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Predictors of Positive Psychosocial Functioning of Older Adults in Residential Care Facilities

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This research examined the contributions of active and passive coping for health problems, and meaning-based coping, to positive psychosocial functioning in a sample of 100 individuals in residential care with a mean age of 83.11 years old. Study participants resided in skilled care, intermediate care, or assisted living facilities. Based on interview data collected on site in participants' residential settings, hierarchical multiple regression analyses revealed that active and passive coping and meaning-based coping had separate influences on measures of positive psychosocial functioning. Active coping was correlated with higher positive affect, whereas passive coping was associated with higher negative affect and self-acceptance. Positive reappraisal, a meaning-based coping strategy, was uniquely associated with higher positive affect, positive social relations, and self-acceptance. Positive religious coping was not independently associated with positive psychosocial functioning indices, whereas negative religious coping was related to higher negative affect. Health functioning did not contribute to positive psychosocial functioning in this sample. The results confirm the separate importance of health-related and meaning-based coping strategies in explaining positive psychosocial functioning in older adults living in residential care settings.

KEY WORDS: predictors; positive psychosocial functioning; elderly

PSYCHOLOGICAL WELL-BEING IN THE ELDERLY

Over the past decade, behavioral scientists and mental health professionals have realized the need for a more inclusive paradigm of mental health that addresses both psychopathology and negative psychological states, and positive psychological attributes or characteristics (Fernandez-Ballesteros, 2003). Accordingly, the construct of positive psychosocial functioning has included the states of psychological well-being (Ryff, 1989b) and positive affect (Bradburn, 1969; Watson *et al.*, 1988). This expanded focus has recognized the need for research to be conducted on the factors contributing to a state of positive psychological wellness (Cowen, 1996; Ryff, 1989a; Seligman and Csikszenmihalyi, 2000; Zautra, 1996).

The examination of psychological well-being in the elderly may provide important information on how individuals cope with the vicissitudes and life challenges associated with aging. Although chronic illness, physical disability, and perceptual impairments are highly prevalent stressors among older adults (Aldwin, 1992; Felton and Revenson, 1987; Heidrich and Ryff, 1996; Ruth and Coleman, 1996; Folkman *et al.*, 1986; Heidrich and Ryff, 1992; Heidrich and Ryff, 1996; Kahana, 1992; Lazarus and DeLongis, 1983), many elderly individuals report high levels of life satisfaction and psychological well-being (Lazarus and DeLongis, 1983). In fact, several studies have found a positive relationship between

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older age and well-being despite losses that become more likely in older adulthood (Aldwin and Brustrom, 1997; Costa and McCrae, 1993; Costa *et al.*, 1987; Dittman-Kohli, 1990; McFadden, 1995; Okun and Stock, 1987; Ryff, 1989b). How individuals in their later years are able to transcend such obstacles and achieve a state of positive psychological well-being represents an important challenge to behavioral scientists and aging researchers. Accordingly, an understanding of the coping mechanisms that the elderly use to manage health stressors, changes in living conditions, and other life stressors may explain important variability in the adjustment process.

The conceptual framework for the present study is derived from a proposed modification of Lazarus and Folkman's classic cognitive theory of stress and coping (Lazarus and Folkman, 1984) that promotes an expansion of the stress-coping paradigm (Folkman and Moskowitz, 2000; Somerfield and McCrae, 2000). The original model proposed that coping efforts (emotion-focused or problem-focused) that would contribute to resolution of a stressful encounter would lead to a positive psychological state, while those that would lead to no resolution of the stressful encounter would lead to psychological distress. However, based on research conducted with caregiving partners of men with AIDS, Folkman (1997) showed that both positive and negative emotions co-exist during periods of coping with significant stress, emphasizing the need to include indices of both distress and positive psychological states in coping research paradigms. Further, the revised model embraced the importance of meaning-based coping strategies. Individuals can use meaning-based coping to maintain positive psychosocial functioning in instances in which an individual is unable to achieve a favorable resolution to a stressor (Folkman and Greer, 2000). According to the reformulated theory, meaning-based coping strategies such as positive reappraisal, the development of revised goals, and religious and spiritual beliefs allow the individual to experience positive psychosocial functioning during the process of managing negative emotional states (Folkman and Greer, 2000), and thus, to transcend difficult obstacles.

Previous studies have shown that coping processes involving optimism and active coping or management may enhance the physical and emotional functioning of elderly individuals with severe health problems such as HIV and coronary heart disease (Carels *et al.*, 2004; Shen *et al.*, 2004; Siegel *et al.*, 2004). However, despite the stressful impact of relocating to a nursing home (Hodgson *et al.*, 2004), little is known about the ways in which nursing home residents cope with the process of adjustment to residential living in their later years. Although qualitative research has demonstrated that the elderly employ a variety of strategies to cope with, and transcend, difficult circumstances (e.g., Bickerstaff *et al.*, 2003; Groger, 2002; Evans *et al.*, 2004), the contribution of coping to psychosocial functioning is largely unexplored in this group of individuals. The present research addressed this gap in the literature by examining the role of meaning-based coping (Folkman *et al.*, 1997), and active and passive coping strategies (Brown and Nicassio, 1987) for managing health problems, in an elderly sample of residential care residents. Specifically, this research explored the use of positive reappraisal and religious coping processes as meaning-based coping strategies. Positive reappraisal involves focusing on positive aspects, benefits, or potentially positive interpretations of, and growing from, negative situations. Significant relationships between positive reappraisal and indices of psychological well-being have been reported across diverse populations (Affleck and Tennen, 1996; Davis *et al.*, 1998; Folkman, 1997; Rusting and DeHart, 2000). For example, among AIDS caregivers, Folkman (1997) found that positive reappraisal was associated with greater positive affect at each of four time periods.

Because older adults tend to rate religion and spirituality as important to them and demonstrate higher levels of organized and unorganized church attendance than any other age group (Ellison, 1991; Koenig, 1993; McFadden, 1995), religious coping may be a highly salient coping mechanism in this population. Religious coping and spirituality may provide a buffer against the harmful effects of stress on psychological well-being by helping individuals reappraise difficult life situations as opportunities for growth or as part of a divine plan (Danhauer, 2001). In this manner, religious coping may provide a mechanism for transcending life obstacles that may otherwise be difficult to control (Ellison, 1991; Folkman, 1997).

In addition to meaning-based coping, this research addressed the relationship between active and passive coping and positive psychosocial functioning. Previous research has examined these forms of coping in patients dealing with the chronic pain associated with rheumatoid arthritis and related conditions (Brown and Nicassio, 1987; Keefe *et al.*, 1989; Zautra and Manne, 1992). Active coping refers to

the use of strategies to function in spite of pain and to cope with pain directly, whereas passive coping includes strategies to avoid activity, depend on others, and take medication to deal with moderately severe pain episodes. Passive coping has generally been associated with greater pain, disability, and depression in patients with chronic conditions, whereas an opposite but weaker pattern has been observed between active coping and negative health outcomes (Brown and Nicassio, 1987; Smith and Wallston, 1992). However, the possibility that active coping may be more closely associated with positive well-being rather than with negative affective states has been suggested previously (Nicassio and Schuman, in press) and was explored in this research.

Overview of Research

This investigation explored the contribution of active and passive coping and meaning-based coping to positive psychosocial functioning in older adults living in residential care facilities. These coping strategies were conceptualized as dispositional coping tendencies that individuals use across stressful situations (Carver *et al.*, 1989). A key objective of this research was to determine the relative significance of meaning-based coping strategies and active and passive coping for health problems. It was hypothesized that meaning-based coping would contribute independent variance to positive psychosocial functioning outcomes due to the presumed importance of this form of coping in maintaining a sense of positive well-being despite the effectiveness or ineffectiveness of other coping mechanisms and the presence of ongoing life stressors, including the health status of the individual (Folkman, 1997). The construct of positive psychosocial functioning was assessed by measures of positive and negative affect (Watson *et al.*, 1988) and by the autonomy, self-acceptance, and positive relations with others scales from the Scales of Psychological Well-Being (PWB; Ryff, 1989a).

METHODS

Participant Recruitment and Selection

The project director (JS) contacted residential care administrators by letter and phone in facilities throughout San Diego County to describe the study and request assistance in identifying potential participants who met study criteria. A meeting was then scheduled with administrators to review study details and establish logistics for data collection at which time a plan was developed to ensure that screening and data collection were conducted at times that were most convenient to staff and residents, and in locations that were as private and as quiet as possible. Facility administrators were asked to identify a staff person who was familiar with the residents and could serve as a contact person during data collection.

All study participants were residing in skilled care, intermediate level care, or assisted living homes at the time of data collection. Site staff members identified a total of 175 individuals as potentially eligible in 14 facilities. All study participants had to meet the following eligibility criteria: (1) were at least 65 years of age; (2) demonstrated no evidence of cognitive impairment as evidenced by a score of at least 24 on the Mini-Mental State Exam (MMSE; Folstein *et al.*, 1975); (3) had been a resident at the residential care facility for at least 4 weeks; and (4) were not short-term residents in the residential care facility (admitted for rehabilitation with plans to return home).

Informed consent was obtained from potentially eligible study participants prior to study screening. Screening with the MMSE took approximately 15 min. From the pool of potential participants, 102 individuals were eligible, expressed interest in the study, and participated in the screening. However, one died shortly after the Mini Mental State Exam (MMSE) was administered to her, and another was unable to complete the interview due to a worsening in her health. The final study sample thus included 100 participants. The number of participants across sites ranged from 3 to 12. An average of 7.14 participants were interviewed at each site. Participants' current physical health conditions were broadly categorized according to organ system using ICD-9 codes. Eleven study participants declined to discuss their physical health conditions or stated that there were none. The following conditions were reported among the 89 participants who provided physical health information: (1) 39.3% ($n = 35$) reported at least one condition related to the musculoskeletal system and connective tissue disease (e.g., difficulty with mobility, arthritis); (2) 23.0% ($n = 21$) reported at least one condition related to diseases of the nervous system (e.g., Parkinson's disease, stroke (DVA)); (3) 10.1% ($n = 9$) reported at least one condition related to diseases of the respiratory system (e.g., allergies, sinusitis); (4) 5.6% ($n = 5$) reported at least one condition related to diseases of the endocrine system

(e.g., diabetes); (5) 5.6% ($n = 5$) reported at least one condition related to diseases of the eye (e.g. visual loss, cataract); (6) 5.5% ($n = 5$) reported at least one condition related to diseases of the circulatory system (e.g., hypertension, congestive heart failure, heart attack); (7) 5.5% ($n = 5$) reported at least one condition related to neoplasms (e.g., cancer); (8) 2.2% ($n = 2$) reported at least one condition related to diseases of the digestive system (e.g., bowel irritation, diverticulitis, gallstones); and (9) 2.2% ($n = 2$) reported at least one condition related to diseases of the ear, nose, and throat (e.g., hearing loss, laryngitis, sinusitis).

The sample consisted of 66.0% females and 34.0% males with a mean age of 83.11 years (SD = 7.51). There was a fairly normal distribution of education level, with 8.0% of the sample reporting having completed some years of high school or less, 55% reporting graduation from high school and/or some years of college, and 37.0% having at least a 4-year college degree. Mean length of stay in the residential facility at time of interview was 45.54 (SD = 58.62) months, while the median length of stay was 24 months. Consistent with study eligibility criteria, all study participants had been residents for at least 4 weeks, were alert and oriented, were ages 65 and above, and scored 24 or higher on the Mini Mental State Exam (MMSE). Forty-seven percent of study participants were residing in skilled care units, 32.0% were residing in intermediate care units, and 21.0% were residing in assisted living units. Eighty six percent of the participants were Caucasian, while the remaining participants were of African American, Hispanic-American, Asian, and Native-American racial backgrounds.

After their eligibility was determined, participants scheduled an interview for a separate meeting time. Interviews lasted approximately 45–60 min during which demographic data were obtained, and measures of health functioning, active and passive coping, meaning-based coping, and psychosocial functioning were administered. Questionnaires were administered verbally, item-by-item by the interviewer. When possible, interviews were completed during one assessment meeting; however, in order to accommodate study participants' schedules and fatigue, follow-up interviews were scheduled in some instances. All interview data from each study participant were collected during a 1-week interval.

Screening

Mini-Mental State Exam (MMSE; Folstein et al., 1975)

The MMSE is a brief, widely used, and easily administered test of cognitive function. Possible scores range from 0 to 30, with lower scores indicating greater cognitive impairment. In this sample, the mean MMSE score was 27.67 (SD = 1.95). The MMSE has been shown to have adequate test–retest reliability ($r = 0.83$ over a 24-h period) (Folstein *et al.*, 1975). Scores of 23 and below typically indicate cognitive impairment (Karuza *et al.*, 1997; McDougall, 1998; Phillips *et al.*, 1993).

Predictors of Well-Being

Medical Outcomes Study 36-Item Health Survey—Physical Functioning Subscale (SF-36-PF; McHorney et al., 1993; Ware and Sherbourne, 1992)

Physical functioning was assessed using the SF-36-PF. The SF-36-PF is a 10-item measure of physical functioning that is an abbreviated version of the full SF-36 (McHorney *et al.*, 1993). Internal consistency of the SF-36-PF in a sample of 3445 patients was high, with $\alpha = 0.93$ (McHorney *et al.*, 1994). In a subsample of cognitively intact older adults (65+ years of age), internal consistency reliability for the SF-36-PF was high as well ($\alpha = 0.91$) (McHorney *et al.*, 1994). Internal consistency reliability of the measure in this study sample was comparable ($\alpha = 0.92$). The mean SF-36 PF score was 16.97 (SD = 5.95).

The Assessment of Active and Passive Coping: The Pain Management Inventory (PMI; Brown and Nicassio, 1987)

The PMI is an 18-item measure used to assess the coping mechanisms by chronic pain patients in the management of moderate to severe pain episodes. The 18-item measure was slightly revised for this study to increase its relevance to individuals in residential care experiencing a variety of illnesses by removing the word *pain* and inserting the words *health condition* for specific items. Thus, participants completed the PMI indicating the coping mechanisms that they used when experiencing moderate to severe difficulties with their health. Active

coping in this study referred to such strategies as engaging in physical exercise or physical therapy, participating in leisure activities and recreation, and "clearing your mind of bothersome thoughts or worries." In contrast, passive coping assessed such tendencies as depending on others for help in dealing with health limitations, restricting activity, and engaging in wish-fulfilling thoughts. The PMI has demonstrated high internal consistency reliability in a population of rheumatoid arthritis patients, with α's = 0.71 and 0.82 for active coping and passive coping, respectively (Brown and Nicassio, 1987). Test–retest reliabilities over a 6-month interval for active and passive coping, respectively, were 0.65 and 0.69. Because the internal consistency of the adapted version of the PMI was lower (0.57 and 0.66, respectively), an item analysis was carried out, resulting in the removal of three items (items # 3 "Ignoring your health problems [active coping]", # 9 "praying for relief [passive coping]", and # 14 "Distracting your attention from the health problems [active coping]"). The deletion of these items increased the active coping (six items) alpha to 0.68, and the passive coping (10 items) alpha to 0.71. Means and SD's for active coping and passive coping were 16.57 (SD = 4.31) and 37.34 (SD = 6.64), respectively.

COPE-Positive Reappraisal Inventory (COPE-PR; Carver et al., 1989)

The 4-item positive reinterpretation and growth subscale (COPE-PR) of the COPE, an inventory of coping responses to assess dispositional coping, was used to measure positive reappraisal. Participants were instructed to respond to COPE items on the basis of what they generally do when they encounter stressful events in their lives. The four items of the COPE-PR assess the tendency to reappraise or reframe stressful situations in a more positive light ("I look for something good in what is happening." I try to see it in a different light, to make it seem more positive." "I learn from the experience." I try to grow as a person as a result of the experience."). Participants endorsed each item by indicating (1) do not do this at all, (2) do this a little bit, (3) do this a medium amount, or (4) do this a lot. Carver *et al.* (1989) reported an alpha coefficient of 0.68 for the COPE-PR. and a test–retest reliability of 0.63 over a 3-month period. Internal consistency of the COPE-PR was higher in the present study (α = 0.78). The COPE-PR mean was 12.01 (SD = 3.32).

Brief Religious Coping (RCOPE; Pargament et al., 1998)

The Brief RCOPE assessed the degree to which participants employed religious coping strategies to deal with stressful events. Consistent with the instructions for the COPE-PR, participants completed religious coping items based on how they generally react to stressful circumstances. The Brief RCOPE consists of seven positive religious coping items (e.g., "Looked for a stronger connection from God," "Sought God's love and care,") and seven negative religious coping items (e.g., "Felt punished by God for my lack of devotion," "Questioned God's love for me"). Participants reported the extent to which they engaged in religious coping by using the following scale: (1) *not at all*, (2) *somewhat*, (3) *quite a bit*, and (4) *a great deal*. Positive items were generated from seven different subscales from the original RCOPE: spiritual connection, seeking spiritual support, religious forgiveness, collaborative religious coping, benevolent religious reappraisal, religious purification, and religious focus (Pargament *et al.*, 2000). The seven negative items originate from five different subscales: spiritual discontent, punishing God reappraisal, interpersonal religious discontent, demonic reappraisal, and reappraisal of God's power. Pargament *et al.* (1998) reported alpha coefficients of 0.87 and 0.69 for the positive and negative scales, respectively, for hospital patients above 55 years of age. Internal consistency of these scales for the present study reached similar levels (0.85 and 0.73, for positive religious coping and negative religious coping, respectively). Test–retest reliability on the Brief RCOPE has not been reported; however, the habitual use of negative religious coping by the hospitalized medically ill has predicted deterioriation in mental and physical functioning over a 2-year period (Pargament *et al.*, 2004). Means for positive religious coping and negative religious coping were 20.40 (SD = 5.82), and 25.38 (SD = 3.66), respectively.

Measures of Positive Psychosocial Functioning

Positive and Negative Affect Schedule—Short Form (PANAS-SF; Kercher, 1992)

The PANAS-SF is a 10-item measure used to assess current affect. Five items assess positive affect (PA) (e.g., excited, enthusiastic, determined) and five items assess negative affect (NA) (e.g., distressed, upset, nervous). Using the

Table I. Correlations Among Physical Health, Active and Passive Coping, Meaning-Based Coping and Psychosocial Functioning Variables ($N = 100$)

	Model variables										
Variable	1	2	3	4	5	6	7	8	9	10	11
PA	1.00										
NA	−0.14	1.00									
AU	0.27*	0.23*	1.00								
PR	0.19	0.27*	0.31**	1.00							
SA	0.28**	0.34**	0.57**	0.63**	1.00						
SF-36	0.11	0.02	−0.07	0.08	1.00						
PMI-A	0.36*	0.01	0.08	0.19	0.16	0.26*	1.00				
PMI-P	0.16	0.36**	0.11	0.09	0.35**	0.25*	0.05	1.00			
Pos Re	0.51**	−0.01	0.21*	0.37**	0.37**	−0.08	0.31**	−0.03	1.00		
RC–P	0.44**	−0.06	0.11	0.14	0.28**	0.06	0.35**	0.07	0.49**	1.00	
RC-N	0.04	0.52**	0.14	0.18	0.25*	0.16	0.02	0.16	0.11	−0.12	1.00

Note. AU : Autonomy, PR : Positive relations with others, SA : Self-acceptance, PA : Positive affect, NA : Negative affect, SF-36 : Medical Outcomes Study 36-Item Health Survey—Physical Functioning Subscale, PMI-A : Pain Management Inventory—Active, PMI-P : Pain Management Inventory—Passive, Pos Re : positive reappraisal, RC-P : Religious coping, positive, RC-N : Religious coping, negative

*$p < 0.05$; **$p < 0.01$.

PANAS-SF in an older sample, Kercher (1992) found high internal consistency (α's = 0.75 for PA and 0.81 for NA). Internal consistency in the present study was similar for PA (α = 0.73), but lower for NA ($\alpha = 0.67$). Means and SD's for positive and negative affect were 14.24 (SD = 4.93) and 21.61 (SD = 3.45), respectively.

Scales of Psychological Well-being—Short Form (PWB-SF; Ryff, 1989a, b)

The PWB-SF is a 54-item, self-report inventory that measures six aspects of psychological well-being (autonomy, environmental mastery, personal growth, purpose in life, self-acceptance, and positive relations with others) derived from the literature on lifespan development, mental health, and personal growth (Ryff, 1989a,b). For the purposes of this study, three of the six measures were administered (autonomy, self-acceptance, and positive relations with others). Data from a recent study employing three of the 9-item subscales (autonomy, self-acceptance, and positive relations) revealed acceptable internal consistency (α's = 0.70, 0.74, and 0.84, respectively) (Cordova *et al.*, 2001). In the present study, reliabilities for autonomy, self-acceptance, and positive relations were 0.67, 0.75, and 0.72, respectively. The means and SD's of these subscales were 44.49 (SD = 6.87), 42.65 (SD = 8.23), and 42.46 (SD = 5.62), respectively.

RESULTS

Correlations Among Model Variables

Gender was the only demographic variable that was significantly correlated with psychosocial functioning. Being female was associated with higher positive affect than being male ($r = 0.29$, $p < .05$). MMSE scores were unrelated to measures of positive psychosocial functioning, and no significant bivariate relationships were found between SF-36 scores and positive psychosocial functioning indices. In contrast, several significant correlations were found between coping variables and indices of psychosocial functioning (see Table I). For example, active coping was correlated with higher positive affect and positive social relations, whereas passive coping was associated with higher negative affect and self-acceptance. Among meaning-based coping variables, positive reappraisal correlated with higher positive affect, autonomy, positive social relations, and self-acceptance. Positive religious coping was associated with higher positive affect and self-acceptance, whereas negative religious coping was correlated with higher negative affect and lower self-acceptance. Significant correlations among positive psychosocial functioning measures were in the low to moderate range (r's = 0.23–0.63). Positive and negative affect scores were uncorrelated ($r = -0.14$).

Table II. Summary of Hierarchical Regression Analysis for PANAS-PA and PANAS-NA

Variable	β	sr^{2a}
Criterion variable = PANAS-PA		
Step 1		
$R^2 = 0.14$, $F(6, 75) = 2.05$, $p = 0.07$		
Covariates (age, gender, MMSE, months in facility, education, marital status)		
Step 2		
$\Delta R^2 = 0.03$, F change $(1, 74) = 2.93$, $p = 0.09$		
SF-36	0.14	0.03
Step 3		
$\Delta R^2 = 0.12$, F change $(2, 72) = 5.82$, $p < 0.01$		
PMI-active	0.39**	0.12
PMI-passive	0.05	0.00
Step 4		
$\Delta R^2 = 0.13$, F change $(3, 69) = 5.12$, $p < 0.01$		
COPE-PR	0.28*	0.09
RCOPE-positive	0.20	0.04
RCOPE-negative	0.06	0.01
Criterion variable = PANAS-NA		
Step 1		
$R^2 = 0.00$, $F(1, 83) = 0.015$ ns		
SF-36	0.01	0.00
Step 2		
$\Delta R^2 = 0.18$, F change $(2, 81) = 8.85$, $p < 0.01$		
PMI-active	−0.01	0.00
PMI-passive	0.44**	0.18
Step 3		
$\Delta R^2 = 0.22$, F change $(3, 78) = 9.35$, $p < 0.01$		
COPE-PR	0.10	0.01
RCOPE-positive	0.00	0.00
RCOPE-negative	0.48**	0.19

Note. PANAS : Positive and Negative Affect Schedule, SF-36 : Medical Outcomes Study 36-Item Health Survey—Physical functioning Subscale, PMI : Pain Management Inventory, COPE-PR : Cope Positive Reappraisal, RCOPE : Religious Coping

[a]Unique variance accounted for in the criterion variable

*$p < 0.05$; **$p < 0.01$.

Multiple Regression Analyses

A series of hierarchical multiple regression analyses were conducted to examine the independent contributions of meaning-based coping and active and passive coping to each psychosocial functioning variable. Covariates that could plausibly be associated with positive psychosocial functioning were considered in the analyses. These included marital status, age, gender, MMSE scores, education, and number of months residing in facility. Because, in the analysis of positive affect, covariates influenced the contributions of coping variables, the findings presented (Table II) controlled for the effects of covariates before testing model variables. In all other analyses, the findings presented did not control for covariates because they did not affect model outcomes. The hierarchical regression model tested the proposition that meaning-based coping would contribute unique variance to psychosocial functioning beyond the effects of active and passive coping and health functioning. In each analysis, health functioning was entered, followed by active and passive coping, and finally, by meaning-based coping variables.

Positive and Negative Affect

The results for positive and negative affect are presented in Table II. The complete set of predictors accounted for a significant (28%) proportion of the variance in PANAS-PA scores. After controlling for the contribution of covariates which approached significance ($p = .07$) on the first step of the

Table III. Summary of Hierarchical Regression Analysis for PWB-SF Positive Relations and PWB-SF Self-Acceptance

Variable	β	sr^{2a}
Criterion variable = PWB-SF positive relations		
Step 1		
$R^2 = 0.005$, $F(1,75) = .360$, ns		
SF-36	0.07	0.01
Step 2		
$\Delta R^2 = 0.08$, F change $(2, 73) = 3.05$, $p = 0.053$		
PMI-active	0.21	0.04
PMI-passive	−0.19	0.03
Step 3		
$\Delta R^2 = 0.11$, F change $(3, 70) = 3.03$, $p < 0.05$		
COPE-PR	0.36*	0.08
RCOPE-positive	−0.08	0.00
RCOPE-negative	−0.06	0.00
Criterion variable = PWB-SF self-acceptance		
Step 1		
$R^2 = 0.01$, $F(1, 76) = 0.735$, ns		
SF-36	0.10	0.01
Step 2		
$\Delta R^2 = 0.15$, F change $(2, 74) = 6.46$, $p < 0.01$		
PMI-active	0.05	0.00
PMI-passive	0.39*	0.14
Step 3		
$\Delta R^2 = 0.20$, F change $(3, 71) = 7.47$, $p < 0.01$		
COPE-PR	0.40*	0.11
RCOPE-positive	0.07	0.00
RCOPE-negative	−0.18	0.03

Note. PANAS = Positive and Negative Affect Schedule, SF-36 = Medical Outcomes Study 36-Item Health Survey—Physical functioning Subscale, PMI = Pain Management Inventory, COPE-PR = Cope Positive Reappraisal, RCOPE = Religious Coping

[a]Unique variance accounted for in the criterion variable.

analysis, physical functioning did not explain variation in positive affect. However, on the next two steps, the contributions of active and passive coping and meaning-based coping variables were significant. Of these variables, active coping and positive reappraisal were individually associated with positive affect. The results indicate that higher active coping and greater use of positive reappraisal were related to reports of higher positive affect. By itself, active coping was the most robust predictor, accounting for 12% unique variance in positive affect scores.

The regression model accounted for 40% of the variance in negative affect scores. Physical functioning did not contribute significantly to negative affect; however, on subsequent steps, active and passive coping and meaning-based coping were associated with negative affect. Higher passive coping and negative religious coping were associated with greater negative affect, accounting for 18 and 19% of the variance, respectively, in negative affect scores.

Positive Social Relations

Table III indicates that the complete set of predictor variables accounted for 18.7% of the variance in positive social relations scores. Physical functioning did not contribute significant variance to positive social relations; however, high active and low passive coping approached significance, and the set of meaning based coping variables accounted for a significant increment in variance. Positive reappraisal was the only variable that was uniquely associated with positive social relations. Higher positive reappraisal accounted for 8% of the variance in positive social relations scores.

Self-Acceptance

The regression model (Table III) accounted for 35.9% of the variance in self-acceptance scores. Although physical functioning was not associated with self-acceptance, active and passive coping and meaning-based coping contributed unique variability to self-acceptance scores. Higher passive coping and positive reappraisal were individually associated with higher self-acceptance, accounting for 14 and 11% unique variance, respectively, in self-acceptance.

Autonomy

The regression equation ($F[6,78] = 1.19$, ns) did not account for significant variability in autonomy, and no individual predictors of autonomy were identified.

DISCUSSION

This research examined a model in which health functioning, active and passive coping, and meaning-based coping were hypothesized to contribute uniquely to positive psychosocial functioning in a sample of elderly persons in residential care facilities. Results indicated that health functioning was not independently associated with measures of positive psychosocial functioning, while active and passive coping and meaning-based coping played significant roles in these outcomes.

Although declines in functional skills are associated with aging and are commonly found in the very elderly (e.g., Aldwin, 1992; Felton and Revenson, 1987), it is noteworthy that better health functioning did not contribute to positive psychological well being in this research. Although better health functioning was correlated with greater positive affect, SF-36 physical functioning scores had no unique relationship with any criterion of positive psychosocial functioning in this sample of elderly individuals. Although there is an absence of research evaluating the relationship between health status and indices of positive functioning in very elderly persons, other researchers (e.g., Aldwin and Brustrom, 1997; Costa and McCRae, 1993) have noted that the aging process may be associated with positive psychological well-being despite the advent of ongoing stressors and health problems. Other factors may thus play more influential roles in the psychosocial adjustment of these individuals.

Importantly, this research has provided clear evidence on the role of coping processes in explaining positive well-being in the elderly. Previous qualitative research (e.g., Bickerstaff *et al.*, 2003; Evans *et al.*, 2004; Groger, 2002) has illustrated the use of a wide range of coping strategies used by elderly persons in their adjustment to residential living; however, statistical relationships between coping and adjustment parameters have not been reported. In advancing this field of inquiry, this study demonstrated several significant, quantitative relationships between specific coping strategies and

adjustment indices. However, the significance of coping varied across positive psychosocial functioning outcomes. For example, coping processes accounted for larger proportions of the variance in positive affect, negative affect, and self-acceptance than in positive social relations. The regression model did not predict autonomy, indicating that neither health-related coping nor meaning-based coping strategies were associated with perceptions of control and mastery in the lives of study participants.

This research also demonstrated significant associations between active and passive coping and measures of positive psychosocial functioning For example, higher active coping was related to higher positive affect, whereas greater passive coping was related to higher negative affect and self-acceptance. In addition, regression analyses revealed a trend suggestive of the contributions of active and passive coping to positive social relations. The findings on passive coping are consistent with research that has demonstrated an association between passive coping, disability, and depression in chronic pain populations (e.g., Brown and Nicassio, 1987, Nicassio *et al.*, 1995; Smith and Wallston, 1992). However, this research also indicates that active coping may be more important in explaining positive emotional adjustment, an important finding in view of previous research that has shown marginal relationships between active coping, depression, and negative health outcomes in chronic illness populations (Brown and Nicassio, 1987; Nicassio *et al.*, 1995).

As predicted, meaning-based coping variables contributed uniquely to several indices of positive psychosocial functioning after controlling for the roles of active and passive coping. Positive reappraisal was the most robust and consistent correlate of adjustment. The data showed that higher positive reappraisal was associated with greater positive affect, better social relations, and greater self-acceptance, and thus contributed to a more pervasive sense of well-being in this group. The adaptive nature of positive reappraisal has been documented in studies of other populations that have undergone trauma or have faced medical conditions that have been life-threatening or difficult to control (e.g., Affleck and Tennen, 1996; Davis *et al.*, 1998; Folkman, 1997). As with these other populations, elderly persons may find benefit from being able to reinterpret their experiences in a positive manner and by trying to grow as individuals despite confronting the hardships of declining health and residential living.

In contrast, religious coping did not prove to be an important factor in explaining positive psychosocial functioning. Although negative religious coping contributed to greater negative affect, a result consistent with other previously reported research (Pargament *et al.*, 2004); positive religious coping was not independently associated with positive well-being. Positive religious coping was correlated with positive affect and self-acceptance, however, regression analyses revealed that positive religious coping did not contribute variance to these outcomes when it competed with positive reappraisal. Although it is unclear why positive religious coping was not associated with psychosocial functioning in this sample, other investigations that have found positive relationships between positive religious coping and beneficial health outcomes have included persons of less advanced age, in other kinds of residential environments, and in other geographical areas (Folkman, 1997; McFadden, 1995; Pargament *et al.*, 2004) than the individuals in this research. Thus, religious coping processes may not be as salient to positive well-being in this group as the ability to reappraise difficult circumstances. Further research on the contribution of religious coping in the very elderly would clarify the significance and generalizability of these findings.

In summary, this research has highlighted important relationships between coping processes and indices of positive well being in a sample of elderly individuals living in residential care facilities. A great need exists for future research that would extend the findings from the present study and address certain methodological limitations that were encountered in this study. First, it is important to recognize that, due to the cross-sectional nature of the study, it was not possible to ascertain the directional relationship between coping and adjustment. Longitudinal research is needed to determine the prospective relationship between coping processes and psychosocial functioning, a pivotal question given the importance of knowing whether the development of adaptive coping strategies would contribute to salutary health and psychological outcomes in a growing elderly population. Furthermore, the use of ecological momentary assessment methodology (Tennen *et al.*, 2000) could be adopted to examine the dynamic relationship between coping and well-being in elderly individuals on a day-to-day basis. Another limitation of the present study was a reliance on self-report measures, which raises a concern that common method variance could have contributed to some of the associations between coping variables and positive

psychosocial functioning outcomes. To address this issue, future research would be improved by incorporating observational measures of adjustment and health functioning that would objectify the assessment of well-being and reduce the burden and biases attendant to lengthy self-report assessments. It would then be possible to determine the convergence between self-report and independent measures of psychological well-being.

The plight of older adults in long-term residential care poses significant challenges and obstacles to achieving optimal psychosocial adjustment. The continued quest for identifying coping strategies that enhance the well-being of such persons may reveal certain principles of adjustment that may hold relevance for other significantly challenged populations. In addition, this type of research may also inform the development of intervention strategies to maximize positive mental and physical health outcomes in such groups.

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