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Patterns of Positive and Negative Religious Coping with Major Life Stressors

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This study attempted to identify positive and negative patterns of religious coping methods, develop a brief measure of these religious coping patterns, and examine their implications for health and adjustment. Through exploratory and confirmatory factor analyses, positive and negative religious coping patterns were identified in samples of people coping with the Oklahoma City bombing, college students coping with major life stressors, and elderly hospitalized patients coping with serious medical illnesses. A 14-item measure of positive and negative patterns of religious coping methods (Brief RCOPE) was constructed. The positive pattern consisted of religious forgiveness, seeking spiritual support, collaborative religious coping, spiritual connection, religious purification, and benevolent religious reappraisal. The negative pattern was defined by spiritual discontent, punishing God reappraisals, interpersonal religious discontent, demonic reappraisal, and reappraisal of God's powers. As predicted, people made more use of the positive than the negative religious coping methods. Furthermore, the two patterns had different implications for health and adjustment. The Brief RCOPE offers an efficient, theoretically meaningful way to integrate religious dimensions into models and studies of stress, coping, and health.

There is a growing body of research on religious coping with major life events and its implications for health (e.g., Hood, Spilka, Hunsberger, and Gorsuch 1996; Koenig 1994; Pargament 1997). Empirical studies indicate that religious coping is commonly used by many groups in times of stress, particularly the most disenfranchised in society (e.g., Ferraro and Koch 1994; Koenig et al. 1992; McRae 1984). Religious coping has been associated with the health and mental health-related outcomes of a wide variety of critical life situations, such as illness (e.g., Koenig et al. 1995; Oxman et al. 1995; Tix and Frazier 1998), victimization (Thompson and Vardaman 1997), war (Pargament et al. 1994), and the death of a loved one (e.g., McIntosh, Silver, and Wortman 1993; Park and Cohen 1993).

Methods of religious coping add unique variance to the prediction of health and well-being above and beyond the effects of measures of nonreligious coping (see Pargament 1997 for a review). Thus, religious coping cannot be "reduced" to nonreligious forms of coping. Religious coping measures are also stronger predictors of outcomes of stressful situations

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than traditional, generic measures of religiousness (e.g., frequency of prayer, frequency of attendance, religious salience). Pargament (1997) concludes his review of this literature with the suggestion that religious coping methods mediate the relationships between an individual's general religious orientation and the outcomes of major life events. In the face of a stressful life event, he asserts, general religious beliefs and practices have to be translated into specific forms of coping; it is these specific coping methods that appear to have the most direct implications for the individual's health in stressful times. Thus, the study of religious coping seems to be a promising research direction. This area of research, however, is still in its early stages.

One approach to the study of this topic has been to focus on a few forms of religious coping in detail. Religious coping (like religion more generally) is multidimensional. It is designed to assist people in the search for a variety of significant ends in stressful times: a sense of meaning and purpose, emotional comfort, personal control, intimacy with others, physical health, or spirituality (e.g., Ellison 1994; Spilka, Shaver, and Kirkpatrick 1985; Pargament 1992; Pargament 1995). The religions of the world provide their adherents with a variety of mechanisms for conserving these "objects of significance" in times of stress or transforming them when conservation may no longer be possible (Pargament 1996). A number of religious coping methods have been identified (see Table 1), and several scales have been developed to measure specific forms of religious coping (e.g., Pargament et al. 1988; Pargament et al. 1990).

TABLE 1

ILLUSTRATIVE METHODS OF RELIGIOUS COPING

Benevolent Religious Reappraisal: Redefining the stressor through religion as benevolent and potentially beneficial.
Punishing God Reappraisal: Redefining the stressor as a punishment from God for the individual's sins.
Demonic Reappraisal: Redefining the stressor as the act of the Devil.
Reappraisal of God's Powers: Redefining God's powers to influence the stressful situation.
Collaborative Religious Coping: Seeking control through a partnership with God in problem solving.
Deferring Religious Coping: Passively waiting for God to control the situation.
Self-Directing Religious Coping: Seeking control through individual initiative rather than help from God.
Religious Focus: Seeking relief from the stressor through a focus on religion.
Seeking Spiritual Support: Searching for comfort and reassurance through God's love and care.
Religious Purification: Searching for spiritual cleansing through religious actions.
Spiritual Connection: Seeking a sense of connectedness with transcendent forces.
Spiritual Discontent: Expressions of confusion and dissatisfaction with God.
Seeking Support from Clergy or Members: Searching for comfort and reassurance through the love and care of congregation members and clergy.
Religious Helping: Attempting to provide spiritual support and comfort to others.
Interpersonal Religious Discontent: Expressions of confusion and dissatisfaction with clergy or members.
Religious Forgiving: Looking to religion for help in letting go of anger, hurt, and fear associated with an offense.

Investigators have begun to examine particular methods of religious coping in more detail. These coping methods include forgiveness (Freedman and Enright 1996; McCullough, Worthington, and Rachal 1997), purification and confession (Pennebaker and Beall 1986), spiritual support (Maton 1989), religious appraisals (Mickley, Pargament, Brant, and Hipp in press), conversion (Zinnbauer and Pargament 1998), and religious approaches to control. Different forms of religious coping, it appears, have different implications for adjustment to critical life events. For example, collaborative religious coping has been associated with better physical and mental health (Hathaway and Pargament 1992; McIntosh and Spilka 1990; Pargament, Kennell, Hathaway, Grevengoed, Newman, and Jones 1988). In contrast, self-directing and deferring religious coping have demonstrated

mixed health correlates, with some research suggesting that the value of these methods is tied to the controllability of the life stressor (Bickel et al. 1998).

Even though there is clear evidence of multidimensionality in religious coping, it is important to note that several religious coping methods are moderately intercorrelated (e.g., Pargament et al. 1990). These intercorrelations suggest that people do not make use of religious coping methods singly. Rather they apply them in some combination with each other. For instance, in a factor analytic study, Boudreaux, Catz, Ryan, Amaral-Melendez, and Brantley (1995) distinguished between personally oriented and institutionally oriented combinations of religious coping methods.

The study of *patterns* of religious coping represents another approach to religious coping. Rather than focus on one method of religious coping in detail, the focus widens to include several methods of religious coping and their patterns of interrelationship. Breadth rather than depth is the approach to measurement and analysis here. This approach offers an economical way to measure a range of religious coping methods, one that may help to integrate the study of religious coping within mainstream theory and research in the social and health sciences.

In this study, we attempted to identify as efficiently as possible two patterns of religious coping with potentially important implications for health: positive and negative religious coping. The pattern of positive religious coping methods, we assumed, is an expression of a sense of spirituality, a secure relationship with God, a belief that there is meaning to be found in life, and a sense of spiritual connectedness with others. We expected that several forms of religious coping would be a part of this pattern: benevolent religious reappraisals, collaborative religious coping, seeking spiritual support, spiritual connection, religious purification, seeking help from clergy or members, religious helping, and religious forgiveness. In contrast, we believed that the negative religious coping pattern is an expression of a less secure relationship with God, a tenuous and ominous view of the world, and a religious struggle in the search for significance. This pattern, we believed, would be defined by a very different set of religious coping methods: punitive religious reappraisals, demonic religious reappraisals, reappraisals of God's powers, spiritual discontent, self-directing religious coping, and interpersonal religious discontent (see Pargament, Zinnbauer, Scott, Butter, Zerowin, and Stanik 1998).

The religious coping literature indicates people are far more likely to see God and their congregation as a source of love and support than as a source of pain and punishment (e.g., Croog and Levine 1972; Bearon and Koenig 1990). On the basis of this literature, we predicted greater use of the pattern of positive religious coping methods than the pattern of negative religious coping methods. Religious coping studies have also suggested that the positive and negative religious coping methods are associated with lower and higher levels of distress respectively (see Pargament 1997 for a review). Drawing from this research, we predicted that higher scores on the positive pattern of religious coping methods would be tied to better health-related outcomes to stressful life situations. We also predicted that higher scores on the negative pattern of religious coping methods would be associated with poorer health-related outcomes to life stressors.

METHODS

Participants and Procedures

Three diverse samples coping with diverse life stressors were examined in this study.

Oklahoma City sample. Participants in the study (N = 296) were members of two churches in Oklahoma City at the time of the bombing of the federal building. Question-

naires were distributed by mail to adult members of the two churches. Completed surveys were returned by mail to the researchers.

Approximately 72% of the participants were Baptists and 27% belonged to the Disciples of Christ. The sample was primarily white (97%), female (63%), and married (59%). The average age of participants was 59.3 years and 88% had at least some college education. Approximately 26% of the participants either felt, saw, or heard the blast, and 12% were in a building directly affected by the bomb. Also, most people reported that they knew at least one person who had been injured or killed in the bombing.

College sample. A total of 540 college students who experienced a serious negative event (e.g., death of friend or family member, problems with romantic relationships) during the last three years completed the study. Questionnaires were distributed to interested students during lectures in introductory psychology classes. They participated voluntarily and received extra credit towards their course grade for participating.

The sample was primarily white (92%), single (99%), and female (69%). The average age of participants was 19.0 years and most were college freshmen (70%). The sample was primarily Catholic (45%) and Protestant (41%).

Hospital sample. A total of 551 participants coping with medical illness were recruited from general medical patients over the age of 55 admitted to two participating hospitals. Patients were screened in their hospital rooms by research assistants to determine their eligibility for the study and those who consented to participate were interviewed in their rooms. Some patients were excluded for medical reasons as well as practical constraints. The overall response rate was 75%.

The majority of patients had at least a moderately severe medical illness (71%), and 63% had at least five active medical diagnoses at the time of admission (M = 5.30). Fifty-two percent (52%) of the sample was male, 62% were white, and the average age of patients was 68.4 years (range = 55 to 97). Seventy-two percent (72%) had at least a high school education.

Measures

Oklahoma City sample. The survey instrument completed by participants assessed demographic information, religious involvement before the bombing, and the respondents' exposure to the bombing (e.g., Were you injured by the bomb? Have you been to the bomb site since the blast? How many family members or friends do you know who were injured or killed by the bomb?).

At the time of the bombing, we were still in the process of developing both comprehensive and brief measures of religious coping. Thus, we quickly assembled a preliminary form of a brief measure of religious coping (Brief RCOPE) consisting of 34 items designed to measure a wide range of positive and negative religious coping methods. No single religious method of coping was assessed in detail. As noted earlier, breadth rather than depth was our goal here. Whenever possible items were drawn or adapted from prior studies and validated measures of religious coping. We also tried to develop items that were linked to self-descriptions of coping in critical life situations. Respondents indicated the extent to which they used particular religious methods of coping with the bombing on a four-point Likert scale ranging from 0 "not at all" to 3 "a great deal". The wording of many of the items was tailored to the bombing (e.g., Prayed for the spiritual salvation of those who committed this bombing).

Health-related outcomes were assessed by a variety of measures. Participants completed a measure of symptoms of Post-Traumatic Stress Disorder (PTSD) (Foa, Riggs, Dancu, and Rothbaum 1993). Park, Cohen, and Murch's (1996) measure of Stress-Related Growth was used to assess the potentially positive outcomes of negative life events. A

measure of Religious Outcome was used to assess the extent to which participants experienced positive religious changes, such as growing closer to God or the church, as a result of coping with the bombing (Pargament et al. 1990). Finally, a brief measure of Callousness developed for this study was used to assess the degree to which participants expressed insensitivity to the distress of others. Estimates of internal consistency for these scales are presented in Table 2.

TABLE 2

DESCRIPTIVE STATISTICS AND CORRELATIONS FOR OKLAHOMA CITY SAMPLE

		Mean	s.d.	1	2	3	4	5	6
1	Positive Relig. Coping	1.55	.67	*.87*[†]					
2	Negative Relig. Coping	.08	.24	.03	*.78*				
3	PTSD	6.09	7.51	.24***	.39***	*.91*			
4	Callousness	.34	.84	.08	.36***	.29***	*.64*		
5	Stress-Related Growth	10.43	8.31	.60***	.20***	.35***	.30***	*.95*	
6	Relig. Outcome	2.95	2.05	.58***	.09	.30***	.16**	.81***	*.87*

[†] Alphas are printed in italics on diagonal of correlation matrix.

College sample. Participants responded to several demographic questions and questions about the negative life event they had experienced. They then completed the newly developed RCOPE to assess the degree to which various types of religious coping were involved in dealing with the serious negative event. The RCOPE is a comprehensive, functionally oriented measure of religious coping (Koenig, Pargament, and Nielsen in press; Pargament, Koenig, and Perez 1998). Each of the 21 subscales of the RCOPE consists of five items; participants indicated the extent to which they used particular religious methods of coping with the negative event on a four-point Likert scale ranging from 0 "not at all" to 3 "a great deal". A shorter, revised version of the Brief RCOPE was constructed from the items of the RCOPE to assess positive and negative religious coping methods (see Results).

In addition, several measures of physical health, mental health, and religious outcomes were used. Physical Health was assessed by a measure of physical symptoms developed by Moos et. al. (1986). Psychosomatic symptomatology was assessed with the General Health Questionnaire (GHQ) (Goldberg 1978). Emotional Distress was assessed with two items to which the respondent indicated the amount of emotional distress that they experienced immediately following the event, and the amount of distress they were currently experiencing. Stress-Related Growth (Park, et al. 1996) and Religious Outcome (Pargament et al. 1990) were also assessed in this study. Estimates of internal consistency for these scales are presented in Table 3.

TABLE 3

DESCRIPTIVE STATISTICS AND CORRELATIONS FOR COLLEGE STUDENT SAMPLE

		Mean	s.d.	1	2	3	4	5	6	7	8
1	Positive Relig. Coping	1.30	.81	*.90*[†]							
2	Negative Relig. Coping	.43	.52	.17***	*.81*						
3	Emot. Distress 1	8.30	1.98	.04	.00						
4	Emot. Distress 2	3.75	2.58	.01	.18***	.32**					
5	Stress-Related Growth	18.41	7.47	.38***	.13**	.16**	.10*	*.90*			
6	Physical Health	18.61	3.01	.02	-.14**	-.22**	-.24**	-.11**	*.78*		
7	GHQ	30.37	6.06	-.10*	.13**	.11*	.32**	-.22**	-.27**	*.86*	
8	Relig. Outcome	2.86	2.01	.73***	.06	.12**	.00	.48**	-.02	-.18**	*.85*

[†] Alphas are printed in italics on diagonal of correlation matrix.

Hospital sample. Participants responded to demographic questions, and measures of religious coping and health outcomes. A 3 item per scale version of the RCOPE assessed the degree to which patients made use of various religious methods of coping with their illnesses. The same Brief RCOPE items, used in the college sample and derived from the RCOPE, were used in the sample of patients (see Results).

A variety of physical health outcomes were assessed: the number of active medical diagnoses (ICD 1989), a rating of illness severity (ASA 1963), patients' ratings of Subjective Health (Maddox et al. 1973), the patient's Functional Status (difficulties in the independent performance of several activities of daily living or ADLs) (Fillenbaum 1985; Katz et al. 1963) and cognitive functioning through a version of the Mini-Mental State Exam (MMSE) modified specifically for use in older, medically ill hospital patients (Koenig 1996).

Several mental health outcomes were also assessed: Depression (Koenig et al. 1995), Quality of Life (Spitzer et al. 1981), Stress-Related Growth, (Park et al. 1996), Cooperativeness, and Religious Outcome (Pargament et al. 1990). Estimates of internal consistency for these scales are presented in Table 4.

RESULTS

Oklahoma City Study

Development of preliminary Brief RCOPE. An exploratory factor analysis (principal components with oblimin rotation) was conducted and constrained to create a two-factor solution which was expected to capture positive and negative patterns of religious coping. A two-factor solution was obtained which accounted for approximately 33% of the variance. The two factors appeared to differentiate clearly between positive and negative items.

A total of 21 items (12 positive religious coping and 9 negative religious coping) were selected that had high factor loadings (> .50) and that did not load highly on the opposite factor (<.20). These items are presented in Table 5. The responses to the items that defined each factor were summed to create positive and negative religious coping scales.

Internal consistency and descriptive statistics. Both scales of the preliminary Brief RCOPE had moderately high internal consistency for this sample (.87 and .78 for the positive and negative scales, respectively). Descriptive statistics were computed and are presented in Table 2. These results indicate higher average item means and greater variance for the positive religious coping scale than for the negative scale ($t(295) = 35.92$, $p < 001$).

Correlational results. Correlations between the positive and negative religious coping scales and measures of adjustment are presented in Table 2. The positive and negative religious coping scales were uncorrelated in this sample ($r = .03$) indicating that they are measuring distinctive patterns of religious coping. The positive and negative religious coping scales were also differentially correlated with some measures of adjustment. Greater use of positive religious coping was strongly associated with higher levels of stress-related growth, more positive religious outcomes, and slightly related to more PTSD symptoms. Positive religious coping was not significantly related to callousness. Greater use of negative religious coping was associated with more PTSD symptoms, higher levels of callousness, and slightly tied to stress-related growth. Negative religious coping was not related to religious outcome.

College Student Study

Development of Brief RCOPE. The results of the initial study of positive and negative religious coping patterns were encouraging. Rather than proceed further with this prelimi

TABLE 4

DESCRIPTIVE STATISTICS AND CORRELATIONS FOR HOSPITAL SAMPLE

	Mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12
1 Positive Relig. Coping[a]	2.15	.87	*.87*[†]											
2 Negative Relig. Coping[a]	.37	.50	.18***	*.69*										
3 Number of Med. Diagnoses	5.30	2.16	.12**	.16***										
4 Illness Severity	2.77	.74	.03	.08	.33***									
5 Functional Status	32.29	5.36	.09*	.17***	-.60***	-.41***	*.92*							
6 Cognitive Status	14.97	2.95	-.18***	-.19***	-.19***	-.23***	.28***							
7 Subjective Health	1.89	.79	-.07	-.15***	-.23***	-.33***	.36***	.04						
8 Cooperative	3.97	1.02	.27***	-.02	.00	-.05	.05	.17***	.01					
9 Stress-Related Growth	21.69	7.48	.56***	.12**	.12**	.04	-.05	-.08	-.07	.26***	*.92*			
10 Depression	15.09	2.71	-.04	.31***	.25***	.25***	-.32***	-.11*	-.32***	-.13**	-.01	*.74*		
11 Quality of Life	6.34	2.06	.02	-.27***	-.36***	-.64***	.75***	.26***	.39***	.22***	.02	-.51***	*.72*	
12 Relig. Outcome	11.76	3.01	.69***	.10*	.14***	.08	-.07	-.20***	-.06	.22***	.52***	-.11**	.06	

[†] Alphas are printed in italics on diagonal of correlation matrix.

[a] Means for positive and negative coping are average item mean scores.

nary Brief RCOPE, however, we decided to develop a shorter form of an instrument drawn from the more comprehensive, theoretically based RCOPE. The nesting of a revised Brief RCOPE in the larger measure would also allow researchers using the RCOPE to study positive and negative patterns of religious coping as well as more specific methods of religious coping.

TABLE 5

BRIEF RCOPE ITEMS AND FACTOR LOADINGS FOR OKLAHOMA CITY STUDY

Item No.	Item	Positive Religious Coping	Negative Religious Coping
1	Thought about how my life is part of a larger spiritual force.	.782	-.064
2	Worked together with God as partners to get through this hard time.	.782	-.084
3	Looked to God for strength, support, and guidance in this crisis.	.756	-.097
4	Thought about sacrificing my own well-being and living only for God.	.666	.133
5	Tried to find the lesson from God in this crisis.	.647	-.078
6	Prayed for those who were killed in the bombing and for the well-being of their families and friends	.641	-.152
7	Looked for spiritual support from my church in this crisis.	.640	-.092
8	Tried to give spiritual strength to other people.	.609	-.182
9	Confessed my sins and asked for God's forgiveness.	.598	-.039
10	Asked God to help me find a new purpose in living.	.554	.059
11	Reminded myself that the victims of the bombing are now at peace with God in heaven.	.551	.090
12	Prayed for the spiritual salvation of those who committed the bombing.	.529	.126
13	Disagreed with the way my church wanted me to understand and handle this situation.	-.051	.828
14	Felt that the bombing was God's way of punishing me for my sins and lack of spirituality.	.004	.772
15	Wondered whether God had abandoned us.	-.008	.714
16	Felt that God was punishing the victims of the bombing for their sins and lack of spirituality.	-.054	.712
17	Tried to make sense of the situation and decide what to do. without relying on God	-.130	.696
18	Questioned whether God really exists.	-.102	.599
19	Prayed to God to send those who were responsible for the bombing to Hell.	.045	.565
20	Expressed anger at God for letting such a terrible thing happen.	-.016	.539
21	Thought about turning away from God and living for myself alone.	-.109	.510

As a first step in the development of the Brief RCOPE, the full RCOPE was factor analyzed. Because we believed that most of the items from the different subscales could be classified as either positive or negative methods of religious coping, an exploratory factor analysis was conducted (using principal factors extraction and oblimin rotation) with the solution constrained to generate only two factors. An acceptable solution was obtained using this approach with the two factors accounting for 38% of the variance. Examination of item content revealed that the two factors did appear to measure positive and negative patterns of religious coping.

Next, general positive and negative religious coping scales were formed by selecting a subset of items from each of the two factors. Several criteria were used for item selection: items with the largest factor loadings, items that loaded clearly on only one factor, items from a variety of subscales, items that were also available in the hospital sample, and the need for economy in measurement. Ultimately, seven items were selected for each scale. These items are listed in Table 6.

Internal consistency and descriptive statistics. Cronbach's coefficient alpha was estimated for each scale and both scales had high internal consistency for this sample. Internal consistency estimates were .90 and .81 for the positive and negative scales, respec

TABLE 6

BRIEF RCOPE ITEMS AND CONFIRMATORY FACTOR ANALYSIS FOR COLLEGE STUDENT AND HOSPITAL SAMPLES

Item No.	Item	College Students		Hospital Patients	
		Positive Religious Coping	Negative Religious Coping	Positive Religious Coping	Negative Religious Coping
1	Looked for a stronger connection with God. (Spiritual Connection)	1.000	0.000	1.000	0.000
2	Sought God's love and care. (Seeking Spiritual Support)	1.053	-.270	.815	-.024
3	Sought help from God in letting go of my anger. (Religious Forgiveness)	.918	.010	.936	.171
4	Tried to put my plans into action together with God. (Collaborative Religious Coping)	.765	.134	1.035	-.256
5	Tried to see how God might be trying to strengthen me in this situation. (Benevolent Religious Reappraisal)	.848	-.095	1.122	-.190
6	Asked forgiveness for my sins. (Religious Purification)	.847	.292	.836	.192
7	Focused on religion to stop worrying about my problems. (Religious Focus)	.620	.029	.900	.169
8	Wondered whether God had abandoned me. (Spiritual Discontent)	0.000	1.000	0.000	1.000
9	Felt punished by God for my lack of devotion. (Punishing God Reappraisal)	-.003	.981	.092	1.367
10	Wondered what I did for God to punish me. (Punishing God Reappraisal)	-.022	1.045	.094	1.733
11	Questioned God's love for me. (Spiritual Discontent)	-.101	1.018	-.081	.925
12	Wondered whether my church had abandoned me. (Interpersonal Religious Discontent)	.005	.364	.043	.307
13	Decided the devil made this happen. (Demonic Reappraisal)	.126	.317	.297	.781
14	Questioned the power of God. (Reappraisal of God's Power)	-.133	.780	-.065	.343

tively. Because the scales were found to be internally consistent, responses were summed and averaged across items to produce average item scale scores. Descriptive statistics were computed and are presented in Table 3. Like the results from Oklahoma City, these results indicate higher average item means and greater variance for the positive religious coping scale than for the negative scale ($t(526) = 22.42, p < .001$).

Confirmatory Factor Analysis Results. A confirmatory factor analysis (CFA) of the 14 items from the two scales was conducted using LISREL VII (Joreskog and Sorbom 1989). These results are presented in Table 6. A two-factor solution was examined with each item allowed to load on both factors. Results indicated that the two-factor solution is a reasonable fit for the data. First, although items were allowed to load on both factors, the pattern of relationships in the lambda-x matrix shows a clear differentiation between the two factors. Second, several indices of model fit are at least moderately supportive of the model. Although the chi-square test was significant ($\chi^2 = 210.77$, df = 64, $p < .001$) this may have been influenced by the large sample size. The goodness of fit indices were acceptable: the GFI for this solution was .945 (values greater than .9 are considered acceptable); DELTA2 and RNI were both .954 (values approaching 1 are considered good), and; the root mean square error of approximation (RMSEA) was .066 (values less than .05 are considered good while values less than .08 are considered reasonable) (Gerbing and Anderson 1992).

Correlational results. Correlations between the positive and negative religious coping scales and measures of health and adjustment were computed and are presented in Table 3. The positive and negative religious coping scales were significantly and positively correlated with each other ($r = .17$, $p < .001$). Although significant, this correlation is relatively low, and therefore, supports the distinctiveness of the two scales. Furthermore, the two scales exhibited very different patterns of correlations with other measures.

Greater use of positive religious coping was slightly related to lower levels of psychosomatic symptomatology (GHQ scores), moderately tied to greater stress-related growth, and strongly tied to better religious outcome. Positive religious coping was not related to emotional distress or physical health. Greater use of negative religious coping was slightly related to higher current levels of emotional distress, poorer physical health, higher levels of psychosomatic symptomatology, and stress-related growth. Negative religious coping was not related to religious outcome or emotional distress experienced at the time of the event.

Hospital Study

Brief RCOPE items. The positive and negative Brief RCOPE scales created with the college student sample were also used with the hospital sample.

Internal consistency and descriptive statistics. Cronbach's coefficient alpha was estimated at .87 and .69 for the positive and negative scales, respectively. Again, the scales were found to be internally consistent, and therefore, responses were summed across items and averaged to produce average item scale scores. Descriptive statistics and are presented in Table 4. Like the other two samples, results indicate much higher average item means and greater variance for the positive religious coping scale than for the negative scale ($t(543) = 45.04, p < .001$).

Confirmatory factor analysis results. Replication of CFA results in a second sample provides strong evidence of the generalizability and stability of the factor structure. Therefore, the Brief RCOPE items were subjected to a second CFA using the hospital patients' data. These results are provided in Table 6. Again, a two-factor solution was examined with each item allowed to load on both factors. Results were highly similar to those obtained in the college student sample. Again, the pattern of loadings clearly shows two separate factors and indices of model fit are moderately supportive of the two-factor model. A significant chi-square value was obtained ($\chi^2 = 263.30$, 64 df, $p < .001$), although once again the sample

size was large enough to have influenced this statistic. Values for the other fit indices were acceptable and also very similar to the results of the college sample (GFI = .934, DELTA2 = .921, RNI = .920, and RMSEA = .076).

Correlational results. Correlations between positive and negative religious coping scales and measures of health and adjustment are presented in Table 4. The positive and negative scales were significantly and positively correlated ($r = .18$, $p < .001$), although the correlation is relatively small. Again, the two scales have different patterns of relationships with the criteria, particularly the measures of mental health.

- *Physical health outcomes.* Greater use of positive religious coping was slightly related to more medical diagnoses, poorer functional status, and poorer cognitive status. Positive religious coping was not related to illness severity or subjective health status. Small but significant associations were found between greater use of negative religious coping and more medical diagnoses, poorer functional status, poorer subjective health status, and poorer cognitive status. Negative religious coping was not related to illness severity.
- *Mental health outcomes.* Greater use of positive religious coping was moderately associated with greater cooperativeness, and strongly tied to higher levels of stress-related growth, and more positive religious outcomes. Positive religious coping was not related to depression or quality of life. Greater use of negative religious coping was moderately related to higher levels of depression and lower quality of life, and slightly associated with higher levels of stress-related growth, and more positive religious outcomes. Negative religious coping was not related to cooperativeness.

Discussion

This study attempted to identify positive and negative patterns of religious coping, develop a brief measure of these religious coping patterns, and examine their implications for health and adjustment. The results were quite encouraging. Through exploratory and confirmatory factor analyses, we were able to identify positive and negative religious coping patterns. The generalizability of these patterns across three different groups of people confronting quite different life stressors is particularly noteworthy. The positive pattern consisted of several religious coping methods: seeking spiritual support, religious forgiveness, collaborative religious coping, spiritual connection, religious purification, benevolent religious reappraisal and religious focus. The negative pattern was defined by a different set of religious coping methods: spiritual discontent, punishing God reappraisals, interpersonal religious discontent, demonic reappraisal, and reappraisal of God's powers. Thus, people appear to use various methods of religious coping in combination with each other; that is, they apply different configurations of religious thought, feeling, behavior, and relationships in their efforts to deal with major life stressors.

As predicted, the participants in each of the three samples made considerably more use of positive than negative religious coping methods. More often than not, people draw on religious approaches that appear to be reflective of a secure relationship with God, a sense of spirituality, and a trustworthy worldview. However, the positive pattern of religious coping did not tell "the full story." Negative religious coping methods were also used by participants, albeit much less frequently. These methods of coping are expressions of a different religious orientation; one involving a tenuous relationship with God, spiritual struggle, and a threatening view of the world. Much of the emerging literature on religious coping has focused on "positive" methods (e.g., Boudreaux et al. 1995; Carver, Scheier, and Weintraub 1989). Negative religious coping methods, however, deserve attention as well, for they have their own distinctive health-related implications (see also Pargament et al. 1998).

The positive and negative religious coping patterns were associated with different

outcomes, particularly in the realm of mental health. Generally, the positive religious coping pattern was tied to benevolent outcomes, including fewer symptoms of psychological distress, reports of psychological and spiritual growth as a result of the stressor, and interviewer ratings of greater cooperativeness. In contrast, the negative religious coping pattern was associated with signs of emotional distress, such as depression, poorer quality of life, psychological symptoms, and callousness towards others. Religion, these findings suggest, can be a source of distress as well as a source of solutions in coping.

One finding, however, was unexpected. Several indicators of poorer physical health (e.g., number of medical diagnoses, functional status, cognitive status, PTSD) were associated with higher levels of both positive and negative religious coping. We should not exclude the possibility that some forms of religious coping contribute to poorer physical health. However, it is difficult to imagine a mechanism through which these methods of religious coping increase the number of serious medical diagnoses and decrease cognitive status, as was found in the sample of elderly, medically ill people. A more likely explanation of this finding is that poor physical health represents a stressor that mobilizes higher levels of positive and negative religious coping. Other researchers have also found that people report higher levels of religious coping in response to medical illnesses than many other problems (e.g., Ellison and Taylor 1996; Mattlin, Wethington, and Kessler 1990). Longitudinal studies are needed to tease out the "religious coping mobilization" effects from the direct effects of religious coping on health.

The Brief RCOPE showed promise as a measure of positive and negative religious coping patterns. The two subscales measure a variety of religious coping methods. Moreover, they demonstrated internal consistency and evidence of discriminant validity. Because it is relatively brief, the instrument can be included in larger social science and health surveys. Studies of religious coping also suggest that these functionally oriented scales are likely to be better predictors of health-related outcomes than the generic measures of religiousness traditionally used in general survey research (e.g., frequency of church/synagogue attendance, frequency of prayer, self-rated religiousness) (see Pargament 1997 for a review). Of course, the Brief RCOPE does not capture all there is to know about religious coping. Only 33% of the total variance was explained by the factor analyses of the positive and negative religious coping methods. The Brief RCOPE was not intended to be a substitute for a more thorough analysis of specific religious coping methods. It can, however, serve complementary purposes. The Brief RCOPE should be most useful to health and social science researchers searching for an efficient, theoretically meaningful way to integrate religious dimensions into their models of stress, coping, and health.

Limitations and Future Directions

This study is limited by its cross-sectional design. The patterns of positive and negative religious coping were associated with indices of health and adjustment measured concurrently. Whether these patterns of positive and negative religious coping are predictive of *change* in health and adjustment over time cannot be known on the basis of these results. Other researchers have reported longitudinal effects of religious coping on health and mental health (e.g., Koenig et al. 1992; Pargament et al. 1994; Tix and Frazier 1998). Similar research is necessary to determine the long-term effects of positive and negative religious coping patterns.

Longitudinal studies are particularly needed to shed light on the health implications of negative religious methods. There are several possibilities. Negative patterns of religious coping may be harbingers of long-term health-related problems as well as indicators of immediate distress. However, it is also possible that the religious pain and discontent embodied in negative religious coping may be short-lived and relatively inconsequential. For

instance, in one study of heart attack patients, only one third of those who initially appraised their illness to be a punishment from God felt the same way one year later (Croog and Levine 1972). Another possibility is that the expression of religious pain and conflict, while accompanied by distress, may have beneficial effects in the long run. After all, struggle within the religious literature and within many models of religious and psychological development is a precursor to growth. Just consider the case of Job. In this vein, it is interesting to note the small but significant relationships between negative religious coping and stress-related growth in each of the three samples in this study. Finally, there may be some truth to each of these possibilities. Negative religious coping may be relatively harmful to some people, inconsequential to others, and a source of growth to still others.

Additional studies are needed to identify those demographic, personality, and religious variables that are predictive of positive and negative religious coping and/or moderate the relationships between these coping patterns and health. Further studies of these patterns in other religious groups are also warranted. The Brief RCOPE was intended for use in a wide range of Judeo-Christian groups. However, it may be applicable to members of other theocentric religions as well, such as Islam.

Finally, the study of religious coping patterns may be practically useful to religious, health, and mental health professionals in both assessment and intervention. Negative religious coping items from the Brief RCOPE are consistent with other "religious red flags" that point to the need for help early in the process of coping with crisis (Pargament et al. 1998). The positive patterns of religious coping methods could also serve as the basis for religiously-oriented interventions to assist individuals in stressful times. Already, health and mental health professionals have begun to apply methods of religious coping to their interventions, with some promising results (e.g., Propst 1988; Rye and Pargament 1997; Worthington, Kurusu, McCullough, and Sandage 1996). In short, the study of positive and negative religious coping patterns represents an important direction for researchers and practitioners interested in understanding and facilitating the roles of religion in coping with major life stressors.

NOTES

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