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Stress Coping Mechanisms in Elderly Adults: An Initial Study of Recreational and Other Coping Behaviors in Nursing Home Patients

I. Roy Hunter and Mark C. Gillen

Residents (N = 32) of 3 skilled nursing homes participated in a study designed to document the nature of the stressors they experienced and the coping mechanisms they used. Medical issues were the most common stressors. The most common coping responses were prayer, reading, watching television, listening to music, and talking to friends and family.

By 2050, with the aging of the baby boomers, the population of persons age 65 years and older will be approximately 70 million, or 1 in every 5 Americans (Hooymann & Kiyak, 2002; Pratt & Kethley, 1988). Accompanying this demographic change are ever increasing concerns for the quality of life experienced by elderly adults. The custodial model, whereby elderly adults were merely warehoused in nursing homes, is now seen as inappropriate. Medical science, along with various societal changes, has provided more individuals with the opportunity to live to an advanced age, maintain their health, and experience high levels of perceived wellness (Myers & Degges-White, 2007; Peterson, 1999).

However, aging is related to a number of factors that have a detrimental effect on the quality of life. These include declining health (Boardman, 2004; Kola & Kosberg, 1981; Stones & Kozma, 1984), loss of friends and family members (Glantz, 1981; Stones & Kozma, 1984), employment and financial problems (Eckenrode, 1984; Pearlin & Radabaugh, 1976), alienation from the larger society (Frytak, Harley, & Finch, 2003; Pearlin, 1983; Pearlin, Schieman, Fazio, & Meersman, 2005), and loneliness (Brown & Chiang, 1983; Schonfeld & Dupree, 1991; Stroebe & Stroebe, 1996; Victor & Scarf, 2005). As a consequence, some elderly adults experience unacceptable reductions of life satisfaction. Bickerstaff, Grasser, and McCabe (2003) wrote: "Some elderly persons

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seem to cope with inevitable changes of later life with a spirit of acceptance. . . . Unfortunately, losses of later life can prove to be overwhelming for many older adults” (p. 159).

Perceived quality of life is a complex phenomenon. Often, while comparing two individuals with similar life circumstances, investigators find considerable disparity in reported quality of life. Robinson (1973) pointed out that antecedents to quality of life can be classified either as primary factors or process factors. Quality of life primary antecedent factors that are commonly identified include physical and emotional safety, financial security, health, self-concept and self-esteem, and social engagement factors. The process factors that influence quality of life are personal attributes that contribute to the interpretation of the primary factor antecedents. The existence of process factors explains why two people subject to similar objective conditions can have grossly dissimilar perceived levels of life satisfaction (Robinson, 1973; Sekaran, 1983).

Pearlin (1989) found that stressful experiences could be traced to social structures and an individual’s role within those structures. He described two types of stressors: life events observed through the quality of nonnormative change and chronic stressors rooted in institutionalized roles. Both types of stress are of critical concern for elderly adults; however, chronic stressors, and their relationship to institutionalized roles, are especially important considerations because many elderly adults experience more stressors, perceive higher levels of stress, and have fewer effective coping responses available to them than do adults at other times of life (Brown & Chiang, 1983; Chiriboga, 1984; Seeman, Seeman, & Budros, 1988; Stones & Kozma, 1984).

Recreational activities serve as both common stress buffers and stress coping responses. Recreational behavior plays a role in an individual’s stress-related symptoms (Cassidy, 1996; Trenberth & Dewe, 2002). However, some functional recreational coping mechanisms are lost by elderly adults because of advancing age; for example, as they age, many people experience medical conditions that preclude high physical-impact recreational alternatives. Moreover, some dysfunctional coping responses, such as alcohol abuse, are also recreational in nature. Researchers do not know if recreation-as-coping plays an increasingly important role as one ages; it is obvious, however, that elderly adults need diversified portfolios of successful coping mechanisms, and recreational activities often constitute a major opportunity to adopt those mechanisms.

A review of the body of knowledge relative to the recreation–stress relationship is not sufficient to ground anything more than the recommendation of the provision of a diversified recreational program to all elderly adults. Researchers do not know which elderly adults are most at risk, which activities are most likely to be functional coping responses, or which personal values are most or least functional for individuals relative to coping with stress.

The understanding of the relationships between age and the various stress model components is limited. Although there is some empirical evidence to

suggest that certain stress components are related to age, any bivariate view is bound to be overly simplistic. However, it is reasonably well established that exposure to stressors increases, both in number and severity, as one ages (Brown & Chiang, 1983; Chiriboga, 1984; Seeman et al., 1988; Stones & Kozma, 1984). Also, the type of stressor encountered changes with age (e.g., the major stressors in the course of one's life may be related to dating, vacation, and eventually bereavement). It is, however, common to carry into old age a considerable number of stressors characteristic of middle age. Hunter and Gillen (2006) surveyed the literature and concluded that the most common specific stressors for elderly adults are (a) bereavement, (b) retirement, (c) health, (d) loneliness, (e) role conflict, and (f) life circumstances.

There is also research evidence to suggest that even in studies controlling for stressors, elderly adults, in general, perceived higher levels of stress (e.g., Folkman, Lazarus, Pimley, & Novacek, 1987). This may indicate that elderly adults engage in or possess fewer stress buffers or that the effectiveness of their buffers is diminished.

As one ages, one's daily activity distribution changes. Major life events precipitate changes in the distribution of time spent involved in activities related to work, child rearing, biological needs, medically related behavior, and fully discretionary leisure time activities. Major shifts in activity distribution occur when one's children leave the home, at retirement, at the loss of a spouse, at a change of residence status, and at major health status changes. The importance of one's leisure-time behavior is likely to positively covary with time available for recreational activities. Recreational programs in nursing homes help improve the quality of the residents' lives. Stevens (1972) observed,

Some patients in nursing homes have arrived there rather precipitously and they anticipate remaining there for a long time. They are often afraid, insecure and lonely. To assist them in adjusting to this difficult situation, a recreation program is essential. (p. 5)

Recreational activities are a well-documented means of influencing levels of happiness, life satisfaction, physical wellness, loneliness prevention, and emotional stability (see Table 1). The benefits of any particular recreational experience vary as a function of the nature of the program and the needs of the participants. Some recreational activities are very physical in nature (e.g., exercise programs), whereas others fall completely into the cognitive and affective domains (e.g., book clubs). Perhaps it is this variance that makes recreation such a powerful life component. Recreational activities and programs commonly include a mix of the following goals: (a) to promote physical activity, (b) to encourage social interaction and the development of friendships, (c) to place cognitive demands on the participants, (d) to provide cross-generational contact, (e) to reinforce a link to the here and now, and (f) to provide an opportunity for the pursuit

TABLE 1
**Common Benefits of Recreation and Recreational Programs
 for Elderly Adults**

Benefit	Source
Physical fitness	Y. Chow (2002); H. Chow (2006); Jacobs et al. (2008)
Well-being and life satisfaction	Wilhite (1992); Penick & Fallshore (2005); Luleci, Hey, & Subasi (2008)
Self-concept and self-esteem	Berryman-Miller (1988)
Relief from depression	Johnson (1999)
Self-efficacy	Langan & Marotta (2000)
Cognitive ability improved	Y. Chow (2002)
Social interaction	Y. Chow (2002)

of excellence (Haberkost & Dellmann-Jenkins, 1996; Levine, 1952; Stevens, 1972). The goal of the current study is to document the nature of the stressors experienced, the coping mechanisms used, and the relationship between client demographics and the bivariate stressor–coping relationship for elderly adults.

METHOD

Research Design and Sample

The design used for this study was the one-shot case study (Campbell & Stanley, 1963). The reader should note that this design does not provide any control over the sources of internal invalidity and is, thus, not sufficient to establish the cause–effect nature of any relationships identified. Keeping this in mind, we suggest against the common practice of assuming cause and effect whenever moderate-to-strong relationships are found using preexperimental designs.

The participants for this study were residents of three skilled nursing care facilities in a small midwestern city who were judged by the nursing and social service staff to be competent to respond to written and interview questions. From the pool of residents who were determined to be competent, a 100% sample was conducted (*N* = 32). Blalock (1972) wrote that “in exploratory studies, the main goal of which is to obtain valuable insights which ultimately lead to testable hypotheses, probability sampling either may be too expensive or lead to fewer such insights” (p. 527).

The sample comprised 26 (81%) women. Of the participants, 41% were 85 years or older, 31% were 75 to 84 years, and 28% were 74 years and younger. The gender and age distributions were similar to 1999 national and midwestern nursing home statistics reported by Jones (2002).

The participants were relatively well educated, with 78% reporting at least some postsecondary school experiences and only 3% reporting leaving school before entering high school. Nearly half of the respondents (47%) considered themselves in “excellent” or “good” health, and exactly half came from a farm residential background, as opposed to having resided in a small town or a city. Fifty-seven percent reported visits from family members at least once a week.

Instrument and Field Work

The preliminary nature of the study lent itself well to using an unstructured interview consisting of a relatively few items combined with extensive probes. “A qualitative interview is an interaction between an interviewer and a respondent in which the interviewer has a general plan of inquiry, including the topics to be covered, but not a set of questions” (Babbie, 2007, p. 306).

In this highly open-ended format, the interview instrument was designed to assess (a) short- and long-term stressors, (b) identification of the most serious stressors, (c) stress coping behaviors and attitudes the respondents engaged in or held, and (d) factors contributing to the selection of the coping responses. In the discourse leading up to each question, the operative terms were defined for the respondents. For instance, as a preliminary to the stressor questions, the interviewer said the following:

We are interested in the things that are stressful in peoples’ lives. Everyone experiences these things from time to time. Sometimes stress is caused by a one-time event (such as being in a car accident), and at other times, the stress is caused by long-term factors (such as reoccurring marital problems).

The principal author (Hunter) provided the interviewer (an individual with interviewing experience who was hired to collect the data) with standard probes for each item. For example, a standard probe for the stressor items was “Are there any long- or short-term things which caused you discomfort in the last 12 months?” If further probing was required, standardized examples were provided to the interviewer.

Demographic information was collected at the end of the interview in a closed-ended format. This information included age, education, income, self-report global physical health, residential background, and level of social support the respondent was experiencing.

The principal author contacted the directors of the three residential facilities, and after the research approval process, the interviewer met with members of the nursing and social service staff to assess the competency of clients to participate. The nursing home staff determined client status using physical, emotional, and cognitive criteria. Once the pool of competent clients was established, the interviewer met with each client individually.

RESULTS

After the initial tabulation, we recoded the responses regarding stressors into response classes: (a) financial, (b) medical, (c) living arrangement, (d) social or loneliness, and (e) bereavement. The responses indicating coping mechanisms were similarly recoded: (a) pray, (b) read, (c) watch television, (d) listen to music,

(e) talk to friends and family, (f) exercise, (g) participate in other recreational activities, (h) take medications as prescribed, and (i) engage in prescribed therapy. Medical stressors were the most commonly reported items. The three low-ranking items had very low response rates and were financial, loneliness, and bereavement stressors. For a complete listing of results see Table 2.

The elaboration model (Rosenberg, 1968) was used to guide the two-way analysis (see Table 2). A cross-tabulation was run examining the relationship between stressors and coping mechanisms. The strong bivariate relationships identified were (a) those who experienced medically related stressors engaged in prayer, reading, watching television, listening to music, talking to friends or family, and participating in recreational activities and (b) those who experienced stressors related to living arrangements engaged in prayer, reading, watching television, listening to music, and talking to friends or family.

The Table 2 cell percentages were then recalculated based on row totals and not the full table total. The cells that displayed the highest relationships were financial stress and prayer (31%), loneliness and read/television/music (35%), and bereavement and prayer (47%). A review of the results from the univariate and bivariate analyses resulted in the following conclusions: (a) medically related and living arrangement stressors were by far the most common and (b) prayer, read/television/music, and talking to friends or family were the most common coping mechanisms (regardless of the type of stressor experienced).

A series of three-way cross-tabulations were constructed. The three-way tables examined the relationship between stressor type and coping mechanism

TABLE 2
Two-Way Analysis for Paired Frequencies and Percentages:
Stressor Type and Coping Mechanisms Selected

Stressor	Coping Mechanism Selected													
	Pray		Read, TV, Music		Talk: Friends, Family		Exercise		Other Recreation		Take Medication		Therapy	
	f	%	f	%	f	%	f	%	f	%	f	%	f	%
Financial	5	3	3	2	4	2	1	1	2	1	0	0	1	1
Medical	14	8	16	9	15	9	6	4	12	7	1	1	4	2
Living arrangement	12	7	13	8	12	7	5	3	8	5	1	1	2	1
Social or loneliness	3	2	6	4	3	2	2	1	3	2	0	0	0	0
Bereavement	7	4	2	2	3	2	0	0	2	1	0	0	1	1

Note. N = 32. The percentages are based on the total number of paired responses (169). Frequencies (fs) contained in this table are based on the number of respondents mentioning the paired responses. For example, if a respondent reported financial stress and coping behaviors of both praying and exercising, his or her response would be added to two of the cell totals in this table.

while controlling for education, health status, type of former residence, level of family support, gender, and age. Of the resulting 210 comparisons, 17 demonstrated that the third variable represented a strong factor. The selection criterion for inclusion in Table 3 was a 4:1 cell ratio. For example, all of the respondents who experienced the social/loneliness stressor and participated in other recreational coping strategies were from farm backgrounds; such high ratio cells were included in Table 3.

Of the demographic variables studied, age demonstrated the strongest correlations; age was a factor in six of the cells. Age and level of family support were both related to the medical stressor/exercise and the living arrangement stressor/exercise relationships. In fact, those relationships held up even when applying the more rigorous 5:1 standard. The relationships between financial problems and the various coping mechanisms were most influenced by the demographics. The demographic variables showed strong third-variable correlations in 6 of the 42 comparisons involving financial stressors. Age was especially strongly associated with the financial stressor, appearing in all three of the bivariate relationships involving financial stressors.

DISCUSSION

The actual impact of stress on any particular individual is a function of the stressors experienced, the stress buffers engaged in, and the success of any coping mechanisms that the individual used. As people age, all of these factors are likely to vary. The nature of the stressors are related to life events and general

TABLE 3

Stressors and Coping Mechanisms Showing Highest Relationships While Controlling for the Demographic Variables

Stressor	Coping Mechanism				
	Pray	Read, TV, Music	Talk: Friends, Family	Exercise	Other Recreation
Financial	High support, younger	Younger	Farm, younger, male	None	None
Medical	None	None	None	Low support, older	None
Living arrangement	None	None	None	Low support, older	Female
Social or loneliness	None	High education, older	None	None	Farm
Bereavement	High education, high support, female	None	None	None	None

Note. High or low support = level of social support received by respondent. Farm = farm residential background.

life situations that change as one ages. Stress buffers are personal attributes (e.g., statuses, attitudes, and beliefs) or behaviors that shield one from the impact of stressors. Buffers such as marriage, close proximity to family, and physical health may all change over time for an individual. Coping mechanisms are behaviors or belief changes that are engaged in as a direct response to a perceived stressor. Exercise, prayer, and social engagement are all used by some as coping responses. The availability and effectiveness of such coping mechanisms change as one ages.

Discussion of the Findings

Medical stressors were the most commonly reported stressor, followed by living arrangements. The three low-ranking items, financial, social/loneliness, and bereavement, had unusually low, and quite similar, response rates. The three coping responses mentioned most frequently—prayer, read/television/music, and talk to friends and family—were about equally popular and showed considerably higher rates than the next most commonly mentioned behaviors (i.e., exercise and other recreation).

Two of the five stressors, living arrangement and social/loneliness, are not only related to each other but can also be somewhat manipulated. For instance, when one examines the list of actual responses that made up the living arrangement category, some were dynamic (e.g., “don’t like the food,” “people or programs bugging me,” “noise at night”), whereas others were more global, dissatisfaction-with-being-here responses (e.g., “change of living arrangement,” “living here,” “had to leave home,” “like to live with my loved ones,” and “hardly enough room”). The more general concerns will probably always exist for many nursing home residents. Although no residential facility can make all the clients happy all the time, the living arrangement and loneliness stressors seem to be responsive to programmatic solutions.

There will, of course, always be important stressors in the lives of elderly adults who are living in a long-term care facility. Residents are ill, have financial difficulties, and experience the loss of loved ones. The solution in these cases for mitigating the effects of stress may be the coping mechanisms the residents engage in. The lesson derived from the three most popular coping mechanisms would be to offer ample opportunity to residents for organized religious activity, access to reading material and recorded music, and visits by friends and family. Opportunities for solitary prayer and television watching already seem to be plentiful. Obviously, the visits from friends and family component is difficult to control, especially if one defines friends as exclusively friends from home. Presumably, residents can make friends while in residence. Programs designed to promote friendships among residents, visitors of other residents, and staff should be considered.

A strong coping response is derived from the combination of exercise and other recreational activities. As outlined earlier, in addition to their use as stress

coping mechanisms, there are also considerable benefits to be derived from both exercise and recreational programming for elderly adults. This is especially so when keeping in mind that the respondents reporting low levels of family support tended to link (a) exercise and medically related stressors and (b) exercise and living arrangement stressors. Recreational and exercise programs can promote friendships, reduce loneliness, and partly replace the support gained by high levels of family contact.

Implications for Counselors

Prior to engaging in counseling with stressed elderly adults living in care facilities, counseling professionals should review issues specific to this population. For example, Stickle and Onedera (2006) stressed the importance of educating elderly adults about the counseling process to dispel their preconceived notions that might lead to more stress. Second, it is important to conduct a complete history to determine how clients have dealt with stress and if those options are still viable (Stickle & Onedera, 2006). Also, counselors need to be aware of their biases about elderly adults, which may hamper counselors' ability to listen for clients' needs and concerns (Granello & Fleming, 2008). Finally, it is important to use forms of therapy that have been shown to be effective with this population, specifically brief therapy and reminiscence therapy (Cavanaugh & Blanchard-Fields, 2002).

Dealing with stress—specifically medically related stressors and stress relating to living arrangements as these are perceived by the client—requires a selection of coping mechanisms in which counseling plays an important role. Counselors can assist individuals in the selection of a coping response that will ameliorate the symptoms of stress or promote the development or adoption of functional stress buffers. Especially intriguing are the dynamic selection inputs, for example attitudes toward exercise and nutrition, because these make tempting targets for intervention programs designed to reduce the symptoms of stress or increase happiness, life satisfaction, or a number of constructs that are related to stress. Equally important is gaining an understanding of the living environment and the options currently available within the living environment that the client might use to ameliorate stress (Granello & Fleming, 2008; Stickle & Onedera, 2006). Ultimately, if we as counselors wish to assist our clients, it is vital that we not only provide support, but also advocate for a healthy, supportive environment for our clients (Gillen & Chung, 2005; Granello & Fleming, 2008).

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