
Religious Coping Among Jews: Development and Initial Validation of the JCOPE



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Numerous studies have underscored the importance of religious coping in psychological health and illness; however, the majority of research in this area has been conducted with Christian samples and knowledge about other religious groups is lacking. Although recent investigations have developed scales to measure religious coping among Hindus and Muslims, the potential for future research in Jewish populations remains limited as no measures of religious coping have been validated in the general Jewish community. This two-part study reports on the development and validation of the 16-item Jewish Religious Coping Scale (JCOPE). In Study 1, an exploratory factor analysis identified two factors reflecting positive and negative religious coping strategies, and the concurrent validity for the measure was evaluated by examining correlations with indices of Jewish beliefs and practices. In Study 2, a confirmatory factor analysis (CFA) verified the JCOPE's 2-factor structure, and the scale's incremental validity was evaluated by examining Jewish religious coping as a predictor of psychological distress over and above significant covariates. Results suggest that the JCOPE has good psychometric properties, and that religious coping is a significant predictor of psychological distress among Jews. © 2009 Wiley Periodicals, Inc. *J Clin Psychol* 65: 670–683, 2009.

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In recognition of the fact that religion and spirituality play an important role in many people's lives, there has been a substantial increase in psychological research

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about religion and spirituality over the past two decades (Paloutzian, & Park, 2005). One of the most heavily researched constructs in this body of literature is religious coping, which involves drawing on religious beliefs and practices to understand and deal with life stressors (Pargament, 1997). A recent PsycINFO (<http://www.apa.org/psycinfo/>) search was able to locate over 250 published studies on religious coping. Meta-analytic findings have confirmed that on the whole, religious methods of coping are significantly linked to psychological adjustment for individuals facing stressful situations (Ano & Vasconcelles, 2005).

Factor analytic studies have identified that religious coping can be divided into two overarching categories involving positive and negative strategies (Pargament, Smith Koenig, & Perez, 1998). Positive religious coping includes benevolent religious appraisals (e.g., seeing one's situation as part of God's plan), active religious surrender (e.g., doing one's best and then turning the situation over to God), seeking spiritual support (e.g., trusting in God), and spiritual connection (e.g., trying to build a stronger spiritual connection with God or others). By contrast, negative religious coping approaches include reappraisals of God's powers (e.g., concluding that some things are beyond God's control), passive religious deferral (e.g., not doing anything and expecting God to solve all of one's problems), and interpersonal religious discontent (e.g., arguments with members of one's religious community). Positive religious coping is beneficial for individuals undergoing stressful life events, whereas negative religious coping can have harmful implications. Specifically, positive religious coping has been tied to lower levels of emotional distress and psychosomatic symptoms (Pargament, Koenig, & Perez, 2000) and even indices of better physical health (see Koenig, McCullough, & Larson, 2001 for a review). Negative religious coping, on the other hand, has been tied to higher levels of anxiety and depression (McConnell, Pargament, Ellison, & Flannelly, 2006; Smith, McCullough, & Poll, 2003), decreased self-esteem (Pargament et al., 2003), and posttraumatic symptoms (Harris et al., 2008). These relationships are robust and have remained significant after controlling for demographic variables and general religiousness (Pargament, Ano, & Wachholtz, 2005).

However, one significant limitation of the current literature on religious coping is that existing studies have focused almost exclusively on Christians, and knowledge about religious coping in other religious populations is sparse. Fortunately, this has begun to change with the development of studies on religious coping among Hindus (Tarakeshwar, Pargament, & Mahoney, 2003) and Muslims (Abu Raiya, Pargament, Mahoney, & Stein, 2008). As a result of these studies, psychometrically sound measures of religious coping have been created that are theologically and culturally relevant to Hindu and Islamic communities. We are aware of only two published studies that have examined religious coping among Jews. Although one of these studies (Dubow, Pargament, Boxer, & Tarakeshwar, 2000) was limited to Jewish adolescents and did not assess for well-being or distress, the other (Loewenthal, MacLeod, Goldblatt, Lubitsh, & Valentine, 2000) provides initial evidence to suggest that religious beliefs and spiritual support (forms of positive religious coping) are related to positive affect among Jews who have recently experienced a major life stressor. Nevertheless, the clinical implications of religious coping among Jewish adults are largely unknown. It should further be noted that the brief Religious Coping Scale (RCOPE; Pargament et al., 1998), a well-utilized measure of religious coping, is not ideally suited for use with Jewish populations. In contrast to other religious traditions that stress the importance of thoughts, feelings, and intentions, the Jewish religion places more importance on religious practices and community involvement

(Cohen, 2002; Cohen, Siegel, & Rozin, 2003). The majority of brief RCOPE items, however, assess for religious coping in terms of specific religious thoughts and feelings (e.g., "I felt punished by God for my lack of devotion") and those relating to religious behaviors are generally phrased and not related to specific ritual practices (e.g., "I sought God's love and care"). Additionally, no brief RCOPE items (positive or negative) assess directly for congregational involvement. Thus, there is a need to develop and validate a measure of Jewish religious coping that is tailored to Jewish doctrine and practice. There is also a need to investigate the relevance of religious coping to psychological distress among individuals in the Jewish community.

The Present Study

With the hope of creating an easy-to-administer measure of Jewish religious coping that has utility for clinical work, we sought to develop the JCOPE, a brief measure of Jewish religious coping, and validate it in two large Jewish community samples. Two studies were conducted. In Study 1, 22 JCOPE candidate items were developed and their factor structure was determined using an exploratory factor analysis. Additionally, we conducted an initial examination of the concurrent validity of the JCOPE by exploring its links to Jewish beliefs and practices. In Study 2, we conducted a CFA to validate further the JCOPE's factor structure. In addition, we examined the incremental validity of the JCOPE as a predictor of worry, anxiety, and depression after controlling for significant covariates.

Study 1: Exploratory Factor Analysis and Links to Jewish Beliefs, Practices, and Attitudes

Method

Participants and procedure. Four hundred sixty-eight Jewish individuals participated in this study. Participants ranged widely in age (from 15 to 97 years) and the mean age was 47.8 ($SD = 15.1$). Females comprised 58.5% of the sample. Consistent with previous research (e.g., Rosmarin, Pargament, & Mahoney, in press), the majority of participants (85.6%) had a college degree or higher level of education. The religious affiliation of the sample was diverse (35.8% Orthodox; 16.2% Conservative; 36.2% Reform; 7.7% Reconstructionist; 4% Other/Unspecified), but there was a higher concentration of Orthodox, and a lower concentration of Conservative and Reform Jews in the sample than is found nationally (United Jewish Communities, 2003).

As part of a larger study on health and religiousness among Jews, we recruited participants through congregations in the greater New York area ($n = 251$) and a medium-sized midwestern city with a population of approximately 300,000 ($n = 33$). In the summer of 2006, an electronic version of the study questionnaire was created and advertised by way of Jewish community Web sites to recruit additional participants ($n = 184$). The exact number of people approached to participate is not known, as participants were asked to inform their Jewish friends and associates about the study to aid in recruitment. Participants were not compensated monetarily or otherwise for completing the survey. This study was approved by the Human Subjects Review Board at Bowling Green State University, and the Institutional Review Board of the Healthcare Chaplaincy.

Measures

Jewish religious coping (JCOPE) items. We developed 22 candidate items (15 positive and 7 negative) based on a measure of Jewish religious coping utilized in a previous study of Jewish adolescents (Dubow et al., 2000). The language of the items was changed to be more appropriate for use with an adult sample, and some items were removed due to redundancy. Additional items were created based on a review of the religious coping literature and interviews with rabbis and religious educators. Items were prefaced with the following instruction: "This questionnaire asks about different ways in which you might rely on religion to deal with stress. Choose the number that best describes how often you do the following things when you have a stressful problem," and a 5-point Likert scale was utilized (*Never, Hardly Ever, Sometimes, Most of the Time, and Always*).

Jewish beliefs and practices. We adapted three subscales from an existing comprehensive measure of Jewish religious involvement (Himmelfarb, 1975) to assess various Jewish beliefs and religious/cultural practices. Seven items assessed doctrinal beliefs including belief in a God who created and guides the universe, belief in the divinity of Jewish law, and trust in God; five items assessed weekly religious practices such as observance of the Sabbath, Jewish dietary laws and regular prayer; and four items assessed Jewish cultural practices, such as possessing Jewish books and artwork in the home. All subscales utilized a 4-point Likert scale. Internal reliability for the five subscales was moderate to high (see Table 2).

Results and Discussion

Exploratory factor analysis. Responses to the 22 JCOPE candidate items were screened and 20 univariate outliers (scores ≥ 3 *SD* on a given item) were identified; these responses were deleted in accordance with the guidelines of Kline (2005). The 22 Jewish religious coping items were then subjected to a principal components factor analysis with direct oblimin (oblique) rotation. Five factors with eigenvalues greater than 1.0 emerged; however, an examination of the scree plot evidenced two or three factors. The factor analysis was thus rerun restricting the solution to three factors. The emerging factors had eigenvalues of 7.3, 2.4, and 1.5, and collectively accounted for 51.0% of the scale variance. However, an examination of the pattern matrix indicated that the third factor contained only two items with loadings greater than .40, and one of these items cross-loaded on another factor. The factor analysis was run again restricting the solution to two factors. All positive religious coping items loaded on the first factor and all negative religious coping items loaded on the second factor. Two items were eliminated due to low pattern matrix factor loadings (Items 4 and 22) and a third due to cross-loading on both factors (Item 13); however, one moderately cross-loaded negative item (Item 15) was retained to improve subscale reliability. Thus, two subscales were created containing 14 positive and 5 negative religious coping items, respectively. Reliability for the positive subscale was high ($\alpha = .92$) and reliability for the negative subscale was adequate ($\alpha = .71$). All 22 candidate items and factor loadings are presented in Table 1.

Correlations of JCOPE with Jewish beliefs and practices. The positive religious coping subscale was moderately correlated with higher levels of doctrinal beliefs ($r = .61, p < .01$), weekly religious practices ($r = .48, p < .01$), and cultural practices ($r = .55, p < .01$), whereas negative correlations emerged between the negative religious coping subscale and these variables (r s range from $-.17$ to $-.27, p < .01$; see

Table 1
 Study 1: Exploratory Factor Analysis (EFA) of the JCOPE

JCOPE items	Factor loadings	
	Positive	Negative
1. I ask G-d to forgive me for things I did wrong.	.76	.17
3. I try to be an inspiration to others.	.51	-.05
5. I try to see how G-d may be trying to teach me something.	.82	.07
6. I think about what Judaism has to say about how to handle the problem.	.72	-.04
7. I do the best I can and know the rest is G-d's will.	.74	-.01
9. I look forward to Shabbat.	.57	-.15
10. I ask G-d to help me do what I need to do.	.82	.07
11. I talk to my rabbi.	.46	-.13
12. I look for a stronger connection with G-d.	.84	.05
14. I look for a sense of spiritual connection with others.	.56	.07
16. I pray for the well-being of others.	.68	.07
17. I pray for G-d's love and care.	.82	.08
19. I try to do Mitzvot (good deeds).	.66	-.06
20. I try to remember that my life is part of a larger spiritual force.	.66	-.01
2. I get mad at G-d.	.16	.74
8. I argue with G-d	.21	.71
15. I question whether G-d can really do anything.	-.43	.50
18. I wonder if G-d cares about me.	-.15	.70
21. I question my religious beliefs, faith and practices.	-.17	.50
4. I feel angry with or distant from people in my synagogue. ^a	-.05	.36
22. I look forward to spending the Jewish holidays with my family. ^a	.22	-.08
13. I wonder what I did for G-d to punish me. ^b	.42	.42
Eigenvalues	7.3	2.4
% of variance	33.3	11.0

Note. Factor loadings are based on rotated (direct oblimin) pattern matrix. Loadings belonging to retained items in each factor are boldfaced. JCOPE = Jewish Religious Coping Scale.

^aItems 4 and 22 were eliminated due to low factor loadings.

^bItem 13 was eliminated due to cross-loading on both factors.

Table 2
 Study 1: Zero-Order Correlations of Positive and Negative JCOPE With Jewish Beliefs and Practices

Variable	1	2	3	4	5
1. Positive JCOPE					
2. Negative JCOPE	-.11*				
3. Religious beliefs	.61*	-.27*			
4. Religious practices	.48*	-.20*	.60*		
5. Cultural practices	.55*	-.17*	.46*	.58*	
<i>M</i>	49.5	12.9	21.8	12.8	9.2
<i>SD</i>	10.8	3.6	5.3	5.7	2.1
Range	18–70	6–24	7–28	5–20	4–14
α	.92	.71	.93	.91	.74

Note. *ns* range from 420 to 444. JCOPE = Jewish Religious Coping Scale. * $p < .01$.

Table 2). These results were consistent across participants recruited from New York, the Midwest, and via the online survey, except that correlations between the negative religious coping subscale, weekly observances, and culture were not significant for

the New York sample. These results provide preliminary evidence of concurrent validity for the two JCOPE subscales.

Study 2: Confirmatory Factor Analysis and Links to Anxiety and Depression

Method

Participants and procedure. Two hundred thirty-four Jewish individuals completed the questionnaire. Participants ranged in age from 18 to 74 years and the mean age of the sample was 37.3 years ($SD = 13.5$). Gender was equally distributed (54.7% of participants were female). Participants were from Canada ($n = 99$), the United States ($n = 95$), Israel ($n = 27$), and elsewhere around the globe ($n = 13$; e.g., Australia, China, Portugal, and the United Kingdom). Religious affiliation in the sample was as follows: 60.3% Orthodox, 21.4% Conservative, 5.1% Reform, 13.2% Other. As in Study 1, the sample contained a higher concentration of Orthodox, and conversely a lower proportion of Conservative and Reform Jews than is found nationally (United Jewish Communities, 2003). All participants indicated that they possessed fluency in English (the language in which the study questionnaire was written).

Participants for this study were recruited from August 2007 to April 2008 using an online survey format. An invitation to participate in the study was distributed to a large e-mail list belonging to a Jewish community Web site dedicated to furthering psychological research in the Jewish community. We are unable to determine the exact number of people approached to participate, however, as participants were asked to inform their friends and family members about the study to aid in recruitment. No compensation was offered for participation. This study was approved by the Bowling Green State University Human Subjects Review Board.

Measures

Jewish religious coping (JCOPE) items. The 14-item positive and 5-item negative religious coping subscales from Study 1 were retained for further analysis in Study 2.

Demographic items. A series of items assessed for age, gender, education level, income, and current employment.

General religiousness. A five-item measure of general religiousness was created using the following questions: (a) Do you believe in God? (*Yes, No*); (b) How religious do you consider yourself to be? (*Very, Moderately, Slightly, Not at All*); (c) How spiritual do you consider yourself to be? (*Very, Moderately, Slightly, Not at All*); (d) How important is being Jewish to you? (*Very, Somewhat, Not Very, Not at All*); and (e) How do you feel about being Jewish? (*Very Positively, Somewhat Positively, Indifferently, Somewhat Negatively, Very Negatively*). This scale demonstrated an adequate level of internal reliability ($\alpha = .69$).

Worry. The Penn State Worry Questionnaire (PSWQ; Meyer, Miller, Metzger, & Borkovec, 1990) was used to measure pathological trait worry. The PSWQ contains 16 items. Respondents rated each item in terms of "how typical or characteristic" it is of them using a 5-point Likert scale (ranging from *Not at All Typical* to *Very Typical*). The PSWQ has well established norms and psychometric properties (Brown, 2003).

Anxiety. The trait version of the State-Trait Anxiety Inventory (STAI-T; Spielberger, Gorsuch, & Lushene, 1970) was used to measure anxiety. The STAI-T contains 20 statements about emotional states (e.g., "I feel nervous and restless").

Participants respond to each item in terms of how they generally feel using a 4-point Likert scale ranging from *Not at All* to *Very Much*. The STAI-T is a commonly used measure in anxiety research and has been validated in community and clinical settings (Gros, Antony, Simms, & McCabe, 2007).

Depression. Current depressive symptoms was assessed using the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977), a 20-item self-report scale that has been validated extensively in community settings as a measure of general depressive symptomatology (Orme, Reis, & Herz, 1986).

Results and Discussion

Preliminary screening for confirmatory factor analysis. Examination of the dataset revealed that 90.1% of the participants' responses to the JCOPE candidate items had no missing data points and across all participants, less than 1% of all data points were missing. To permit inclusion of data from all participants in the CFA procedures, missing values were imputed using an expectation-maximization (EM) imputation algorithm available in EQS 6.1 (Bentler, 2004). Imputation has been found to yield more accurate standard errors than traditional methods for handling missing data (e.g., listwise or pairwise deletion; Bentler, 2004). Screening of participant responses to the JCOPE items identified nine univariate outliers (scores ≥ 3 *SD* on a given item); these responses were deleted. After this deletion, all items met standard criteria for univariate normality (Kline, 2005), but the assumption of multivariate normality was not met. Therefore, all CFA analyses were conducted using Satorra-Bentler robust estimation methods (EQS 6.1; Bentler, 2004).

Confirmatory factor analysis. For simplicity, item numbers below are consistent with those used in Study 1. Following the recommendations of Kline (2005), multiple indices were evaluated to determine model fit, including the root mean square error of approximation (RMSEA), the Comparative Fit Index (CFI), and the Non-Normed Fit Index (NNFI). Values greater than .90 for the CFI and NNFI indicate an acceptable fit; values less than .08 for the RMSEA indicate a reasonable fit. Results indicated that the original 2-factor model with all 19 retained items from Study 1 did not fit the data well, Satorra-Bentler χ^2 (186) = 483.27, $p < .05$, CFI = .85, NNFI = .83, RMSEA = .085 (90% CI = .075–.094). An examination of factor loadings revealed one item on the negative factor had a loading of less than .25 (Item 8). Additionally, results of the Lagrange Multiplier Test suggested that two items on the positive factor cross-loaded with the negative factor (Items 10 and 14). Therefore, a second CFA was conducted to examine whether a slightly revised 2-factor model, with these items deleted, provided a better fit with the observed data. Though a single item in the negative factor (Item 2) had a relatively low factor loading, this item was retained as it was observed that Cronbach's alpha for the negative factor decreased upon removal of this item. Results indicated that this model had an acceptable fit with the data, Satorra-Bentler χ^2 (101) = 206.70, $p < .05$, CFI = .93, NNFI = .91, RMSEA = .069 (90% CI = .055–.082). The improved model fit of the revised scale over the original model was significant, Satorra-Bentler χ^2_{diff} (85) = 276.57, $p < .001$. Thus, Items 10 and 14 were deleted from the positive religious coping subscale, and Item 8 was deleted from the negative religious coping subscale, resulting in a 12-item positive and 4-item negative subscale. Table 3

Table 3
 Study 2: Confirmatory Factor Analysis (CFA) of the JCOPE

JCOPE Items negative	Positive			
	Unstandardized	Standardized	Unstandardized	Standardized
1. I ask G-d to forgive me for things I did wrong.	1.02 (.06)	.75		
3. I try to be an inspiration to others.	0.50 (.08)	.45		
5. I try to see how G-d may be trying to teach me something.	1.13 (.06)	.80		
6. I think about what Judaism has to say about how handle the problem.	1.05 (.05)	.82		
7. I do the best I can and know the rest is G-d's will.	1.13 (.07)	.77		
9. I look forward to Shabbat.	0.71 (.08)	.57		
11. I talk to my rabbi.	1.02 (.05)	.68		
12. I look for a stronger connection with G-d.	1.23 (.06)	.82		
16. I pray for the well-being of others.	0.77 (.07)	.63		
17. I pray for G-d's love and care.	1.19 (.06)	.79		
19. I try to do Mitzvot (good deeds).	.46 (.06)	.51		
20. I try to remember that my life is part of a larger spiritual force.	.98 (.08)	.68		
2. I get mad at G-d.			0.42 (.09)	.37
15. I question whether G-d can really do anything.			1.08 (.13)	.73
18. I wonder if G-d cares about me.			0.80 (.11)	.59
21. I question my religious beliefs, faith and practices.			1.01 (.04)	.66

Note. Item numbers taken from Study 1. Parentheses contain robust standard errors. JCOPE = Jewish Religious Coping Scale.

presents the standardized and unstandardized factor loadings of the revised model containing these subscales.

Incremental validity of the JCOPE. Table 4 contains zero-order correlations between demographics (age, gender, education, income, and current employment), general religiousness, positive and negative Jewish religious coping, and psychological distress (worry, anxiety, and depression). None of the demographic variables emerged as significant predictors of positive or negative JCOPE scores, or any measure of distress (*rs* range from $-.07$ to $.08$, *ns*). General religiousness was associated with higher levels of positive religious coping ($r = .76, p < .01$), and lower levels of negative religious coping ($r = -.29, p < .01$), worry ($r = -.14, p < .05$), and depression ($r = -.20, p < .01$). Positive religious coping was associated with lower levels of worry ($r = -.22, p < .01$), anxiety ($r = -.20, p < .01$), and depression ($r = -.19, p < .01$), whereas negative religious coping was associated with higher levels of these variables ($r = .15, p < .05$ for worry; $r = .27, p < .01$ for anxiety; and $r = .34, p < .01$ for depression).

Regression was utilized to determine whether the positive and negative JCOPE subscales predicted psychological distress after controlling for significant correlates. General religiousness was entered as a predictor in Model 1. Demographic variables were not added to the model as they were uncorrelated with positive and negative

Table 4
Study 2: Zero-Order Correlations of Demographics, General Religiousness, Positive/Negative Religious Coping, and Distress

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Age											
2. Gender	-.01										
3. Education	.09	.04									
4. Income	.33***	-.10	.12								
5. Employment	.11	-.05	.24**	.22**							
6. General religious	-.02	.05	.07	.04	.01						
7. Positive <i>JCOPE</i>	.02	.03	.00	.08	.04	.76**					
8. Negative <i>JCOPE</i>	.03	.03	.01	-.05	-.05	-.29**	-.32**				
9. Worry	-.04	.07	.13	.04	-.05	-.14*	-.22**	.15*			
10. Anxiety	-.05	.00	.12	-.06	-.04	-.13	-.20**	.27**	.68**		
11. Depression	-.01	-.03	.08	-.07	-.05	-.20**	-.19**	.34**	.54**	.86**	
<i>M</i>	37.3	.55	4.9	3.8	.74	11.8	43.0	8.3	42.2	38.9	11.8
<i>SD</i>	13.5	.50	1.3	1.9	.44	2.1	10.6	3.0	13.3	9.9	10.2
Range	18-74	0-1	2-7	1-6	0-1	1-14	12-60	4-17	16-80	20-74	0-50
α						.69	.93	.69	.94	.92	.93

Note. *ns* range from 192 to 233. Gender coded as 0 = M, 1 = F; education coded as 0 = some college or less, 1 = college degree or more; income coded as 0 ≤ \$24,999; 1 = \$25-49,999; 2 = \$50-74,999; 3 = \$75-99,999; 4 = \$100-129,999; 5 ≥ \$130,000; employment coded as 0 = currently unemployed; 1 = currently employed. *JCOPE* = Jewish Religious Coping Scale. * $p < .05$, ** $p < .01$.

Jewish religious coping and all measures of distress in the sample (see Table 4). To avoid problems associated with multicollinearity, two regression analyses were conducted utilizing the positive and negative JCOPE subscales separately. Positive JCOPE scores were entered into Model 2 in the first analysis and negative JCOPE scores were entered into Model 2 in the second analysis. Beta weights and r^2 values for each predictor variable are presented in Table 5 (positive JCOPE) and Table 6 (negative JCOPE). In the first regression analyses, Model 1 (general religiousness) was not tied to worry or anxiety, but was a significant predictor of lower levels of depression ($\beta = -.16, p < .05$). In Model 2, positive religious coping was a significant predictor of lower levels of worry ($\beta = -.41, p < .001$) and anxiety ($\beta = -.24, p < .05$). It was observed that positive JCOPE scores accounted for an additional 7% of the variance in worry over and above general religiousness. In the second regression analysis, general religiousness was tied to all three measures of psychological distress in Model 1 (β s ranging from $-.13, p < .10$ to $-.20, p < .001$), and negative religious coping emerged as a significant predictor in Model 2 ($\beta = .13, p < .10$ for worry; $\beta = .25, p < .001$ for anxiety; and $\beta = .32, p < .001$ for depression). It was noted that negative JCOPE scores accounted for 6% of the variance in anxiety and 9% of the variance in depression after controlling for general religiousness. These results

Table 5
 Study 2: Positive Jewish Religious Coping as an Incremental Predictor of Distress

Predictor variable		Worry	Anxiety	Depression
Model 1	General religiousness			
	β	-.10	-.11	-.16*
	t	-1.4	-1.6	-2.3
	R^2	.01	.01	.03*
Model 2	Positive JCOPE			
	β	-.41***	-.24*	-.17
	t	-3.7	-2.2	-1.5
	ΔR^2	.07***	.02*	.01

Note. *ns* range from 190 to 198. JCOPE = Jewish Religious Coping Scale. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 6
 Study 2: Negative Jewish Religious Coping as an Incremental Predictor of Distress

Predictor variable		Worry	Anxiety	Depression
Model 1	General religiousness			
	β	-.13*	-.15**	-.20***
	t	-1.8	-2.1	-2.8
	R^2	.02*	.02**	.04***
Model 2	Negative JCOPE			
	β	.13*	.25****	.32****
	t	1.7	3.5	4.4
	ΔR^2	.02*	.06****	.09****

Note. *ns* range from 189 to 193. JCOPE = Jewish Religious Coping Scale. * $p < .10$, ** $p < .05$, *** $p < .01$, **** $p < .001$.

provide preliminary evidence for the incremental validity of both the positive and negative JCOPE subscales.

General Discussion

Although previous research has established robust links between positive and negative religious coping and physical and mental health across multiple religious groups, we are not aware of any published studies having examined these variables in the Jewish community. Research on religious coping in the Jewish community has been limited by the lack of specific culturally sensitive scales to measure religious coping among Jewish adults. This two-part study therefore sought to develop and validate the JCOPE, a brief measure of Jewish religious coping. The results of this investigation are encouraging for several reasons.

First, previous research with non-Jews has consistently found that religious coping has two facets—positive and negative (Pargament et al., 1998). The present investigation found evidence of positive and negative religious coping among Jews. This 2-factor structure of the JCOPE is consistent with the conceptualization and construction of the JCOPE scale items. The positive and negative factors are also grounded in existing theory and research, giving the JCOPE good utility for future studies in this area. Second, in studies 1 and 2, both the positive and negative JCOPE subscales were significantly tied to markers of general Jewish religiousness, providing evidence for the scale's concurrent validity. Additional concurrent validity was established in Study 2 as both subscales were significantly tied to indices of psychological distress (i.e. worry, anxiety, and depression). Specifically, positive JCOPE scores were associated with lower levels of distress whereas negative JCOPE scores were related to elevated levels of distress. These results are consistent with previous literature among non-Jews (e.g., McConnell et al., 2006; Pargament et al., 2000). Third, in Study 2, the positive JCOPE scale demonstrated incremental validity by significantly predicting reduced levels of worry and anxiety over and above general religiousness. The negative JCOPE scale also demonstrated incremental validity by predicting elevated levels of anxiety and depression over and above controls. These findings are particularly significant as JCOPE scores predicted up to 9% of additional variance in psychological distress. More importantly, the results of this investigation underscore the importance of religious coping to the mental health of Jews. Although not directly investigated by the present study, it is possible that positive religious methods of coping may offer solace and support to Jewish individuals during times of stress and turmoil. Specifically, interpersonal positive religious coping such as speaking with one's rabbi or trying to inspire others, may increase a sense of ethnic identity and spiritual support. Focusing on Jewish doctrine such as observance of the Sabbath and performance of other Mitzvot (good deeds) may strengthen one's sense of spiritual purpose in life and put worldly difficulties in perspective. Furthermore, prayer and other efforts to strengthen one's connection with God may foster positive emotions such as hope and gratitude. By contrast, negative religious coping methods such as questioning God's power or love may exacerbate negative appraisals of threat and lead to symptoms of anxiety and depression. Interpersonal struggles in a religious context may also intensify negative emotions in times of distress. The JCOPE thus may be a useful clinical inventory to assess both positive and negative aspects of Jewish religious coping. Although recent years have seen an increase in interest and research regarding the integration of spiritual and religious concepts into psychotherapy (Pargament, 2007), almost none

of the work in this area has been conducted with Jews (Smith, Bartz, & Richards, 2007). Thus, the clinical assessment of religious coping may be particularly important for Jewish individuals. Fortunately, the length of the JCOPE scale renders it ideal for inclusion in assessment batteries in psychotherapy clinics dealing with Jewish populations.

Limitations and Future Directions

This study has several limitations that warrant discussion. The cross-sectional nature of the present study rendered it incapable of determining the direction of influence between religious coping and distress among Jews. Future studies could clarify the issue of causality by employing longitudinal analyses or experimental designs. Future studies could also seek to substantiate the incremental importance of religious coping over and above general coping, which was not done in this study. As well, sole reliance on Internet administration is a limitation in Study 2 as Internet use is discouraged by some religious groups (Armfield & Holbert, 2003). It should also be noted that the 2-factor solution in Study 1 did not initially replicate in Study 2, possibly due to a substantial increase in the number of Orthodox Jews in the sample. Furthermore, for statistical reasons, we were only able to retain four items to measure negative Jewish religious coping. Due to the low number of items, the item content of the negative JCOPE subscale largely centers around Divine negative religious coping. Previous research has identified three forms of negative religious coping: interpersonal, intrapersonal, and Divine (Pargament, Murray-Swank, Magyar, & Ano, 2005). Interpersonal negative religious coping involves conflicts with others in a religious context (e.g., arguments with congregants), intrapersonal struggles involve uncertainty and reservations about religious issues and internal conflicts between beliefs and practices, and Divine negative religious coping involves tension in one's relationship with God (e.g., anger at God). Future research could revise the negative JCOPE subscale to better assess for interpersonal and intrapersonal dimensions of negative religious coping. It would also be beneficial for future studies to create a Hebrew version of the JCOPE for use with the Hebrew-speaking Jewish population in Israel.

Despite its limitations, this study makes an important contribution to the literature by developing and validating a scale capable of measuring positive and negative aspects of religious coping in the general Jewish community. It is worth reiterating that research examining links between religiousness, mental health, and illness among Jews is not abundant. It is hoped, therefore, that the JCOPE will help spawn future studies in this area. The scale could also be a useful assessment tool for clinicians working within the Jewish community. Finally, combined with the results from previous research, this study highlights religious coping as a variable with potential universal significance; there is now evidence to suggest that religious coping is a salient predictor of distress among Christians, Muslims, Hindus, and Jews.

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