larson, 1978; Lowenthal & Haven, 1968; Seeman & Berkman, 1988; Strain & Chappell, 1982). The frequency of contact and the level of intimacy were
both proportionately related to the level of well-being in these studies.

The foregoing findings underline the importance of separating living alone from social isolation as a social indicator. As Birren and Schaie (1977) suggest, solitary living arrangements are not enough to produce social isolation although living alone fosters it. As a result, ambiguity and complexity about social isolation indicators still remain. Part of the confusion as to what determines social isolation is a consequence of the various ways it is defined.

A Literature Review of Social Isolation

Historically, social isolation has been defined in numerous ways. The definitions of isolation fall into two general categories. Probably the most frequent approach in the literature is to operationally define isolation in terms of the number of social relationships an individual has within a time period specified by the investigator (House & Kahn, 1985; Kaplan, 1992; Seeman, 1959), such as the number of people contacted within one week.

The other type of definition is psychological. In the psychological context, the intimacy or quality of the relationship is considered in assessing social contact (Chappell & Badger, 1989; Fischer & Phillips, 1982). Even though much of the gerontological research
during the past decade has employed operational and psychological definitions of social isolation, there is still a lack of consensus regarding the factors that are used to assess isolation. In addition, the extent of the relationship between operationally defined isolation and psychologically defined isolation is not known.

The lack of consensus in defining social isolation has led to conceptual confusion since isolation research by Parsons began fifty years ago. At that time, sociologists were finding that the elderly became isolated through the loss of major role relationships.

Parsons (1942), a social theorist, found isolation to be characteristic of the elderly in middle and upper middle class urban society. According to Parsons, the elderly experienced isolation for one or more of the following reasons: the elderly were excluded from participation in the families of their adult children, they were unable to maintain jobs, and they were living alone. Other descriptions of isolation often integrated concepts of alienation (Seeman, 1959) and anomie (Merton, 1957). Similarly, Lundberg and Lawsing (1949) defined an isolated person as one who was not chosen by anyone as an associate in any of the activities or relations of a community.
Studies differ regarding the reference group for defining isolation. Parsons (1942) regards isolation as lack of contact with family, for Seeman (1959) the reference group is society in general, while Lundberg and Lawsing (1949) use the community. Consequently, the body of research on isolation that was published in the 1950s and 1960s contributed more to the conceptual confusion of defining isolation among social gerontologists (Rathbone-McCuan & Hashimi, 1982).

An early attempt at greater clarity came from Townsend (1957). Other researchers were encouraged by Townsend to make a distinction between social isolation and loneliness. Townsend found that the elderly who reported feelings of loneliness had suffered a loss of companionship of someone they loved. Although isolated because of their loss, they were not lacking social contacts. Townsend concluded that those who reported loneliness due to suffering a loss of companionship of someone they loved were to be considered desolate not isolated.

Townsend suggested that social isolation should be measured by objective criteria such as through assessing the social contacts of elderly people. As used by Townsend, social contacts were defined as more than a casual exchange of greeting with another person. Townsend operationally defined isolation as the number
of contacts per week a person had with people perceived as important to them.

Further delineation of isolation, however, suffered a major setback with the advent of the social disengagement theory of Cumming and Henry (1961). According to social disengagement theory, withdrawal of the aging individual from others in the social system to which the individual belongs is universal and inevitable. The aging individual is accepting of the decreased interaction and the gradual disengagement is mutually beneficial for the elderly individual and society. Cumming (1963) noted that disengagement frees the elderly to die without disrupting vital affairs, such as family ties, thus maintaining social stability.

The theory generated much controversy. During the 1960s and 1970s, most researchers failed to find empirical support for the theory (Kart, Metress & Metress, 1988). Some of the problems concerning the theory included the use of variables that were not properly defined. Two of the major variables, age and disengagement, are divisible into many other variables. Furthermore, the investigators did not measure the elderly individual's perception of the process of disengaging (Kart et al., 1988).

Meanwhile, other authors have shifted the focus from isolation as an aging phenomena to isolation as a
possible indicator of old age related maladies such as mental illness (Bellin & Hardt, 1958; Lowenthal, 1964; Wanklin, 1958; Williams & Jaco, 1958). Isolation has been suggested as a possible precursor of poor self-image (Blau, 1957), adverse effects on stroke rehabilitation (Hyman, 1972), and adjustment difficulties in the homes for the aged (Rodstein, Savitsky & Starkman, 1976). Finding that social isolation had such a strong adverse influence on the elderly, researchers began to examine social roles and interactions to identify social and psychological factors that may influence states of isolation.

Lowenthal (1964, 1968, 1975) and Bennett (1980) studied a broad range of social roles and interactions relevant to isolation. Through empirical research and conceptualization, both of these investigators have offered frameworks that could be used to refine the concept of isolation and to identify isolates (Rathbone-McCuan & Hashimi, 1982).

Lowenthal began research exploring isolation, mental illness, and old age by comparing psychiatric elderly and community elderly (Lowenthal, 1964). The results indicated that isolation might be more of a consequence than a cause of mental illness. Lowenthal's subsequent research began to focus upon life course, adult life stage adaptation, and social
interaction and intimacy patterns. Frameworks developed by Lowenthal examine social and psychological factors that may influence states of isolation/involvement from social networks among nonpsychiatric elderly (Lowenthal, 1968, 1975; Lowenthal & Berkman, 1967; Lowenthal & Haven, 1968).

For more than 20 years, Bennett and her colleagues investigated the importance of environment and social interactions in relation to social isolation (Bennett, 1980). Bennett's research gave rise to four isolation types: (1) those integrated over a lifetime; (2) the early isolate, who was isolated as an adult but is comparatively active in old age; (3) the involuntary or recent isolate, active early in life but not in old age; (4) the lifelong or voluntary isolate, for whom isolation was a lifestyle (Bennett, 1980).

In categorizing the types of isolated elderly, Bennett provided a useful definition of isolation. Social isolation is defined as the absence of specific role relationships that are activated and sustained through direct personal face-to-face interaction (Bennett, 1980). Bennett found that isolation has a negative impact on the elderly because they are desocialized and less independent. In addition, Bennett found that isolation in the elderly did not
correlate with usual demographic factors, such as gender and marital status.

The general trend in gerontological research has been to define social isolators (factors) in objective and subjective terms. Some of the subjective terms used as psychological correlates or social indicators are emotional isolation, loneliness, decreased well-being, and desolation (Chappell & Badger, 1989). Objective terms are often identified as various demographic factors (isolators), such as marital status, income, education, and living arrangements. Support for distinguishing between these concepts of isolators is provided by many researchers in the field (Berg et al., 1981; Gee & Kimball, 1987; Lowenthal & Robinson, 1976; Townsend, 1957).

A broader conceptualization of isolators is useful to assess the impact of various combinations of isolators on the lives of the elderly. For example, Rathbone-McCuan and Hashimi (1982) have organized isolators along two dimensions. The first dimension divided the isolators according to origin at the individual or environmental level. The second dimension divides the individual or environmental levels into four quadrants: biophysical, psychological, social, and economic. Interactions and interdependence among the isolators could explain the
conditions, social status, and living situations of the elderly (Rathbone-McCuan & Hashimi, 1982).

Kaplan (1992) discovered interactions and interdependence of social isolation with depression, physical activity, and problems in activities of daily living. The focus of Kaplan's study was on health and morbidity in Alameda County. Data collection began in 1965 and reports on this group were published in 1974 and 1983. Kaplan quantitatively defined isolation as less than five contacts with friends and relatives for one month. Results of the study found that the elderly did not become isolated as they aged. The results contradict the stereotype of the elderly becoming progressively socially isolated. Kaplan's study is one of the few current longitudinal studies to contradict the isolation myth.

A study by Thompson and Heller (1990) investigated quantitative social isolation and well-being in elderly women. The quantitatively isolated participants had poorer well-being and functional health than the nonisolated, independent of perceived support levels. On the other hand, participants with low perceived family support had poorer well-being regardless of perceived support from friends or degree of isolation. Other studies that found no significant relationship among isolation and social support or well-being among
groups have found a relationship between isolation, and social support in widowed women (Bury & Holme, 1990; Gee & Kimball, 1987). These seemingly contradictory results illustrate the complexity and conceptual confusion throughout the gerontological literature concerning isolation and its indicators.

The most recent study to address the confusion is by Chappell and Badger (1989). These investigators examined common objective indicators of social isolation in an attempt to determine their relationship to the elderly’s well-being. Few objective indicators singly or combined were found to be related to lowered psychological well-being. Only the absence of confidants and companions significantly reduced well-being.

In summary, studies dealing with social isolation in the elderly, have continuing problems of conceptualization. The lack of consistency among researchers has been illustrated by the numerous definitions of terms and types of indicators in defining social isolation. Studies of the elderly have come under increasing criticism for reliance on survey self-assessments and lack of longitudinal data (Belsky, 1990; Larson, 1978). Nevertheless, survey data can be useful in delineating factors to serve as
indicators in measures of social isolation (Andrews & Withey, 1976).

Overview

A social indicator can be defined as a statistic of direct normative interest that facilitates concise, comprehensive, and balanced judgments about the condition of major aspects of a society (U. S. Department of Health, Education and Welfare, 1969). An indicator is a measurable factor that can be manipulated allowing researchers to design empirical studies. Notwithstanding the lack of agreement in defining isolation, researchers can employ a defacto definition of isolation through the use of indicators.

Indicators are often divided into two types -- objective and subjective. There are arguments for and against this division of types among investigators. George and Clipp (1991) recommend that subjective factors should be more than a simple reflection of objective life circumstances when measuring life satisfaction. Conversely, Andrews and Withey (1976) believe classification into objective and subjective is neither clear nor useful. Instead of two categories, Andrews and Withey (1976) propose three dimensions: 1) the extent to which people agree in characterizing a phenomenon, such as, two people see a wooden structure and agree to name it a house; 2) the degree that the
same neural or sensory input at some level of the nervous system is available for people to find observable, such as, the patient at a dental office experiences the pain one way while the dentist experiences it another; 3) the extent to which different people can take similar action, such as, two people see two coins on the ground and each takes one coin.

Although both objective and subjective indicators have been used as factors of isolation, there has been little attempt to integrate a definitive set of indicators to clarify social isolation. In an attempt to rectify the situation, the present study was designed by compiling the most common indicators from previous studies and measuring their effects on the most common measures of well-being using one elderly sample. It is assumed that indicators that have a significant relationship to well-being could help to define social isolation.

The indicators chosen for the study were found frequently throughout the literature on social isolation. The list of indicators included the conditions of the elderly who: lived alone, had no companions, had no confidants, closeness of confidants, had no children, and were not married.
These objective indicators were measured for the effects on subjective well-being. The measures of well-being were also found frequently throughout the literature. The subjective measures included: life experience, health status, quality of life, satisfaction, and perceived adequacy of material comforts.

A self-report survey, designed for the elderly, that contained scales measuring the indicators was distributed to a sample of elderly individuals. The sample was selected so that the respondents did not belong to the same organization and did not live in the same housing tract. The rationale of the study was to determine if "living alone" was related to decreased well-being, if social contacts were related proportionately to well-being, and if having no confidants was related to decreased well-being. It is hypothesized that living alone will not be correlated with decreased well-being, that an increase in number of social contacts will be correlated with an increase in well-being, and that having no confidants will be correlated with decreased well-being.
Method

Subjects

Participants in the study were 135 elderly men and women aged 60 to 91 with a median age of 67, recruited from the investigator's dental office. Of the subjects asked to participate, approximately 44 percent did not return the surveys.

There were more women than men (75 compared with 54). The majority were married (86) followed by 24 widowed, 9 single, 8 divorced, 2 separated. The majority (70) had resided at their current residences 5 to 10 years while 31 had lived in their residences over 10 years. The majority of the sample identified themselves as Protestant (76) followed by Catholic (38). Forty percent reported education beyond the high school level.

Occupations of the respondents included 37 different types. Some of the major careers were registered nurse, accountant, housewife, manager, real estate agent, teacher, sales, and waitress. Thirty-eight of the respondents reported an income range of 45,000 to 65,000, thirty-three reported an income of 15,000 to 30,000 and seventeen reported 15,000 or less. Finally, age distributions showed that the majority (72) were between 61 and 69 years while 44
participants were between 70 and 77 and 15 participants were between 78 and 92.

Materials

The questionnaire used in the study was entitled "Health, Quality of Life and Aging." Margaret Louis of the University of Nevada, Las Vegas designed the survey by compilation of several preexisting scales. The survey consists of eight scales. These include a life experiences scale, a health profile, a perceived stress scale, a stress questionnaire, a social relationships list, a life assessment scale, a Lipson-Parra adult attachment scale, and a demographic inquiry.

The life experiences scale is based on the life satisfaction index $Z$ (Neugarten & Havighurst, 1961). Subjects were asked to indicate agreement or disagreement with 13 items. Examples of the items include, "These are the best years of my life"; "My life could be a lot happier than it is now"; "as I look back on my life, I am fairly well satisfied." Scores range from 13-26. Test/retest reliability has been reported as $r = .79$ (Wood, Wylie, & Sheafor, 1966). Results from this scale represented a subjective factor.

To determine respondents health status, the health profile was adapted from the Duke-UNC health profile (Parkerson, Gehlbach, Wagner, James, Clapp, & Muhlbaier, 1981). Parts of the profile that were used in this
survey include: symptom status questions like, "During the past week, How much trouble have you had with: Eyesight, hearing, talking, nervousness, etc."; the physical function questions like, "During the past week, How many days were you in bed"; and the social function questions like, "During the past week how often did you: Socialize with other people." Respondents were to answer none, some, or a lot. Total scores could range from 0 to 70. Parkerson et al. (1981) report Guttman coefficient of reproducibility of .98 for the physical function and .93 for the social function.

Another part of the questionnaire contained two items that asked respondents to check a box that most closely reflected their feelings. One asked "at the present time how would you describe your overall quality of life," and included choices from poor, fair, good, very good, and excellent. The other question had respondents rate "satisfaction with life as a whole" on a scale from 1-7 with 1 = terrible to 7 = delighted. Results from these questions were used as subjective factors.

On the social relationships scale, respondents were asked to list a maximum of ten close friends or relatives in one column and ten friends or relatives with whom respondents have had contact in the last thirty days in another column. Subjects were also asked to indicate the degree to which people on the lists had: given
assistance; given physical support; given advice or help with a problem; and shared social time using the categories none, a little, some, or a lot. Scores from this scale represented the objective indicator of whether or not companions existed.

The life assessment measure is divided into two subscales (Flanagan, 1978). One subscale measures the importance of certain aspects of lifestyles to respondents. The other subscale measures how well the respondents' needs and wants are met in relation to the items. Subjects were asked to rate the importance of factors such as relationships with relatives, work, health care, socializing, material comforts, having and raising children, on a scale by checking "not at all, slightly, moderately, important, very important." The range for the importance dimension is 0 to 48 whereas the range for the needs dimension is 21 to 105. "Whether material comforts were met" was used as a subjective factor.

The Lipson-Parra Adult Attachment Scale (LAAS, 1990) was developed specifically to assess attachment in older adults. The author reports an alpha coefficient of .97 for its reliability. Respondents first identify one special person, if they have one, in their life and then are asked to mark statements referring to levels of intimacy. Statements such as: "I love this person";
"I can relate to this person"; "We are very compatible with each other," are to be ranked "not at all true," "slightly true," "mostly true," or "completely true." Scores range from 30 to 120.

In the Lipson-Parra attachment scale the first question represented whether or not the respondents had a person they could refer to as a confidant. Scores from the question "having no confidants" were used as an objective indicator. Scores from the remainder of the scale represented the objective indicator "closeness of confidant." Finally, the demographic information assessed the remainder of the objective indicators including number of children, living arrangement, and marital status.

Procedure

Approximately 50 surveys were issued from the investigator's dental office and the rest were mailed. The mailed surveys included a letter of request from the investigator and consent forms. All clients 60 and over were selected from the entire patient roster of the investigator's office. Patients who had not visited the dental office for 5 years or more were eliminated. Subjects were given the choice of returning the surveys to a box provided at the dental office or returning the forms by mail directly to the University of Nevada, Las Vegas. Subjects were urged to return the survey within 90 days.
Results
Distribution of the Isolators

The indicators of social isolation used as predictor variables included: living alone, having no companions, having no confidants, the closeness of the confidant, having no children, and was unmarried. The frequencies, means, and standard deviations of the predictors are displayed in Table 1.

Table 1
Frequencies, Means, and Standard Deviations of the Predictor Variables

<table>
<thead>
<tr>
<th>Predictors</th>
<th>N</th>
<th>%</th>
<th>M</th>
<th>SD</th>
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<td>Living Alone</td>
<td>31</td>
<td>23.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Companions</td>
<td>8</td>
<td>5.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Confidants</td>
<td>8</td>
<td>5.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Close. Confidants</td>
<td></td>
<td></td>
<td>101.00</td>
<td>13.38</td>
</tr>
<tr>
<td>No Children</td>
<td>29</td>
<td>21.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Married</td>
<td>41</td>
<td>30.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The scores from the Lipson-Parra scale that determined how close the respondents were to the confidant ranged from 54-116 with the higher score indicating a more intimate relationship. A score in
the range of 54-84 demonstrated a less intimate relationship.

Most respondents listed people to whom they felt close, although 3 subjects did not list anyone and 33 named 5 or fewer people. All but 8 respondents listed people with whom they have had contact within the last thirty days.

**Distribution of Well-Being Measures**

Scores from the subjective scales used as criterion variables included the life experiences scale, the health status scale, the quality of life scale, the satisfaction scale, and the material comforts scale. The range of scores for the life experiences scale were 4 to 26. Some respondents did not complete all of the questions in the scale. Scores from these incomplete scales were below 13. A score of 13 indicated the most satisfaction and a score of 26 indicated the least satisfaction. Most respondents reported happiness with life.

Health status scores ranged from 0 (no problems) to 34 (some problems). Most respondents reported only "some" difficulty with health. In rating quality of life overall, most respondents reported it was "very good" on a scale of 1 (poor) to 7 (excellent). In reporting satisfaction with quality of life on a scale of 1 (unhappy) to 7 (delighted), most were found to be
"pleased." Material comforts were rated from 1 (not at all) to 5 (very well met). Most respondents found material comforts "well met." The frequencies, means, and standard deviations of the criterion variables are displayed in Table 2.

Table 2
Frequencies, Means, and Standard Deviations of the Criterion Variables

<table>
<thead>
<tr>
<th>Criteria</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life experiences</td>
<td>134</td>
<td>16.02</td>
<td>3.37</td>
</tr>
<tr>
<td>Health Status</td>
<td>131</td>
<td>6.95</td>
<td>5.55</td>
</tr>
<tr>
<td>Quality of Life</td>
<td>131</td>
<td>3.60</td>
<td>.88</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>131</td>
<td>5.44</td>
<td>1.16</td>
</tr>
<tr>
<td>Material Comforts</td>
<td>131</td>
<td>4.31</td>
<td>1.01</td>
</tr>
</tbody>
</table>

Intercorrelations among the Variables

A Pearson product-moment correlation coefficient analysis was performed to explore intercorrelations among the predictor and criterion variables. The results presented in Table 3 show most correlations between predictors and criteria indicated weak associations. Significant correlations were found, in order of magnitude, between no confidants and quality of life;
between closeness of confidants and life experience, closeness of confidants and quality of life, closeness of confidants and satisfaction; between no companions and quality of life, no companions and satisfaction. Of the remaining indicators, living alone, no children, and not married were not significantly correlated with any of the criteria.

Table 3
Correlation Matrix of Indicators and Well-Being

<table>
<thead>
<tr>
<th>Well-Being Variables</th>
<th>Life Experience</th>
<th>Health Status</th>
<th>Quality of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indicators</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living Alone</td>
<td>-.02</td>
<td>.07</td>
<td>.03</td>
</tr>
<tr>
<td>No Companions</td>
<td>-.10</td>
<td>-.04</td>
<td>.18*</td>
</tr>
<tr>
<td>No Confidants</td>
<td>.15</td>
<td>-.02</td>
<td>-.26**</td>
</tr>
<tr>
<td>Close. Confidants</td>
<td>-.22*</td>
<td>-.10</td>
<td>.22*</td>
</tr>
<tr>
<td>No Children</td>
<td>-.08</td>
<td>-.04</td>
<td>.14</td>
</tr>
<tr>
<td>Not Married</td>
<td>.02</td>
<td>.08</td>
<td>-.09</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Well-Being Variables</th>
<th>Satisfaction</th>
<th>Material Comforts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indicators</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living Alone</td>
<td>.15</td>
<td>.05</td>
</tr>
<tr>
<td>No Companions</td>
<td>.18*</td>
<td>.17</td>
</tr>
<tr>
<td>No Confidants</td>
<td>-.15</td>
<td>-.01</td>
</tr>
<tr>
<td>Close. Confidants</td>
<td>.22*</td>
<td>.13</td>
</tr>
<tr>
<td>No Children</td>
<td>.14</td>
<td>.14</td>
</tr>
<tr>
<td>Not Married</td>
<td>-.03</td>
<td>.02</td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01.
Analysis of intercorrelations among the indicators found significant but weak relationships between no confidants and not married; closeness of confidants and no children; and not married and no children. Results shown in Table 4 indicate a strong negative correlation between no confidants (a "yes" answer was scaled from 1 to 4) and closeness of confidants.

Table 4

Correlation Matrix of Indicators

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Living Alone</th>
<th>No Companions</th>
<th>No Confidants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living Alone</td>
<td>.06</td>
<td>-.04</td>
<td>-.05</td>
</tr>
<tr>
<td>No Companions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Confidants</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Close. Confidants</td>
<td>.11</td>
<td>.11</td>
<td>-.48**</td>
</tr>
<tr>
<td>No Children</td>
<td>.10</td>
<td>.19</td>
<td>-.05</td>
</tr>
<tr>
<td>Not Married</td>
<td>.16</td>
<td>.07</td>
<td>.23*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Closeness of Confidants</th>
<th>No Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living Alone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Companions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Confidants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Close. Confidants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Children</td>
<td>.19*</td>
<td></td>
</tr>
<tr>
<td>Not Married</td>
<td>-.08</td>
<td>.23**</td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01.
The strongest associations, presented in Table 5, were discovered among the well-being (criteria) variables. The variables, quality of life and satisfaction, were most strongly correlated.

Table 5
Correlation Matrix of Well-Being Variables

<table>
<thead>
<tr>
<th>Well-Being Variables</th>
<th>Life Experiences</th>
<th>Health Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Experience</td>
<td></td>
<td>.15</td>
</tr>
<tr>
<td>Health Status</td>
<td>-.31**</td>
<td>-.51**</td>
</tr>
<tr>
<td>Quality of Life</td>
<td>-.27**</td>
<td>-.53**</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>-.09</td>
<td>-.11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Well-Being Variables</th>
<th>Quality of Life</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Status</td>
<td>.65**</td>
<td></td>
</tr>
<tr>
<td>Quality of Life</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>.32</td>
<td>.29**</td>
</tr>
<tr>
<td>Material Comforts</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01.

Health status strongly correlated with satisfaction and quality of life. Intercorrelations of life experience with quality of life and satisfaction were significant but weak, similar to the significant correlation between material comforts and satisfaction.
Canonical Correlation of Indicators and Well-Being

A canonical correlation analysis was performed between five measures of well-being and six indicators of isolation with the use of SPSS MANOVA. The five well-being measures included the life experience score, the health status score, the quality of life score, the satisfaction score, and the material comforts score. The six indicators included living alone, no companions, no confidants, closeness of confidants, no children, not married.

One univariate outlier was identified, after the initial analysis, among the criteria and deleted from further analysis. The outlier case had an extremely high score on health status (34).

One significant canonical correlation was obtained, $R = .43$, $p<.05$ using Wilks multivariate test of significance. Subsequent canonical correlations were not statistically significant. The first canonical correlation, therefore, accounts for the significant linkages between the two sets of variables.

Analyses of the canonical variate that accompanies the canonical correlation appear in Table 6. Shown in the table are correlations between the variables and the canonical variate, standardized canonical variate coefficients, within-set variance accounted for by the
canonical variates (percent of variance), redundancies, and canonical correlations.

With a cutoff correlation of .3 for interpretation, the variables relevant to the first canonical variate in the well-being measure were, in order of magnitude, life experience, quality of life, satisfaction, and material comforts. Among the indicators, closeness of confidants, no companions, no confidants, no children, and not married were relevant to the canonical variate. Taken as a pair, the first canonical variates indicate that those who are most happy with life, perceive a good quality of life, are pleased with their material comforts being met also tend to have a fairly intimate confidant, a companion, a confidant, children, and are married.
Table 6

Correlations, Standardized Canonical Coefficients, Canonical Correlations, Percents of Variance, and Redundancies between Indicators and Well-Being and their Canonical Variates

<table>
<thead>
<tr>
<th>First Canonical Variate</th>
<th>Correlation</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Well-Being</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Experience</td>
<td>.83</td>
<td>.67</td>
</tr>
<tr>
<td>Health Status</td>
<td>.01</td>
<td>-.40</td>
</tr>
<tr>
<td>Quality of Life</td>
<td>-.71</td>
<td>-.63</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>-.48</td>
<td>.19</td>
</tr>
<tr>
<td>Material Comforts</td>
<td>-.37</td>
<td>-.24</td>
</tr>
<tr>
<td>Variance, percent</td>
<td>31.00</td>
<td></td>
</tr>
<tr>
<td>Redundancy</td>
<td>5.66</td>
<td></td>
</tr>
<tr>
<td><strong>Indicators</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living Alone</td>
<td>.10</td>
<td>.10</td>
</tr>
<tr>
<td>No Companions</td>
<td>-.57</td>
<td>-.49</td>
</tr>
<tr>
<td>No Confidants</td>
<td>.55</td>
<td>.28</td>
</tr>
<tr>
<td>Close. Confidants</td>
<td>-.64</td>
<td>-.39</td>
</tr>
<tr>
<td>No Children</td>
<td>-.45</td>
<td>-.40</td>
</tr>
<tr>
<td>Not Married</td>
<td>.34</td>
<td>.35</td>
</tr>
<tr>
<td>Variance, percent</td>
<td>23.09</td>
<td></td>
</tr>
<tr>
<td>Redundancy</td>
<td>4.21</td>
<td></td>
</tr>
<tr>
<td>Canonical Corr.</td>
<td>.43</td>
<td></td>
</tr>
</tbody>
</table>

Regression of Indicators on Well-Being

To explore the strength of these relationships further, a series of stepwise regressions was performed with each of the criterion variables (life experience, health status, quality of life, satisfaction, and material comforts) using living alone, no companions, no
confidants, closeness of confidants, no children, and marital status as predictors.

For the criterion variable life experience, the predictor variable "having no confidants" entered the equation at step 1, $r = .23$, $p < .05$. None of the remaining predictors entered the equation. None of the predictors entered the equation with health status as the criterion. The variable "closeness of confidant" entered at step 1, $r = .22$, $p < .05$ when quality of life was the criterion. With satisfaction as the criterion "having no confidants" entered the equation at step 1, $r = .36$, $p < .01$. Similarly, "having no confidants" entered at step 1 with material comforts as the criterion, $r = .39$, $p < .01$. After step 1 in each regression analysis, none of the remaining predictors entered the equations.

The results of the regression analysis revealed only simple correlations among the variables. Although the results of these analyses indicate weak relationships, there is a trend suggesting that an elderly individual's intimate relationship with a confidant may influence that individual's perceived well-being.
Discussion

The present study examined the commonly used social indicators of social isolation and their relationship to well-being among the elderly. The research attempted to replicate and expand on previous studies done in this area (Chappell & Badger, 1989). The questions addressed by the study included: whether living alone indicated decreased well-being; whether the number of social contacts were related proportionately to well-being; and whether lack of confidants indicated decreased well-being.

The results revealed that there was no significant relationship between the objective social indicators -- living alone, no children, not married -- and well-being among this elderly sample. These results support Chappell and Badger's (1989) findings that there is a lack of relationship between objective indicators and well-being. In addition, these results support Chappell and Badger's findings that there is a relationship between having confidants, and the strength of the confidant relationship to well-being. In contrast to Chappell and Badger's findings, this study found a significant but weak relationship between number of social contacts and respondents perceived quality of life and satisfaction.

The findings suggest that the confidant relationship
of the elderly is important to their quality of life. The analyses, however, suggest that the conceptualization of "confidant" needs to be reexamined. Whether the elderly had a confidant emerged as important to overall satisfaction, but the degree of intimacy with the confidant may add more valuable information. For the life experience scale (life satisfaction), the degree of intimacy with a confidant emerged as the most important using the canonical correlation, whereas "whether or not the elderly had a confidant" emerged as the most important using a multiple regression.

Given the emergence of the degree of intimacy in this study and others (Dayton & Antonucci, 1988; Strain & Chappell, 1982) as a possible predictor of well-being, distinctions among the relationships of the elderly need to be made. Typically, researchers have used categories such as, spouse, child, friend, or relative. If relationships with peers, neighbors, distant relatives, or other types are the source of confidants for the elderly individual, the relationships may go unreported if, for example, they are not included in a list of a survey. There is a need to enhance understanding of the importance of the confidant relationship by analyzing the quality of it, and by analyzing the role the relationship plays in other aspects of the elderly's lives.
Although living alone has been used as an indicator of isolation by health practitioners (Lubben, 1988), there was no relationship between living alone and lowered well-being in the present study. This finding appears consistently within the literature (Fillenbaum & Wallman, 1984; Hughes & Gove, 1981; Larson et al., 1985; Peplau et al., 1982; Satariano & Ragheb, 1985; Shanas, 1979, 1980). Given the results, living alone should be considered an unreliable indicator of social isolation.

Similarly, the vast social support literature suggests that the number and frequency of interaction with relatives and friends (social contacts) determines well-being among the elderly (Chappell & Badger, 1989). Initially a correlational relationship between social contacts and well-being emerged in this study. Yet, further analysis revealed that none of the quantity of companions measures (number of friends/relatives, frequency of contact with friends/relatives) emerged as significant predictors of any measure of well-being. These results support the view that there is at best a weak relationship between the two variables (Edwards & Klemmack, 1973).

Another indicator that revealed no relationship with well-being was having children. Previous research has suggested that the elderly's ties with children have offered important emotional support for the elderly.
individual (Seeman & Berkman, 1988) with significant increases in closeness to children (Field & Minkler, 1988). Measures of well-being were not included in these studies. As a result, it is not clear if the elderly perceive these relationships with their children as integral to their well-being.

Finally, the relationship between marital status and well-being was not significant. Previous studies of the elderly have not found that marital status affects well-being (Berg et al., 1981; Chappell & Badger, 1989; Shanas, 1980). An exception to this finding is found in the case of the widow. Reports of elderly widows indicate increased isolation and decreased well-being (Gee & Kimball, 1987). Most researchers agree, however, that the grieving process and change in lifestyle of the widow confound these results.

Overall, the present study seems to reiterate a need to clarify the dimensions of social indicators of social isolation both objectively and subjectively. Investigators have suggested various strategies for improving conceptual consistency. Lubben (1988) proposed that composite indicators, such as the one used in this study, were more reliable than single item indicators, such as living alone. George and Clipp (1991) advise that the use of objective indicators has been limiting researchers conceptions of subjective
well-being. These authors believe that three major limitations need overcoming for investigators to expand their understanding of subjective components of aging well. The limitations are an overemphasis on objective conditions underlying subjective components; stereotypical, unidimensional views of aging well; and an overly narrow conceptualization of subjective well-being. To resolve these limitations, George and Clipp recommend an expanded concept of subjective well-being to include a measure of life as meaningful.

Suggestions for future research from other investigators propose inclusion of dimensions that measure self-esteem, stress, self-image and optimism. Most investigators agree that more valid and reliable measures of well-being are required for researchers to properly assess such conditions as social isolation. The body of research examining the lifestyle of the elderly, it seems, suffers from conceptual difficulties in both identifying potential areas of need and in assessing those areas.

It should be noted, though, that consistent findings such as, living alone is not undesirable for the elderly, need to be considered when practitioners and researchers are formulating plans to find the isolated within a community. Even though the field of research concerning the elderly has grown, attempts should be made
to clarify and agree on conceptions and assessments to portray this burgeoning group more accurately.
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