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**Journal of Religion and Health**

ISSN 0022-4197

J Relig Health

DOI 10.1007/s10943-016-0228-5



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# Religious and Psychological Implications of Positive and Negative Religious Coping in Iran

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**Abstract** This study examined the religious and psychological implications of religious coping in Iran. University students ( $N = 224$ ) responded to the Brief Positive and Negative Religious Coping Scales along with measures of Religious Orientation, Integrative Self-Knowledge, Self-Control, Mindfulness, Self-Compassion, Self-Esteem, Guilt, Shame, and Self-Criticism. As in previous research elsewhere, Positive Religious Coping was stronger on average than Negative Religious Coping, and Positive and Negative Religious Coping predicted adjustment and maladjustment, respectively. In addition, this study demonstrated that direct relationships between Positive and Negative Religious Coping appeared to be reliable in Iran; that Positive Religious Coping was broadly compatible with, and Negative Religious Coping was largely irrelevant to, Iranian religious motivations; and that Negative Religious Coping obscured linkages of Positive Religious Coping with religious and psychological adjustment.

**Keywords** Positive and Negative Religious Coping · Iran · Psychological adjustment · Religious orientations · Self-regulation

## Introduction

Research increasingly documents the influence of religion on coping (Pargament 1997; Pargament and Abu-Raiya 2007). Findings obtained with the Brief Religious Coping Scales, for example, confirm that this impact can be beneficial or problematic (Pargament

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et al. 2011). The Positive Religious Coping subscale assesses “a sense of connectedness with a transcendent force, a secure relationship with a caring God, and a belief that life has a greater benevolent meaning.” Negative Religious Coping instead reflects “signs of spiritual tension, conflict and struggle with God and others, as manifested by negative reappraisals of God’s powers (e.g., feeling abandoned or punished by God), demonic reappraisals (i.e., feeling the devil is involved in the stressor), spiritual questioning and doubting, and interpersonal religious discontent” (Pargament et al. 2011, p. 58). Evidence demonstrates that on average Positive Religious Coping is usually stronger than Negative Religious Coping and that Positive and Negative Religious Coping predict adjustment and maladjustment, respectively (Abu-Raiya and Pargament 2015).

Conclusions about religious coping largely rest upon Christian data, which makes the analysis of other faith traditions essential (Pargament et al. 2011). Abu-Raiya and Pargament (2015) summarize recent progress in accomplishing that goal and point, for example, to the increasing use of Brief Religious Coping Scales with Muslim samples. They specifically review studies that examined Bosnian immigrants to the United States (Ai et al. 2003), Pakistani university students (Khan and Watson 2006), Pakistani cancer patients (Khan et al. 2009), American Muslims coping with the aftermath of 9/11 (Abu-Raiya et al. 2011), and Muslims attending a New Zealand university (Gardner et al. 2014). With Muslims, as with Christians, Positive Religious Coping tended to be stronger, and Positive Religious Coping described more constructive and Negative Religious Coping defined more destructive styles of coping.

At least four studies have also used the Brief Religious Coping Scales with Muslims in Iran. In one, university employees displayed a significant  $+ .24$  correlation of Positive with Negative Religious Coping (Rohani et al. 2010). Positive Religious Coping also predicted greater Sense of Coherence and spirituality. Negative Religious Coping correlated negatively with Sense of Coherence and with self-reported physical health. A second Iranian investigation examined family caregivers of cancer patients (Khanjari et al. 2012). Positive Religious Coping predicted a better and Negative Religious Coping predicted a poorer caregiver quality of life. These researchers did not report the correlation between the two coping styles. In a third project, Iranian physicians and nurses responded to the Negative but not to the Positive Religious Coping Scale (Hafizi et al. 2014). Negative Religious Coping displayed connections with lower trust and greater mistrust in God, but failed to correlate with an array of other religiosity constructs. Finally, a significant  $+ .36$  relationship appeared between these two scales in a fourth study that examined Iranian university students (Rajabi et al. 2012). Ties with mental health variables confirmed Positive Religious Coping as adaptive and Negative Religious Coping as maladaptive. Positive Religious Coping also was stronger on average than Negative Religious Coping, and women scored higher than men on both measures.

## Present Study

The present project further clarified the Brief Religious Coping Scales in Iran by examining four issues. First and most importantly, the correlation between Positive and Negative Religious Coping seemed to deserve further attention. Creation of these scales operated from the assumption that they should be orthogonal; so, the usual observation of nonsignificant rather than occasional positive correlations is unsurprising (Pargament et al. 2011). In Iran, however, the only two studies to report these data found the linkage to be positive. Such results suggest that ties of Positive Religious Coping with adjustment might be obscured by its direct covariance with the maladjustment of Negative Religious Coping,

and vice versa. The expectation, therefore, was that mental health implications of both measures would be more obvious when multiple regression procedures focused on the unique contribution of each to the coping process.

Second, multiple regression procedures also made it possible to explore the issue of moderation. The specific theoretical possibility was that problematic influences of Negative Religious Coping might moderate evidence of the benefits associated with Positive Religious Coping. In other words, Positive Religious Coping might more strongly predict religious and psychological adjustment when Negative Religious Coping is low.

Third, previous attempts to relate Brief Religious Coping Scales to Iranian religiosity have yielded inconsistent results using measures with limited psychometric credentials in this cultural context. Participants in the present study responded to Religious Orientation Scales (Gorsuch and McPherson 1989) that have seen extensive use in Iran. This instrument assesses three religious motivations. The Intrinsic Religious Orientation records an attempt to make religion the ultimate motivation in life. An Extrinsic Personal Orientation assesses the use of religion to obtain a sense of well-being. The Extrinsic Social Orientation measures religious commitments as a means for obtaining desired social outcomes.

Research has established the Intrinsic and especially the Extrinsic Personal Orientations as indices of religious adjustment in Iran, but the Extrinsic Social Orientation has been weak and ambiguous in its implications (Ghorbani et al. 2007). Specifically, the average response per item for the Extrinsic Social Orientation has been lower than for the other two motivations, and relationships with measures of mental health have usually been non-significant, but occasionally negative and even more rarely positive. Such outcomes appear not only with Muslims in Iran and Pakistan (Ghorbani et al. 2007), but also with Muslims in Malaysia (Tekke et al. 2015), Hindus in India (Kamble et al. 2014), and Christians in the United States (Watson et al. 2014) and Iran (Watson et al. 2015). The overall suggestion, therefore, is that the Extrinsic Social Orientation may lack validity in efforts to assess important social motivations for being religious and that new measures are needed (Ghorbani et al. 2010; Watson et al. 2014). The hypothesis, therefore, was that Positive Religious Coping would correlate positively and Negative Religious Coping would correlate negatively with the Intrinsic and Extrinsic Personal Orientations. No predictions were made for the weaker and more ambiguous Extrinsic Social Orientation.

Fourth and finally, procedures further assessed the psychological implications of Iranian religious coping. Integrative Self-Knowledge (Ghorbani et al. 2008) and Self-Control (Tangney et al. 2004) scales have served as empirical markers of a "Perfect Man" construct that defines an ideal of Iranian mysticism (Ghorbani et al. 2011b). Mindfulness (Brown and Ryan 2003) combines with these two constructs to describe Iranian processes of self-regulation (Ghorbani et al. 2009, 2014). Self-Compassion (Neff 2003) and Self-Esteem (Rosenberg 1965) predict Iranian religious and psychological well-being (Ghorbani et al. 2012). With regard to moral affects (Tangney and Dearing 2002), Guilt predicts healthier whereas Shame operationalizes unhealthier personality functioning in Iran (Ghorbani et al. 2013). Internal and Comparative Self-Criticism Scales express self-condemnation based upon personal standards and upon comparisons with others, respectively (Thompson and Zuroff 2004). Both predict maladjustment in Iranians (Ghorbani et al. 2011a). Administration of these instruments made it possible to assess the apparent mental health consequences of Positive and Negative Religious Coping using measures with established validity in Iran.

## Hypotheses

In summary, this study sought to clarify the Brief Positive and Negative Religious Coping Scales in Iran by examining four most important sets of hypotheses.

First, Positive and Negative Religious Coping should display a direct relationship, and the implications of each should be clearer in multiple regression procedures that use both constructs as simultaneous predictors of religious and psychological functioning.

Second, Negative Religious Coping should moderate relationships observed for Positive Religious Coping. Specifically, Positive Religious Coping should more strongly predict religious and psychological adjustment when Negative Religious Coping is low.

Third, Positive Religious Coping should display a direct and Negative Religious Coping should exhibit an inverse linkage with the religious adjustment of the Intrinsic and Extrinsic Personal Religious Orientations.

Fourth, Positive Religious Coping should predict greater and Negative Religious Coping should predict poorer psychological adjustment. Specifically, Positive Religious Coping should correlate positively and Negative Religious Coping should correlate negatively with Integrative Self-Knowledge, Self-Control, Mindfulness, Self-Compassion, Self-Esteem, and Guilt. In addition, Positive Religious Coping should predict lower and Negative Religious Coping should predict higher levels of Shame, Internal Self-Criticism, and Comparative Self-Criticism.

## Method

### Participants

Students at the University of Tehran in Iran served as the research participants. Average age of these 127 women and 97 men was 21.5,  $SD = 2.1$ .

**Table 1** Descriptive statistics and internal reliabilities for all measures

Measure	Mean	Standard deviation	Range	Cronbach's $\alpha$
Positive Religious Coping	1.90	.72	0–3	.85
Negative Religious Coping	1.15	.61	0–3	.75
Integrative Self-Knowledge	3.56	.67	1–5	.79
Mindfulness	3.91	.82	1–6	.83
Self-Compassion	3.01	.60	1–5	.88
Internalized Self-Criticism	3.20	1.14	0–6	.82
Comparative Self-Criticism	2.57	.96	0–6	.75
Shame	2.59	.62	1–5	.76
Guilt	3.50	.76	1–5	.86
Self-Esteem	3.58	.74	1–5	.80
Self-Control	3.27	.44	1–5	.83
Intrinsic Religious Orientation	3.35	.82	1–5	.75
Extrinsic Personal Orientation	3.48	1.20	1–5	.84
Extrinsic Social Orientation	2.03	.98	1–5	.78

## Materials

All psychological scales appeared in a single questionnaire booklet. Creation of a Persian Integrative Self-Knowledge Scale occurred during initial development of this instrument (Ghorbani et al. 2008). Translation of the Brief Religious Coping Scales occurred in preparation for the present project with all other measures translated prior to previous Iranian investigations. In these procedures, one individual translated a scale into Persian, and then, another translated that measure back into English. Discrepancies between original and back-translated measures proved to be minor and resolved through revisions in the Persian translation. Unless otherwise noted, all instruments presented 1-to-5 Likert scale response options. The scoring of each construct involved computation of the average response per item. Scales appeared in the questionnaire booklet in the order in which they are described below. Table 1 summarizes the descriptive statistics and internal reliabilities for each measure.

### *Religious Coping*

Brief Positive and Negative Religious Coping Scales included 7 items each (Pargament et al. 2011). Participants self-reported their religious reactions to challenging life experiences using a 4-point scale that ranged from 0 (almost never) to 3 (almost always). Illustrating Positive Religious Coping was the assertion, “Sought God’s love and care.” Negative Religious Coping appeared in such responses as, “Questioned the power of God.”

### *Integrative Self-Knowledge*

The Integrative Self-Knowledge Scale consisted of 12 items that expressed personal efforts to integrate past, present, and desired future self-experience into a meaningful whole (Ghorbani et al. 2008). An example item said, “If I need to, I can reflect about myself and clearly understand the feelings and attitudes behind my past behaviors.”

### *Mindfulness*

Recording mindfulness was the Mindful Attention Awareness Scale (Brown and Ryan 2003). This measure includes 15 reverse-scored self-reports of a lack of mindfulness. One item said, for instance, “I find it difficult to stay focused on what’s happening in the present.” Reactions to each statement ranged across 1 (almost never) to 6 (almost always) response options.

### *Self-Compassion*

Twenty-six statements assessed Self-Compassion (Neff 2003). A representative item said, “I try to be loving towards myself when I’m feeling emotional pain.”

### *Self-Criticism*

The Levels of Self-Criticism measure included two subscales to which participants responded with a 0 (strongly disagree)-to-6 (strongly agree) Likert scale (Thompson and Zuroff 2004). Ten statements defined Internalized Self-Criticism (e.g., “I am very

irritable when I have failed"). Twelve items described Comparative Self-Criticism (e.g., "I have a nagging sense of inferiority").

### *Shame and Guilt*

Assessment of Shame and Guilt involved use of the third version of the Test for Self-Conscious Affect (Tangney and Dearing 2002). This test presents a series of 11 negative and 5 positive scenarios to which respondents express their emotional reactions. One negative scenario said, for instance, "You are driving down the road, and you hit a small animal." Indicative of Shame was the statement, "You think: 'I'm terrible'." Guilt appeared in the reaction, "You'd feel bad that you hadn't been more alert driving down the road."

### *Self-Esteem*

The widely used 10-item measure of Rosenberg (1965) recorded Self-Esteem. A representative expression of this construct said, "I feel that I'm a person of worth, at least on an equal basis with others."

### *Self-Control*

The Self-Control Scale of Tangney et al. (2004) included 36 statements. Illustrating this measure was the self-report, "I am good at resisting temptation."

### *Religious Orientations*

As in previous projects (Ghorbani et al. 2007), procedures adapted the Gorsuch and McPherson (1989) Religious Orientations Scales to the Iranian Muslim cultural context. Illustrating the 8-item Intrinsic Religious Orientation was the claim, "My whole approach to life is based on my religion." The other two subscales included 3 items each. Expressing an Extrinsic Personal Orientation was the statement, "What religion offers me most is comfort in times of trouble and sorrow." Indicative of the Extrinsic Social Orientation was the assertion, "I go to activities associated with my religion because I enjoy seeing people I know there."

## **Procedure**

All procedures complied with institutional regulations governing the ethics of research. Participants volunteered for the project, and their responding was completely confidential. Administration of the questionnaire booklet to groups of varying sizes occurred in classroom settings.

## **Results**

### **Preliminary Issues**

Preliminary analyses revealed significant gender relationships with a number of variables. Women scored lower than men on the Extrinsic Social Orientation ( $r = .27$ ) and higher on



**Table 2** Relationships among Religious Orientations and measures of psychological adjustment in partial correlations controlling for gender

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Intrinsic Orientation	-	.71***	.34***	.25***	.38***	.25***	-.07	.24***	.20**	-.12	.04	-.04
2. Extrinsic Personal		-	.31***	.12	.30***	.17*	-.05	.24***	.18**	-.07	.08	-.10
3. Extrinsic Social			-	-.05	.02	-.09	.01	-.11	-.18**	.08	-.12	.10
4. Integrative Self-Knowledge				-	.52***	.45***	.17**	.54***	.20**	-.34***	-.13	-.17*
5. Self-Control					-	.46***	.09	.58***	.06	-.36***	-.11	-.21**
6. Mindfulness						-	.07	.39***	.19**	-.16*	.06	-.20**
7. Self-Compassion							-	.21**	-.11	-.18**	-.54***	-.31***
8. Self-Esteem								-	.12	-.34***	-.12	-.23**
9. Guilt									-	.00	.28***	-.17**
10. Shame										-	.26***	.18**
11. Internalized Self-Criticism											-	.31***
12. Comparative Self-Criticism												-

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

**Table 3** Partial correlations controlling for gender and multiple regression analyses examining associations of Positive Religious Coping (PRC) and Negative Religious Coping (NRC) with other variables

Variables	Partial correlations		Multiple regressions							
	PRC	NRC	Step 1			Step 2			Step 3	
			R <sup>2</sup>	Gender $\beta$	PRC $\beta$	NRC $\beta$	$\Delta R^2$	PRC $\beta$	NRC $\beta$	$\Delta R^2$
Intrinsic Orientation	.51***	.03	.00	-.03	.54***	-.10	.02*	-.13*		
Extrinsic Personal	.57***	.12	.01	-.09	.58***	-.02	.02*	-.13*		
Extrinsic Social	.26**	.17*	.07***	.27***	.23**	.11	.03**	-.19**		
Integrative Self-Knowledge	.09	-.38***	.00	-.04	.20**	-.43***	.00	-.03		
Self-Control	.10	-.16*	.01	-.09	.15*	-.19**	.00	-.05		
Mindfulness	.17*	-.23***	.02*	-.15*	.24***	-.29***	.00	.06		
Self-Compassion	.02	-.06	.00	.03	.04	-.07	.01	.12		
Self-Esteem	.12	-.27***	.03*	.17*	.19**	-.31***	.00	.02		
Guilt	.03	-.27***	.01	-.09	.10	-.29***	.00	-.05		
Shame	.00	.25***	.01	-.09	-.06	.26***	.00	.01		
Internalized Self-Criticism	-.12	.02	.03**	-.18**	-.13	.04	.00	.02		
Comparative Self-Criticism	-.03	.07	.00	-.01	-.05	.09	.00	.00		

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

Positive Religious Coping ( $-.15$ ), Mindfulness ( $-.15$ ), Self-Esteem ( $-.17$ ), and Internalized Self-Criticism ( $-.18$ ,  $ps < .05$ ). All subsequent analyses, therefore, controlled for gender.

With gender controlled, significant differences appeared in average levels of the two Religious Coping measures, Greenhouse–Geisser  $F(1, 222) = 55.59$ ,  $p < .001$ . In line with previous research, Positive Religious Coping ( $M \pm S.E.M. = 1.92 \pm .05$ ) was stronger on average than Negative Religious Coping ( $1.15 \pm .04$ ).

### Partial Correlations

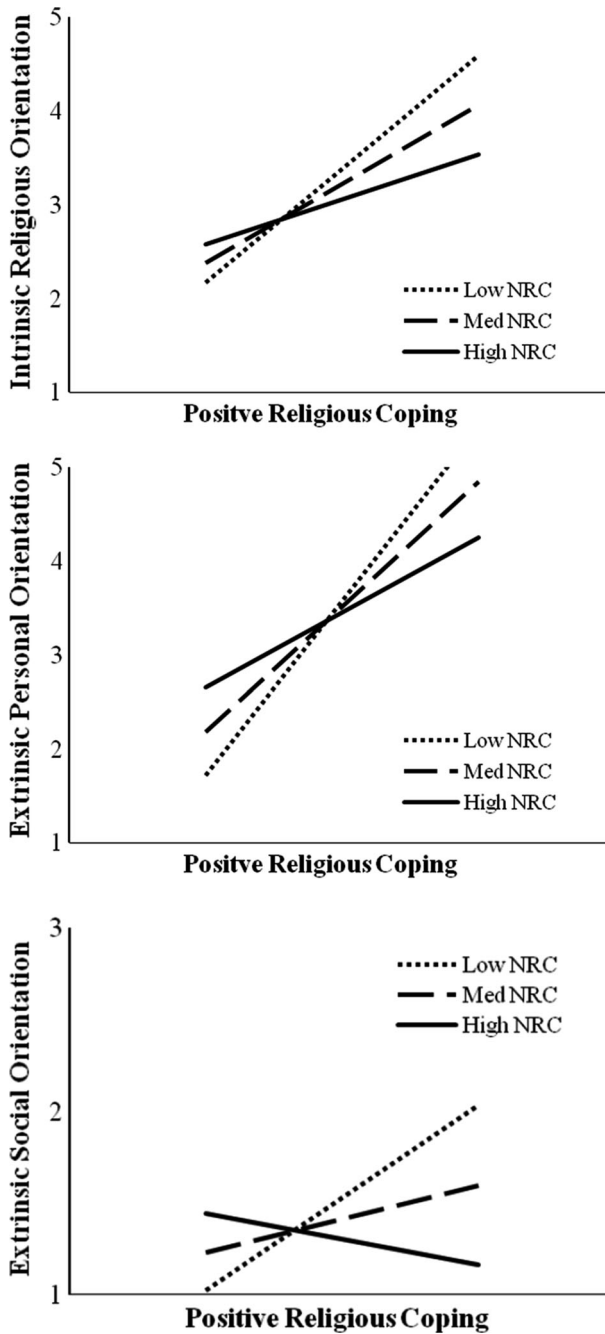
Positive and Negative Religious Coping correlated positively after controlling for gender,  $r_{ab.c} = .24$ ,  $p < .001$ . Other partial correlations appear in Table 2. The three Religious Orientations covaried directly. In findings suggestive of relative mental health, the Intrinsic Orientation predicted higher Integrative Self-Knowledge, and the Intrinsic and Extrinsic Personal Orientations displayed direct ties with Self-Control, Mindfulness, and Self-Esteem. Positive associations of these two religious motivations with Guilt seemed largely adaptive in their implications because Guilt correlated positively with Integrated Self-Knowledge and Mindfulness and negatively with Comparative Self-Criticism. Guilt did, however, exhibit a direct tie with Internalized Self-Criticism. The only linkage of the Extrinsic Social Orientation with a psychological construct involved its inverse connection with Guilt. Measures of psychological adjustment correlated positively with each other and negatively with indices of maladjustment. The maladjustment of Shame, Internalized Self-Criticism, and Comparative Self-Criticism also correlated positively.

As Table 3 makes clear, partial correlations generally described Positive Religious Coping as relatively more adaptive and Negative Religious Coping as relatively more maladaptive. Specifically, Positive Religious Coping displayed direct associations with all three Religious Orientations and with Mindfulness. Negative Religious Coping exhibited a direct association with the Extrinsic Social Orientation and correlated positively with Shame and negatively with Integrative Self-Knowledge, Self-Control, Mindfulness, Self-Esteem, and Guilt.

### Multiple Regression Analyses

Again, multiple regression procedures used Positive and Negative Religious Coping as simultaneous predictors of other variables and also assessed the question of moderation. Standardization of the Brief Religious Coping measures prior to computation of their cross product addressed the problem of multicollinearity (Aiken and West 1991). Evidence of moderation appeared when this cross product increased the variance explained in a construct after Positive and Negative Religious Coping had been entered into the prediction equation on the previous step (Baron and Kenny 1986).

As Table 3 also reveals, multiple regression results suggested that a covariance between the Brief Religious Coping measures obscured the more adjusted psychological implications of Positive Religious Coping. When statistical procedures simultaneously accounted for variance associated with these two scales, Positive Religious Coping continued to predict higher levels of all three Religious Orientations and Mindfulness, but new direct linkages also appeared with Integrative Self-Knowledge, Self-Control, and Self-Esteem. In these analyses, Negative Religious Coping no longer displayed a direct tie with the Extrinsic Social Orientation while continuing to predict the same disturbed forms of self-functioning.



**Fig. 1** Moderation effects of Negative Religious Coping (NRC) on the relationship between Positive Religious Coping and Religious Orientations. Lines reflect relationships at the mean and at two standard deviations above and below the mean

Negative Religious Coping moderated relationships of Positive Religious Coping with all three Religious Orientations, but with none of the psychological constructs (see Table 3). Figure 1 depicts these significant moderation effects and most importantly confirms that Negative Religious Coping inhibited linkages of Positive Religious Coping with the religious adjustment of the Intrinsic and Extrinsic Personal Religious Orientations. In addition, Positive Religious Coping more strongly predicted higher levels of the Extrinsic Social Orientation when Negative Religious Coping was low, but exhibited an inverse connection with this religious motivation when Negative Religious Coping was high.

Implied in the mean levels depicted in Fig. 1 was the previously reported contrast in the strengths of these three religious motivations. A formal analysis of these data once again controlled for gender and yielded a statistically significant overall difference, Greenhouse–Geisser  $F(2, 221) = 57.69, p < .001$ . All post hoc comparisons proved to be significant ( $ps < .01$ ) with the Extrinsic Social Orientation weakest ( $2.03 \pm .06$ ), the Extrinsic Personal Orientation ( $3.50 \pm .08$ ) strongest, and the Intrinsic Orientation ( $3.36 \pm .05$ ) in between.

## Discussion

This study further confirmed the validity, but also the complexity of Brief Religious Coping Scales in Iran. In line with much previous research (Abu-Raiya and Pargament 2015), Positive Religious Coping was stronger on average than Negative Religious Coping, and Positive and Negative Religious Coping predicted psychological adjustment and maladjustment, respectively. However, these two coping measures also correlated positively, just as they have done in previous Iranian investigations (Rohani et al. 2010; Rajabi et al. 2012). This result contrasts with the nonsignificant linkage that usually appears elsewhere (Pargament et al. 2011). Multiple regression procedures focused on the unique contribution of each form of coping to the prediction of psychological functioning and uncovered previously obscured ties of Positive Religious Coping with greater Integrative Self-Knowledge, Self-Control, and Self-Esteem. The maladjustment of Negative Religious Coping, therefore, obscured evidence of the psychological strengths associated with Positive Religious Coping.

## Religious Orientation Relationships

In partial correlations controlling for gender, Positive Religious Coping predicted higher levels of all three Religious Orientations. Negative Religious Coping instead displayed a direct linkage only with the Extrinsic Social Orientation. Hence, Positive Religious Coping was broadly relevant to Muslim religious motivations, but the more maladaptive Negative Religious Coping predicted only the more ambiguous Extrinsic Social Orientation. These results, therefore, suggested that Negative Religious Coping was less likely than Positive Religious Coping to reflect sincere Muslim religious commitments.

Multiple regression data further clarified Religious Coping linkages with Religious Orientations. As simultaneous predictors, Positive Religious Coping continued to exhibit direct connections with the Intrinsic and Extrinsic Personal Orientations, and these associations for Negative Religious Coping remained nonsignificant. Such results supplemented partial correlations in failing to support the hypothesis that Negative Religious

Coping would predict lower levels of adaptive Muslim religious motivations. At the same time, however, Positive Religious Coping did display more robust connections with the Intrinsic and Extrinsic Personal Orientations when Negative Religious Coping was low. Negative Religious Coping, therefore, did exert an inhibition effect on adaptive religious functioning that became apparent only as a background influence on Positive Religious Coping.

The Extrinsic Social Orientation was once again weakest. This scale correlated positively with both forms of coping, but the Negative Religious Coping effect disappeared in the multiple regression. This direct association with Positive Religious Coping suggested that the Extrinsic Social Orientation was not wholly problematic. In addition, Positive Religious Coping displayed a stronger positive tie with the Extrinsic Social Orientation when Negative Religious Coping was low, but an inverse relationship when it was high. This stronger positive connection at lower levels of Negative Religious Coping paralleled data for the other two religious motivations and further suggested that the Extrinsic Social Orientation had adaptive potentials. On the other hand, the inverse relationship with Positive Religious Coping at higher levels of Negative Religious Coping suggested that the Extrinsic Social motivation operated as a problematic factor within the dynamics of more disturbed Muslim functioning. In other words, the Extrinsic Social Orientation may take on meanings dependent upon contextual factors associated with other psychological and social processes. Such results supplemented previous findings in depicting the Extrinsic Social Orientation as an ambiguous measure with questionable validity when used with Muslims (Ghorbani et al. 2007).

### **Additional Findings**

Other variables usefully clarified the Religious Coping and Religious Orientation variables. In partial correlations, an inverse connection with Guilt was the lone linkage of the Extrinsic Social Orientation with a psychological construct. Guilt reflects a largely prosocial need to bring behavior into conformity with morality (Tangney and Dearing 2002). This negative relationship, therefore, supported interpretations of the Extrinsic Social Orientation as pointing toward at least some maladaptive consequences.

In multiple regressions, Positive Religious Coping exhibited direct linkages with Integrative Self-Knowledge and Self-Control constructs that reflect an ideal of Iranian Muslim mysticism (Ghorbani et al. 2011b). Positive Religious Coping also predicted greater Mindfulness, which research has identified as a variable that combines with Integrative Self-Knowledge and Self-Control to define processes of self-regulation in Iran (Ghorbani et al. 2014). In other words, Positive Religious Coping perhaps reflected a religiously relevant form of self-regulation. The positive relationship with Self-Esteem further confirmed Positive Religious Coping as a successful self-regulatory process. Conversely, Negative Religious Coping described a failure in self-regulation that did not correlate with adaptive religious motivations and that displayed connections with greater Shame and with lower Integrative Self-Knowledge, Self-Control, Mindfulness, and Self-Esteem.

Positive and Negative Religious Coping did not interact in predicting psychological variables. This absence of interaction effects did not mean, however, that simultaneous attention to both forms of coping was irrelevant. Again, connections of Positive Religious Coping with Integrative Self-Knowledge, Self-Control, and Self-Esteem only appeared when multiple regression procedures accounted for variance associated with Negative Religious Coping. This lack of reliable interactions did suggest, however, that Religious Coping influences on psychological functioning were more straightforward than on

Religious Orientations. The perhaps unsurprising implication was that measures of specifically religious forms of coping would have subtler and more nuanced implications within the domain of religious functioning than across domains with psychological functioning.

Relationships among psychological scales largely conformed to expectations. When significant relationships did appear, presumed indices of psychological adjustment correlated positively with each other and negatively with instruments designed to operationalize maladjustment. These latter measures also correlated positively. The only complexity appeared when Guilt displayed a direct relationship with Internal Self-Criticism. Other results confirmed Guilt as adaptive. Specifically, Guilt correlated positively with Integrative Self-Knowledge and Mindfulness and negatively with Comparative Self-Criticism. Overall, these data perhaps suggested that Internal Self-Criticism had at least some adaptive role to play; however, the opposite possibility cannot be dismissed that Guilt also had problematic implications.

Gender differences appeared. Women scored higher on Positive Religious Coping, a result that mirrors a common observation within the psychology of religion that women just tend to be more religious (e.g., Hood et al. 1996). In light of these data, the lower Extrinsic Social scores of women perhaps supplied additional evidence of the questionable validity of this religious motivation. Women also exhibited higher Integrative Self-Knowledge, Mindfulness, and Internal Self-Criticism. This pattern of gender differences may further suggest that Internal Self-Criticisms had at least some adaptive meanings for mental health.

## Limitations

As with any investigation, limitations dictate interpretative caution. The university students who served as research participants were not typical of the Iranian population. Confident generalizations about the wider society will require the analysis of a more representative sample. In addition, these data may or may not clarify religious coping in other Muslim societies or in Muslims living as a minority community elsewhere. Future studies will need to examine Positive and Negative Religious Coping in these other cultural contexts. Finally, the conclusions of this project rested upon correlational findings that can say nothing definitive about causation. It cannot be assumed, for example, that Negative Religious Coping caused poorer Integrative Self-Knowledge and Self-Esteem. Demonstrations of causality will require the use of other research designs.

## Conclusions

In Iran, as elsewhere, Positive Religious Coping was stronger on average than Negative Religious Coping; and Positive Religious Coping predicted better and Negative Religious Coping predicted poorer mental health. In addition to replicating these effects, this study added three new observations. First, direct relationships between Positive and Negative Religious Coping appear to be a reliable phenomenon in Iran. Second, Positive Religious Copings is broadly compatible with, and Negative Religious Coping is largely irrelevant to, Iranian religious motivations. Third, Negative Religious Coping in Iran can obscure linkages of Positive Religious Coping with religious and psychological adjustment. These findings suggest future concerns both for basic research and for applied psychological practice.

With regard to basic research, an important question is to explain the direct relationship between Brief Religious Coping Scales designed to be orthogonal. One possibility may be that both forms of coping may be especially sensitive to factors associated with anxiety in Muslims. Research does generally suggest that Positive Religious Coping reduces stress (e.g., Pargament et al. 2011), but evidence also suggests that Positive Religious Coping can predict greater rather than reduced distress in Muslims (Abu-Raiya and Pargament 2015). Such distress mobilization effects have appeared, for example, in Pakistanis (e.g., Khan et al. 2011; Khan et al. 2016), and positive correlations between Positive and Negative Religious Coping may reflect a shared sensitivity to a stress-related mobilization of anxiety. Perhaps supporting this argument have been suggestions that Muslims are more vulnerable to anxiety in their attachments to God (Miner et al. 2014), a possibility recently confirmed empirically in Iran (Ghorbani et al. in press). In Malaysia as well, at least some aspects of a normative Muslim accountability to the wider community can predict anxiety (Tekke et al. 2016). Future studies might, therefore, examine whether processes associated with stress-induced anxiety in Muslims may help explain direct linkages between Positive and Negative Religious Coping.

Other operationalizations of Muslim religious coping have been developed. The Psychological Measure of Islamic Religiousness, for instance, includes Islamic Positive Religious Coping and Punishing Allah Reappraisal subscales that record more adaptive and more maladaptive forms of Muslim religious coping, respectively (Abu-Raiya et al. 2008; Abu-Raiya and Hill 2014). An obvious basic research question is whether these measures parallel Positive and Negative Religious Coping in displaying a covariance that would affect their apparent religious and psychological implications.

With regard to applied psychological practice, the present data may help guide counseling efforts to help Muslims cope with stressors. Any client tendencies toward Positive Religious Coping presumably should be encouraged as adaptive and as compatible with sincere Muslim religious motivations. Conversely, dysfunctions associated with Negative Religious Coping might be addressed by deepening client understandings that this form of coping is not a demand of Muslim commitments and that it may interfere with the benefits of Positive Religious Coping.

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