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## Muslim Experiential Religiousness: Spirituality Relationships With Psychological and Religious Adjustment in Iran

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### ABSTRACT

Iranian university ( $N = 153$ ) and Islamic seminary ( $N = 143$ ) students responded to a Muslim Experiential Religiousness measure of spirituality. This instrument correlated positively with Integrative Self-Knowledge, Self-Control, Mindfulness, and Satisfaction With Life. Muslim Experiential Religiousness also displayed direct associations with Muslim Attitudes Toward Religion and with Intrinsic and Extrinsic Personal Religious Orientations. At higher levels of Muslim Experiential Religiousness, Muslim Attitudes Toward Religion displayed stronger connections with psychological and religious adjustment. Islamic seminarians self-reported higher Islamic spirituality than university students. Overall, Muslim Experiential Religiousness appeared to assess a Muslim form of spiritual self-regulation.

### KEYWORDS

Integrative self-knowledge; Iran; Muslim Experiential Religiousness; self-control; spiritual self-regulation

Spirituality can be defined as a “search for the sacred” (Pargament, 2013, p. 257). *Islam* in Arabic means “submission” (Nasr, 2002), and a recently developed Muslim Experiential Religiousness Scale uses Quranic perspectives to define a Muslim search for the sacred in terms of a loving submission to God who, according to Muslim traditions, is always nearby (Ghorbani, Watson, Geranmayepour, & Chen, 2014a). This instrument has been evaluated as “a theoretically sound measure” that “captures a central feature of Islamic religiousness” (Abu-Raiya & Hill, 2014, p. 28). Indeed, findings from both Shiite Iran (Ghorbani, Watson, Aghababaei, & Chen, 2014; Ghorbani, Watson, Geranmayepour, & Chen, 2013, 2014b) and Sunni Pakistan (Khan, Watson, & Chen, 2015a, 2015b; Khan, Watson, Naqvi, Jahan, & Chen, 2015) demonstrate that this index of Muslim spirituality predicts psychological and religious adjustment.

Early uses of this measure have also suggested that spirituality may, in at least some instances, moderate other influences of Muslim religiousness. In an Iranian project, Islamic attitudes toward religion more strongly predicted

psychological adjustment when Muslim Experiential Religiousness was high (Ghorbani et al., 2014b). Similarly, in Pakistan, Muslim Experiential Religiousness enhanced the ability of religious coping to reduce distress produced by terrorism (Khan et al., 2015b). In both investigations, moderation effects appeared with some but not all indices of adjustment. Moderation effects, therefore, represent a complexity in the dynamics of Muslim spirituality that deserve additional research attention.

In general terms, the present project sampled Iranian university and Islamic seminary students in order to further clarify the psychological and religious implications of Muslim spirituality. Pursuit of that goal involved analysis of an array of mental health constructs, some of which were especially germane to the Iranian cultural context. Given the previous finding in Iran that spirituality moderated the influence of Islamic religious attitudes, procedures also evaluated the possibility that relationships observed for Muslim Attitudes Toward Religion (Wilde & Joseph, 1997) would be more robust when Muslim Experiential Religiousness was high.

### ***Measures of psychological and religious adjustment***

Among their recommendations for promoting an understanding of Muslim religiousness, Abu-Raiya and Pargament (2011) have argued that research should be sensitive to “particularities and nuances of Islamic faith and culture” (p. 106). This study, therefore, included an examination of two measures that are relevant to an Iranian mystical ideal called the “Perfect Man” (*Ensān-e Kāmel*). Iranian philosophical perspectives define the Perfect Man as someone with a personality essentially grounded in self-knowledge and self-control (Motahhari, 2000). Self-knowledge is deemed indispensable for achieving insight into God (Shimamoto, 2008). Self-control then becomes important because if “a person purifies his heart [i.e., uses self-control] and travels by a vehicle of love to the status of Perfect Man, the barrier between he and God will be completely removed” (Shimamoto, p. 31). The Perfect Man, in other words, describes a successful Muslim search for the sacred. In a previous Iranian investigation, Integrative Self-Knowledge (Ghorbani, Watson, & Hargis, 2008) and Self-Control (Tangney, Baumeister, & Boone, 2004) scales served as empirical markers of the Perfect Man, and each displayed expected linkages with Muslim psychological and religious adjustment (Ghorbani, Watson, Rezazadeh, & Cunningham, 2011). In the present project, the prediction was that Muslim Experiential Religiousness would correlate positively with both measures.

Analysis of additional psychological constructs further clarified Muslim spirituality. Mindfulness is an ongoing awareness of the self in the present, and this process combines with self-knowledge and self-control to describe self-regulation in Iran (Ghorbani, Watson, Farhadi, & Chen, 2014). Efforts

to specify the relationship of Muslim and other religious commitments with death anxiety have yielded inconclusive results (see e.g., Al-Sabwah & Abdel-Khalek, 2006). Rasmussen and Johnson (1994) suggested that an inverse relationship will become clearer if the empirical focus is placed on spirituality rather than on religiosity. The Satisfaction With Life Scale correlates positively with Muslim religious commitments in general (Abdel-Khalek, 2004) and with Muslim Experiential Religiousness in particular (Ghorbani et al., 2014a). The hypothesis, therefore, was that Muslim Experimental Religiousness would correlate negatively with the Death Anxiety Scale (Templer, 1970) and positively with Mindfulness (Brown & Ryan, 2003) and Satisfaction With Life scales (Diener, Emmons, Larsen, & Griffin, 1985).

With regard to religious functioning, administration of the Muslim Attitudes Toward Religion Scale (Wilde & Joseph, 1997) involved the use of a measure that correlates with mental health and with religious and spiritual adjustment in Iran (Ghorbani et al., 2014a; Ghorbani, Watson, Ghramaleki, Morris, & Hood, 2000). Well-established religious orientation scales (Gorsuch & McPherson, 1989) assessed basic Iranian motivations for being religious. The Intrinsic Religious Orientation Scale records an attempt to make religion the ultimate motivation in life. The Extrinsic Personal Orientation involves the use of faith to achieve a sense of well-being. The Extrinsic Social Orientation Scale measures a desire to obtain social benefits by being religious. In Muslim samples, intrinsic and extrinsic personal orientations predict more adaptive religious and psychological functioning, but the extrinsic social orientation appears to be weaker and ambiguous in its implications (Ghorbani, Watson, & Khan, 2007). Overall, the expectation was the spirituality of Muslim Experiential Religiousness would correlate positively with Muslim Attitudes Toward Religion and with the Intrinsic and Extrinsic Personal Orientations. No clear predictions seemed possible for the ambiguous Extrinsic Social Orientation.

Finally, Iranian data already demonstrate that Islamic seminarians score higher than university students in their Muslim Experiential Religiousness (Ghorbani et al., 2014, 2014a). Given this difference, the additional question was whether seminarians would also display greater psychological and religious adjustment as made evident in lower Death Anxiety and in higher levels of Integrative Self-Knowledge, Self-Control, Mindfulness, Satisfaction With Life, and Intrinsic and Extrinsic Personal Religious Orientations.

### **Hypotheses**

In summary, this project used the Muslim Experiential Religiousness Scale to further explore spirituality in Iranian university and Islamic seminary students. Procedures tested four broad sets of hypotheses:

- H1:* Muslim Experiential Religiousness should predict religious adjustment by correlating positively with Muslim Attitudes Toward Religion and with the Intrinsic and the Extrinsic Personal Religious Orientations.
- H2:* Muslim Experiential Religiousness should also predict better mental health as made evident in direct relationships with Integrative Self-Knowledge, Self-Control, Mindfulness, and Satisfaction With Life and in an inverse linkage with Death Anxiety.
- H3:* Muslim Experiential Religiousness should moderate relationships observed for Muslim Attitudes Toward Religion. Specifically, associations of Muslim Attitudes Toward Religion with mental health and with religious adjustment should be stronger when Muslim Experiential Religiousness is higher.
- H4:* Given their higher Muslims Experiential Religiousness, Islamic seminarians relative to university students should also be lower in Death Anxiety and higher in their Intrinsic and Extrinsic Personal Religious Orientations, Muslim Attitudes Toward Religion, Integrative Self-Knowledge, Self-Control, Mindfulness, and Satisfaction With Life.

## Method

### Participants

Research participants included 296 students from a university in Tehran and from an Islamic seminary in Tehran or Qom ( $M$  age = 23.8 years,  $SD$  age = 4.3). A group of 88 women and 65 men made up the university sample. Among the Islamic seminarians, 77 were women, and 66 were men.

### Materials

All measures appeared in a single questionnaire booklet. Creation of the Muslim Experiential Religiousness and the Integrative Self-Knowledge scales occurred in Persian. Translation of all other measures from English into Persian took place in preparation for previous Iranian projects. Unless otherwise noted, participants responded to each instrument using a 5-point Likert scale. Statistical procedures scored each measure in terms of the average response per item. Scales appeared in the booklet in the order of their description as follows.

### **Muslim Experiential Religiousness**

Making up the Muslim Experiential Religious Scale (Ghorbani et al., 2013) were 15 statements that recorded a personal experience of closeness and loving submission to God ( $M = 3.24$ ,  $SD = 0.63$ ,  $\alpha = .90$ ). One item said, for instance, “Experiences of submitting to God cause me to feel more vital and motivated.”

### **Integrative self-knowledge**

The 12-item Integrative Self-Knowledge Scale ( $M = 2.46$ ,  $SD = .64$ ,  $\alpha = .76$ ) recorded efforts of the individual to unite past, present, and desired future self-experience into a meaningful whole (Ghorbani, Watson, & Hargis, 2008). A representative expression of self-knowledge said, “If I need to, I can reflect about myself and clearly understand the feelings and attitudes behind my past behaviors.”

### **Mindfulness**

The Mindfulness Attention Awareness Scale (Brown & Ryan, 2003;  $M = 4.17$ ,  $SD = 0.81$ ,  $\alpha = .84$ ) included 15 reverse-scored expressions of a lack of mindfulness (e.g., “I find it difficult to stay focused on what’s happening in the present”). Reactions were rated on a 6-point scale (1 = *strongly disagree* to 6 = *strongly agree*).

### **Self-control**

The Brief Self-Control Scale ( $M = 3.30$ ,  $SD = 0.65$ ,  $\alpha = .80$ ) contained 13 statements (Tangney et al., 2004). One item said, for instance, “I am able to work effectively toward long-term goals.” Participants used a 6-point Likert scale to respond to this measure (1 = *strongly disagree* to 6 = *strongly agree*).

### **Muslim attitudes toward religion**

The Wilde and Joseph (1997) Muslim Attitudes Toward Religion Scale consists of 14 statements ( $M = 3.57$ ,  $SD = 0.52$ ,  $\alpha = .91$ ). Exemplifying these attitudes were self-reports such as “Islam helps me lead a better life” and “I fast the whole month of Ramadan.”

### **Death anxiety**

The Templer (1970) Death Anxiety Scale ( $M = 3.57$ ,  $SD = 0.52$ ,  $\alpha = .91$ ) included 15 statements (e.g., “I am very much afraid to die”). Responses ranged from 1 (*strongly disagree*) to 4 (*strongly agree*).

### **Satisfaction with Life**

Five statements made up the Diener et al. (1985) Satisfaction With Life Scale ( $M = 2.27$ ,  $SD = 0.85$ ,  $\alpha = .83$ ). One illustrative item said, “In most ways, my life is close to my ideal.”

### Religious orientation

Gorsuch and McPherson's (1989) Religious Orientation Scales used 0 (*I strongly disagree*) to 4 (*I strongly agree*) response options. Representative of the 8-item Intrinsic Scale ( $M = 3.03$ ,  $SD = 0.72$ ,  $\alpha = .78$ ) was the self-report, "My whole approach to life is based on my religion." Exemplifying the Extrinsic Personal Orientation (three items,  $M = 2.93$ ,  $SD = 0.81$ ,  $\alpha = .66$ ) was the statement, "What religion offers me most is comfort in times of trouble and sorrow." Indicative of the Extrinsic-Social Orientation (three items,  $M = 1.47$ ,  $SD = 0.96$ ,  $\alpha = .72$ ) was the claim, "I go to activities associated with my religion because I enjoy seeing people I know there."

### Procedure

All procedures conformed to institutional guidelines for the conduct of ethical research. Participants volunteered for the project, and their responding was completely confidential. Groups of varying sizes received the questionnaire booklet in a classroom setting.

After preliminary analyses revealed a need to control for age, statistical procedures began with an examination of relationships among measures. With regard to the issue of moderation (Baron & Kenny, 1986), standardization of Muslim Experiential Religiousness and Muslim Attitudes Toward Religion prior to computation of their cross-product addressed the problem of multicollinearity (Aiken & West, 1991). Multiple regression evidence of moderation appeared when this cross-product increased the variance explained beyond that already accounted for by these two measures on the previous step. A multivariate analysis of covariance (MANCOVA) examined both gender and institution group differences.

## Results

### Preliminary analyses

Preliminary analyses revealed that age correlated positively with Mindfulness (.12,  $p < .05$ ) and negatively with Satisfaction With Life (−.12,  $p < .05$ ). Men ( $M$  age = 24.7 years,  $SD$  age = 5.0) proved to be older than women ( $M$  age = 23.1 years,  $SD$  age = 3.6),  $F(1, 292) = 10.40$ ,  $p < .01$ ; and Islamic seminarians ( $M$  age = 25.1 years,  $SD$  age = 5.0) were also older than university students ( $M$  age = 22.6 years,  $SD$  age = 3.2),  $F(1, 292) = 24.07$ ,  $p < .001$ . All subsequent statistical procedures, therefore, controlled for age.

**Table 1.** Partial correlations of Muslim Experiential Religiousness with religious and psychological functioning after controlling for age ( $N = 296$ ).

Scale	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Muslim Experiential Religiousness	—	.52***	.36***	-.05	.67***	.18**	.19**	.35***	.09	.18**
2. Intrinsic Religious Orientation		—	.30***	-.08	.45***	.52***	.45***	.35***	.20***	.26***
3. Extrinsic Personal Orientation			—	.19**	.28***	.03	.14*	.10	.10	.22***
4. Extrinsic Social Orientation				—	-.09	-.17**	-.14*	-.04	-.08	-.05
5. Muslim Attitudes Toward Religion					—	.10	.13*	.30***	.01	.24***
6. Integrative Self-Knowledge						—	.60***	.24***	.09	.22***
7. Self-Control							—	.33***	-.05	.34***
8. Mindfulness								—	-.05	.16**
9. Death Anxiety									—	-.15**
10. Satisfaction with Life										—

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

### **Relationships among measures**

Partial correlations controlling for age appear in Table 1. Muslim Experiential Religiousness and the Intrinsic Religious Orientation correlated positively with each other and with Extrinsic Personal Orientation, Muslim Attitudes Toward Religion, Integrative Self-Knowledge, Self-Control, Mindfulness, and Satisfaction with Life. A direct connection also appeared between the Intrinsic Orientation and Death Anxiety.

In addition, the Extrinsic Personal Orientation displayed direct linkages with the Extrinsic Social Orientation, Muslim Attitudes Toward Religion, Self-Control, and Satisfaction with Life. Inverse associations appeared for Extrinsic Social Orientation with both Integrative Self-Knowledge and Self-Control. Muslim Attitudes Toward Religion correlated positively with Self-Control, Mindfulness, and Satisfaction with Life. Integrative Self-Knowledge, Self-Control, Mindfulness, and Satisfaction With Life all correlated positively. Satisfaction with Life also predicted lower Death Anxiety.

### **Moderation**

Table 2 summarizes the moderation results. Again, the first step of these procedures accounted for the influence of age. On the second step, Muslim Experiential Religiousness but not Muslim Attitudes toward Religion exhibited significant linkages with higher levels of the Extrinsic Personal Orientation, Integrative Self-Knowledge, Self-Control, Mindfulness, and Death Anxiety. Muslim Attitudes Toward Religion alone explained greater



**Table 2.** Prediction of religious and psychological functioning using age in step 1, Muslim Experiential Religiousness (MER) and Muslim Attitudes Toward Religion (MATR) in step 2, and the MER by MATR interaction in step 3 (N = 296).

Measures	Step 1		Step 2			Step 3	
	$R^2$	Age $\beta$	$\Delta R^2$	MER $\beta$	MATR $\beta$	$\Delta R^2$	Interaction $\beta$
Intrinsic Religious Orientation	.00	-.06	.29***	.40***	.18**	.03**	.21**
Extrinsic Personal Religious Orientation	.01	-.07	.13***	.32***	.07	.00	-.03
Extrinsic Social Religious Orientation	.00	-.02	.01	.01	-.10	.00	-.03
Integrative Self-Knowledge	.01	-.07	.03**	.19*	-.03	.04***	.27***
Self-Control	.00	-.04	.03**	.18*	.00	.03**	.21**
Mindfulness	.02*	.12*	.13***	.27***	.12	.02**	.19**
Death Anxiety	.00	.01	.01	.16*	-.10	.01	-.13
Satisfaction With Life	.02*	-.12*	.06.***	.03	.22**	.04***	.25***

Note. MER = Muslim Experiential Religiousness; MATR = Muslim Attitudes Toward Religion. For the Death Anxiety interaction effect,  $p = .051$ .

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

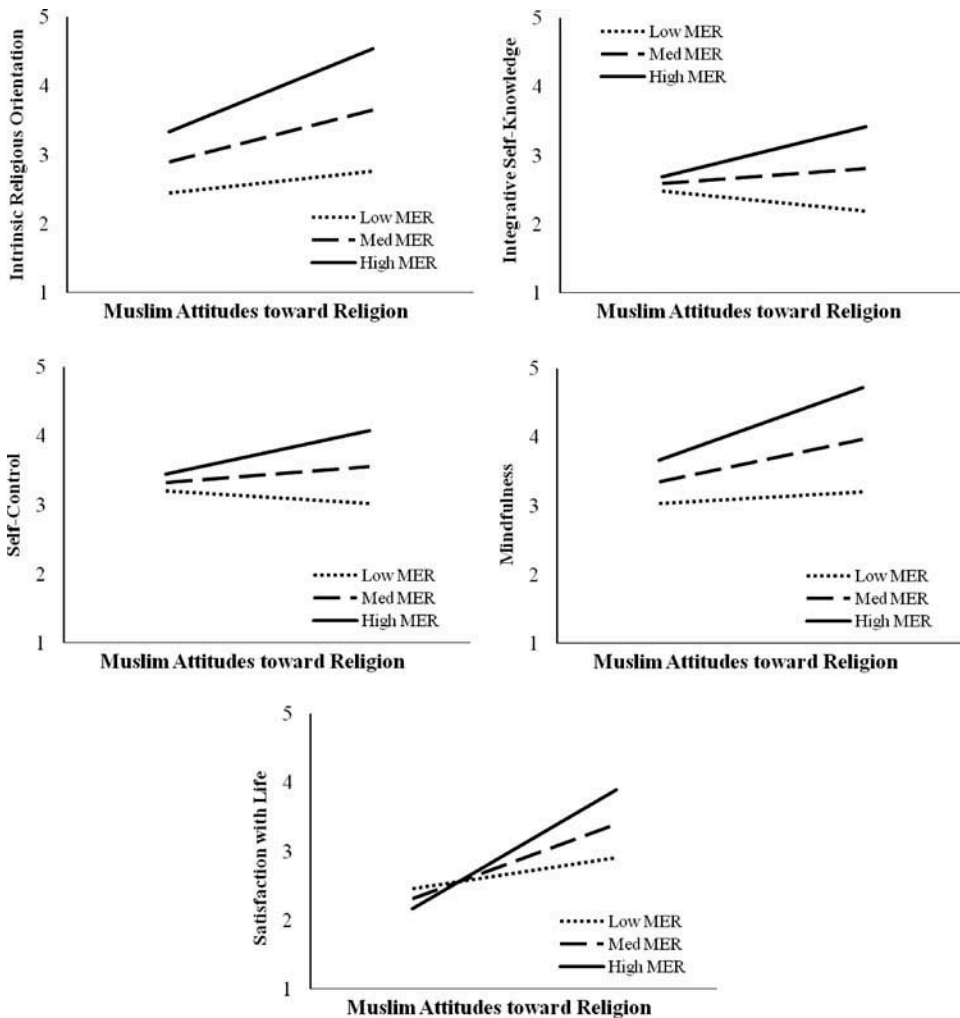
Satisfaction with Life. Both measures predicted higher levels of the Intrinsic Religious Orientation.

Significant interactions between Muslim Experiential Religiousness and Muslim Attitudes Toward Religion appeared in the analysis of five measures, including specifically the Intrinsic Religious Orientation, Integrative Self-Knowledge, Self-Control, Mindfulness, and Satisfaction with Life. As Figure 1 makes clear, associations of Muslim Attitudes Toward Religion with each of these constructs became more positive as Muslim Experiential Religiousness became stronger. At low levels of Muslim Experiential Religiousness, Muslim Attitudes Toward Religion also displayed at least some tendency toward an inverse connection with Integrative Self-Knowledge and Self-Control.

### Group comparisons

The MANCOVA uncovered a significant overall effect for Gender, Wilks' lambda = .831,  $F(10, 282) = 5.72$ ,  $p < .001$ . As Table 3 reveals, women scored higher than men on the Intrinsic Orientation ( $M \pm S.E.M. = 3.13 \pm .06$ ), Extrinsic Personal Orientation ( $3.11 \pm .06$ ), Death Anxiety ( $1.92 \pm .03$ ), and Satisfaction With Life ( $2.41 \pm .07$ ) measures. For men, descriptive statistics for these measures were Intrinsic Orientation,  $2.92 \pm .06$ ; Extrinsic Personal Orientation,  $2.72 \pm .07$ ; Death Anxiety,  $1.72 \pm .04$ ; and Satisfaction with Life,  $2.08 \pm .07$ .

Overall differences between the two institutions appeared as well, Wilks' lambda = .846,  $F(10, 282) = 5.13$ ,  $p < .001$ . Islamic seminarians displayed higher levels of Muslim Experiential Religiousness ( $3.34 \pm .05$ ), Intrinsic Religious Orientation ( $3.14 \pm .06$ ), and Death Anxiety ( $1.97 \pm .03$ ), along with lower scores on the Extrinsic Social Orientation ( $1.36 \pm .08$ ) measure. Responding of university students on these measures was as follows: Muslim



**Figure 1.** Effects of Muslim Attitudes toward Religion as Significantly Moderated by Muslim Experiential Religiosity. Lines Reflect Relationships at the Mean and at Two Standard Deviations Above and Below the Mean. *Note.* MER = Muslim Experiential Religiosity.

Experiential Religiosity,  $3.14 \pm .05$ ; Intrinsic Religious Orientation,  $2.90 \pm .06$ ; Death Anxiety,  $1.66 \pm .03$ ; and Extrinsic Social Orientation,  $1.59 \pm .08$ .

An overall interaction between gender and institution was significant as well, Wilks' lambda = .909,  $F(10, 282) = 2.84$ ,  $p < .01$ . Two measures explained this result (see Table 3). University men scored higher on the Extrinsic Social Orientation scale than men in the Islamic seminary, ANCOVA  $F(1, 128) = 8.00$ ,  $p < .01$ , but for women this contrast was nonsignificant,  $p = .98$ . With regard to Integrative Self-Knowledge, seminary men scored higher than university men, ANCOVA  $F(1, 128) = 6.13$ ,

**Table 3.** Gender and institutional differences in religious and psychological functioning after controlling for age ( $N = 296$ ).

Measures	University		Islamic Seminary		ANCOVA $F$		
	Men	Women	Men	Women	G	I	G $\times$ I
Muslim Experiential Religiousness	3.09+.08	3.20+.07	3.42+.05	3.26+.06	0.11	6.43*	3.50
Intrinsic Orientation	2.73+.09	3.08+.08	3.10+.09	3.19+.08	6.50*	8.09***	2.35
Extrinsic Personal Orientation	2.75+.10	3.08+.09	2.71+.10	3.13+.09	17.21**	0.03	0.14
Extrinsic Social Orientation	1.72+.12	1.46+.11	1.26+.12	1.46+.11	0.06	4.03*	4.34*
Muslim Attitudes Toward Religion	3.48+.06	3.57+.06	3.64+.07	3.59+.06	0.07	1.71	1.70
Integrative Self-Knowledge	2.22+.08	2.62+.07	2.57+.08	2.37+.07	1.96	0.60	15.89***
Self-Control	3.21+.08	3.39+.07	3.24+.08	3.34+.08	3.38	0.01	0.22
Mindfulness	4.03+.10	4.23+.09	4.20+.10	4.16+.09	1.16	0.07	2.26
Death Anxiety	1.54+.05	1.78+.04	1.89+.05	2.05+.05	18.39***	42.07***	.87
Satisfaction with Life	2.11+.10	2.50+.09	2.05+.10	2.32+.10	11.24**	1.40	0.46

Note. G = gender; I = institution. For each ANCOVA procedure, the degrees of freedom was 1,291.

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

$p < .001$ , but an opposite pattern appeared for women with the university mean being higher than the seminary mean, ANCOVA  $F(1, 162) = 5.21$ ,  $p < .05$ .

### Discussion

Muslim Experiential Religiousness once again proved to be useful in clarifying Islamic spirituality. Most important was confirmation of the hypothesis that Muslim Experiential Religiousness would correlate positively with Integrative Self-Knowledge and Self-Control. Within Iranian philosophical frameworks, self-knowledge combines with self-control to actualize an Islamic cultural and mystical ideal called the Perfect Man (Shimamoto, 2008). When supplemented by mindfulness, these variables also describe adaptive processes of Iranian self-regulation (Ghorbani, Watson, Farhadi, & Chen, 2014). Noteworthy, therefore, were findings that Muslim Experiential Religiousness also correlated positively with Mindfulness and that Mindfulness displayed direct linkages with both Integrative Self-Knowledge and Self-Control. Associations with greater Satisfaction With Life verified the positive mental health implications of all these constructs, and direct relationships with Muslim Attitudes Toward Religion and the Intrinsic and Extrinsic Personal Religious Orientation measures once again documented Muslim Experiential Religiousness as an index of Muslim religious adjustment. Taken together, these results supported a conclusion that Muslim Experiential Religiousness reflected a Muslim form of spiritual self-regulation.

Moderation effects supplied especially compelling evidence of spiritual self-regulation. In general terms, Muslim Attitudes Toward Religion became a more robust predictor of mental health and religious adjustment when

Muslim Experiential Religiousness was high. Deserving emphasis was the appearance of such effects with the three self-regulatory processes of Integrative Self-Knowledge, Self-Control, and Mindfulness. Muslim Attitudes Toward Religion also tended to predict lower Integrative Self-Knowledge and Self-Control when Muslim Experiential Religiousness was low. In these instances, therefore, Muslim attitudes in the absence of spirituality seemed to describe a faith of diminishing impact. The moderation effect observed with the Intrinsic Orientation pointed toward spirituality as a consolidating factor within the dynamics of Muslim religiousness. As with findings for the three self-regulatory processes, moderation of the relationship with Satisfaction With Life further suggested that spirituality augmented the mental health potentials of Muslim attitudes.

As in earlier projects (Ghorbani et al., 2014, 2014a), Islamic seminarians scored higher than university students on Muslim Experiential Religiousness. They also exhibited a higher Intrinsic and a lower Extrinsic Social Religious Orientation. Previous research has established the Intrinsic Orientation as a valid index of Muslim religious adjustment, but the Extrinsic Social Orientation measure appears to be questionable as an acceptable Muslim religious motivation (Ghorbani et al., 2007). In this project as well, the Intrinsic Orientations broadly predicted adjustment, whereas negative correlations with Integrative Self-Knowledge and Self-Control confirmed the Extrinsic Social Orientation as problematic. The questionable nature of the Extrinsic Social Orientation may also have been evident in the relatively lower levels of this religious motivation in Islamic seminarians. Most importantly, this pattern of significant religious contrasts between seminarians and university students once again suggested that Muslim Experiential Religiousness served as a valid measure of Muslim spirituality.

### ***Unexpected death anxiety results***

This study also uncovered a number of complexities and unexpected outcomes. Perhaps most obvious were data for Death Anxiety. Against predictions, no correlation appeared between Muslim Experiential Religiousness and this measure. At least some evidence suggests that a negative association with Death Anxiety will more likely appear if an empirical focus is placed on spirituality rather than on religiosity (Rasmussen & Johnson, 1994). Muslim Experiential Religiousness clearly recorded Islamic spirituality in present project. Its failure to predict lower Death Anxiety may mean either that the ability of spirituality to work against Death Anxiety is inconsistent or that such effects do not generalize to specifically Islamic forms of spirituality.

Even more striking were findings that the Intrinsic Religious Orientation measure correlated positively with Death Anxiety, and that seminarians scored higher than university students on this measure. The unexpected

implication was that anxieties about death operated as an element sustaining Muslim commitments. Perhaps supporting such a conclusion was a previous demonstration that Muslim Experiential Religiousness predicted a stronger motivation to be religious in order to earn a better life after death (Ghorbani et al., 2014b). Muslims in India have also displayed a direct linkage between religion and their death anxieties (Beg & Zilli, 1982). On the other hand, a previous study in Iran found no connection between the Intrinsic Religious Orientation and Death Anxiety (Ghorbani, Watson, & Shahmohamadi, 2008), and the research literature presents an ambiguous picture of how this issue might be resolved (e.g., Al-Sabwah & Abdel-Khalek, 2006). The present data, therefore, supplemented previous findings in suggesting a need for more research into the relationship of Muslim commitments with Death Anxiety.

### ***Other complexities in group differences***

In comparison to university students, Islamic seminarians did not display the higher Integrative Self-Knowledge, Self-Control, Mindfulness, and Satisfaction with Life that seemed possible based upon their greater spirituality. At least three considerations may be relevant here. First, institution and gender interacted to influence Integrative Self-Knowledge. The to-be-expected contrast did appear for men, but for women, the university rather than the Islamic seminary sample scored higher. With regard to other gender differences, women exhibited higher Death Anxiety, Satisfaction With Life, and Intrinsic and Extrinsic Personal Orientations. At least some studies have already found women to be higher in Death Anxiety (e.g., Rasmussen & Johnson, 1994). With regard to Satisfaction with Life, evidence also suggests that women can be more content with life (Zweig, 2015). The stronger religiousness of women is a common finding within the psychology of religion (e.g., Batson, Schoenrade, & Ventis, 1993). In short, the nonsignificant contrast between university and seminary students on Integrative Self-Knowledge may need to be evaluated within the context of complexities associated with gender.

Second, perhaps important here was the failure of seminary and university students to differ in their Muslim Attitudes toward Religion. This nonsignificant outcome perhaps revealed that at least some aspects of Muslim religiosity are distributed more generally in Iranian society both inside and outside the seminary. Such attitudes may operate as a foundational background characteristic within this cultural context. The same may be true with regard to psychological correlates of Muslim spirituality like Self-Control, Mindfulness, and Satisfaction with Life.

Third, Integrative Self-Knowledge, Self-Control, Mindfulness, and Satisfaction with Life scales expressed these constructs in an essentially

non-religious, “secular” language. In describing the situation in Iran, Shimamoto (2008) has argued, “In general, the notion of the ‘Perfect Man’ is rarely discussed from a philosophical perspective among the general public,” but “discussions of the theme from the mystical standpoint are abundant and widespread” (pp. 30–31). Here, the implication is that linguistic considerations may influence understandings of religious processes. Contrasts between Islamic seminarians and university students might become more obvious if psychological constructs relevant to Muslim spirituality were expressed in a more explicitly Islamic and spiritual language.

## Limitations

As in all investigations, limitations mean that interpretative caution is necessary. At least four issues deserve some emphasis. First, university and Islamic seminary students were not typical of the Iranian or other Muslim populations. Whether the present findings generalize to Iran as a whole will require analysis of a more representative sample. In addition, Iran is an overwhelmingly Shiite Muslim society. The dynamics of Muslim spirituality may differ in other societies defined primarily by Sunni Muslim commitments; although, recent work in Pakistan has supplied encouraging preliminary evidence that parallels may exist across these two types of cultures (Khan et al., 2015a, 2015b). Important differences may also appear in Muslims living as a minority community in other societies.

Second, conclusions of this project rested upon correlational results. Such evidence cannot prove causation. It cannot be said, for example, that Muslim Experiential Religiousness exerted a causal influence on the Integrative Self-Knowledge and Self-Control of the Perfect Man (or vice versa). Some other unexamined causal variable could have produced observed relationships. Attempts to establish causation will require the use of different research designs.

Third, additional emphasis may deserve to be placed on the language of psychological scales. Secular language may not only have prevented the appearance of differences between Islamic seminarians and university students. It may also have reduced the magnitude of relationships of these constructs with religious variables. Research with Christians already demonstrates that a translation of psychological measures into Christian language can produce more robust linkages with religious functioning (Watson, 2011). The same may be true with regard to research examining Muslims.

Fourth and finally, social desirability response sets could have influenced the results with contrasts between Islamic seminarians and university students perhaps being the most obvious possibility. Further analysis of this issue is unlikely to be straightforward, however. Research suggests that social desirability scales record a substantive process of personality adjustment that

is not fully reducible to a response set (McCrae & Costa, 1983). Indeed, social desirability scales may assess a desirable sociality (Watson, Milliron, & Morris, 1995) that conforms to religious norms (Watson, Morris, Foster, & Hood, 1986). Moreover, Uziel (2010) recently reviewed the literature and concluded that social desirability scales actually record an interpersonally oriented form of self-control. Self-control, as this study once again makes clear, can be identified as a noteworthy element of religious adjustment (also see, McCullough & Carter, 2013). Any effort to explain the present data in terms of social desirability, therefore, will need to remain sensitive to the alternative explanation that any such apparent effects may actually reflect a substantively desirable sociality.

## Conclusion

Muslim Experiential Religiousness once again proved to be useful in clarifying Muslim spirituality. Linkages with the Perfect Man and other constructs suggested that this scale may operationalize a spiritual form of Muslim self-regulation. Moderation effects more specifically revealed that this spiritual self-regulation has a potential to enliven the dynamics of Muslim religiousness. An important question for future research is to understand when and why such moderation effects do not always appear.

In the more secular West, recent research has distinguished between religion and spirituality and has focused on the possibility of being spiritual but not religious (Pargament, 2013). Positive correlations of Muslim Experiential Religiousness with Muslim Attitudes Toward Religion and with the Intrinsic and Extrinsic Personal Religious Orientations further confirmed the unsurprising observation that being spiritual and religious is a prominent feature of life within the Muslim society of Iran. Whether spiritual but not religious commitments exist in such a cultural context remains to be determined. The Muslim Experiential Religious Scale may be useful in efforts to explore this and many other issues related to Muslim spirituality.

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