

Measuring Muslim Spirituality: Relationships of Muslim Experiential Religiousness with Religious and Psychological Adjustment in Iran

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Abstract

Spirituality based on a Muslim perspective centers on loving submission and closeness to God. A 15-item Muslim Experiential Religiousness Scale operationalized this definition of spirituality in a sample of 627 Iranian university and Islamic seminary students. Muslim Experiential Religiousness correlated positively with Intrinsic and Extrinsic Personal Religious Orientations, Muslim Attitudes toward Religion, and Satisfaction with Life, and negatively with Anxiety and Depression. This new instrument also displayed incremental validity over religious orientation and Muslim attitude scales, and an ability to explain variance in the relationships of these measures with other variables. Islamic seminarians scored higher on Muslim Experiential Religiousness than more general university students, and this scale mediated contrasts between these two student groups. In short, the Muslim Experiential Religiousness Scale demonstrated a clear potential for assessing Muslim spirituality and thus for advancing a Muslim psychology of religion.

Keywords: Spirituality, Muslim Experiential Religiousness, Religious Orientations, Muslim Attitudes, Psychological Adjustment, Iran

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Research in the psychology of religion increasingly suggests that the positive mental health implications of religion in general, and thus presumably of Islam in particular, rest upon spiritual as well as belief dimensions of faith (Hill & Pargament, 2008; Wink & Dillon, 2008). A recent research program sought to explore this potentially important role of spirituality for Muslims by using a Qur'anic perspective to develop a Muslim Experiential Religiousness Scale. Spirituality can be defined as a "search for the sacred" (Pargament, 2013, p. 257), and the assumption underlying this new scale is that Muslims search for the sacred in a submission to God which results in a close and loving relationship (Ghorbani, Watson, Geranmayepour, & Chen, 2013).

Studies conducted in Iran already document the potentials of this instrument to advance the Muslim psychology of religion (Chen, Ghorbani, Watson, & Aghababaei, 2013; Ghorbani et al., 2013; Ghorbani, Watson, Geranmayepour, & Chen, in press). The availability of such an instrument, for example, makes it possible for researchers to test hypotheses about the full range of influences that Muslim spirituality might have on religious and psychological functioning. Within this broader research program, the present project sought to define and establish the basic validity of the Muslim Experiential Religiousness Scale.

Defining Muslim Experiential Religiousness

"Islam" comes from the Arabic word meaning "surrender." For Muslims, faith as an experiential reality begins with a surrender to the infinite power of God that illuminates the finiteness of the humbled believer (cf., Büyükçelebi, 2005, p. 20). "Whose way is better than that of the man who has submitted to God, and does good, and who follows the creed of Abraham the upright?" asks the Qur'an (4:125). A "Muslim" is someone like Abraham who "surrenders to God" (Nasr, 2002, p. 8). This surrender is to God, who is "closer to him than his jugular vein" (Qur'an, 50:16). "He is with you wheresoever you may be, and He perceives whatsoever you do" (Qur'an, 57:4). Making this closeness conscious opens the Muslim up to the love of God; "Say: 'If you love God then follow me that God may love you and forgive your faults; for God is forgiving and kind'" (Qur'an 3:31). These elements come together symbolically in the five

daily prayers of Islam which include a literal, prostrate submission that seeks to bring Muslim consciousness into closer contact with the love of God.

The underlying assumption of the present project was that submission, closeness, and love should operate within Muslim consciousness as a dynamic whole. More specifically, in the phenomenology of Muslim spirituality, submission of the finite self should reveal the closeness of what is experienced as the infinite God, closeness of the infinite God should enkindle a love that is at the heart of this experience, and love should then motivate further submission in a self-reinforcing cycle that deepens faith across time. The overall goal of this study, therefore, was to create a unidimensional and reasonably short measure of Muslim Experiential Religiousness that would be useful in clarifying spirituality within the Muslim psychology of religion.

Attempts to accomplish this overall objective rested upon an examination of three sets of hypotheses. First, as an important feature of Muslim faith, Muslim Experiential Religiousness should display direct linkages with measures of religious commitment. Second, the idea that spirituality promotes the positive mental health implications of religion (Hill & Pargament, 2008; Wink & Dillon, 2008) suggested that it should also correlate positively with indices of psychological adjustment. Finally, the claim that spirituality could be centrally important in a Muslim psychology of religion would receive confirmation if Muslim Experiential Religiousness mediated relationships of Muslim religious commitments with other measures.

Additional Measures

With regard to religious commitments, relationships with well-established Intrinsic, Extrinsic, and Quest Religious Orientation scales helped clarify the religious motivational dynamics of this new measure. The Intrinsic Scale theoretically records a sincere faith in which religion serves as the ultimate motivation in a believer's life. The Extrinsic Scale assesses the use of religion as a means to other ends and contains two factors (Kirkpatrick, 1989). An Extrinsic Personal factor involves the use of religion to achieve a sense of personal wellbeing. An Extrinsic Social Orientation reflects the use of religion to obtain desired social outcomes. Quest operationalizes "the degree to which an individual's religion involves an open-ended, responsive dialogue with existential questions raised by the contradictions and tragedies of life" (Batson, Schoenrade, & Ventis, 1993, p. 169).

Studies in Iran and Pakistan demonstrate that the Intrinsic and especially the Extrinsic Personal instruments record clearly adaptive forms of Muslim faith, whereas the Extrinsic Social and Quest measures display an ambiguous

pattern of relationships (Ghorbani, Watson, & Khan, 2007; Dover, Miner, & Dowson, 2007; Ghorbani, Watson, & Mirhasani, 2007). Previous studies, therefore, suggest that Muslim Experiential Religiousness should correlate positively with the Intrinsic and Extrinsic Personal Orientations, but leave unclear what connections might appear with the Extrinsic Social and Quest scales. A further assumption was that Muslim Experiential Religiousness cannot be reduced to more general religious motivations. Relative to these four religious orientations, therefore, Muslim Experiential Religiousness should display incremental validity in predicting other measures (Piedmont, 1999). If central to Muslim faith, Muslim Experiential Religiousness should also mediate at least some religious orientation relationships with religious and psychological functioning.

A further expectation was that Muslim Experiential Religiousness would correlate positively with the explicitly Islamic perspectives expressed by the Muslim Attitudes toward Religion Scale (MARS: Wilde & Joseph, 1997; Ghorbani, Watson, Ghramaleki, Morris, & Hood, 2000). The presumed centrality of Muslim Experiential Religiousness also suggested that this new scale would display incremental validity over the MARS and at least partially mediate some of its linkages with other variables.

Attempts to evaluate the psychological implications of Muslim Experiential Religiousness rested upon use of Anxiety and Depression (Costello & Comrey, 1967) and Satisfaction with Life (Diener, Emmons, Larsen, & Griffin, 1985) scales. Muslim Experiential Religiousness theoretically reflects a mentally healthy form of spirituality and should consequently correlate positively with Satisfaction with Life and negatively with Anxiety and Depression.

Finally, procedures examined contrasts between Iranian students enrolled in an Islamic seminary with those from more general university programs. Seminary education moved students toward formally religious careers whereas the general university curriculum did not. Hence, seminarians presumably were more religious. The obvious expectation, therefore, was that seminarians would score higher on Muslim Experiential Religiousness. A valid Muslim Experiential Religiousness Scale should also at least partially mediate and thus help explain religious and psychological differences that might appear between these two student groups.

Hypotheses

In summary, this project worked from the assumption that in personal relationships with God the phenomenology of Muslim spirituality unites experiences of submission, closeness, and love into a dynamic whole. The attempt to operationalize this construct began with the creation of a large number of

statements expressing these three spiritual themes alone or in combination. Statistical analyses then examined participant responses to these items in order to develop a unidimensional and usefully brief measure of a presumed ideal in Muslim spiritual consciousness. Six specific sets of hypotheses evaluating this new Muslim Experiential Religiousness Scale follow:

1. First, Muslim Experiential Religiousness should correlate positively with Intrinsic and Extrinsic Personal Religious Orientations and with the MARS.
2. Second, Muslim Experiential Religiousness should correlate positively with Satisfaction with Life and negatively with Anxiety and Depression.
3. Third, Muslim Experiential Religiousness should display incremental validity over the more general religious orientation scales in predicting the MARS and psychological functioning and also incremental validity over the MARS in predicting psychological adjustment.
4. Fourth, Muslim Experiential Religiousness should at least partially mediate religious orientation relationships with the MARS and psychological adjustment and also relationships of the MARS with psychological adjustment.
5. Fifth, in comparison to more general university students, Iranians who attended an Islamic seminary presumably did so, at least in part, as a reflection of their stronger spirituality and thus should display relatively higher levels of Muslim Experiential Religiousness.
6. Sixth and finally, Muslim Experiential Religiousness should at least partially mediate religious and psychological differences observed between seminary and general university students.

Method

Participants

Research participants included 627 students from universities and Islamic seminaries in or near Tehran. Of this total, 218 men and 105 women studied in the more general educational programs of the University of Kashan. Average age of this general university group was 22.7 ($SD = 4.81$). Making up the Islamic seminary group were 304 students which included 40 men from Imam Sadegh University, 2 men and 84 women from Motahari University, and 67 men and 111 women from the Seminary of Kashan. The Islamic seminary group had an average age of 23.5 ($SD = 6.97$). The two groups did not differ in age, $F(1, 625) = 3.15, p = .07$.

Materials

All psychological scales appeared in a single questionnaire booklet. Potential items for the new scale expressed Muslim Experiential Religiousness in the Persian language, Farsi. Translation of all other measures took place in preparation for previous Iranian studies. In these procedures, one individual translated the English version of a psychological instrument into Farsi, and then another translated it back into English. Discrepancies between original and back-translated statements were minor and easily resolved through revisions in the Farsi translation. With one exception, responding to all instruments occurred along a 1-to-5 Likert Scale. The Quest Scale used a 1-to-4 Likert scale. Measures appeared in the questionnaire booklet in the order in which they are presented below.

Muslim Experiential Religiousness. Appearing first were 90 potential items for the Muslim Experiential Religiousness Scale. All items made reference to Qur'anic themes of submission, closeness, and love. These statements included reversed as well as directly scored wordings of the construct.

Anxiety and Depression. Costello and Comrey (1967) scales assessed Anxiety (9 items, $\alpha = .73$, M response per item = 2.75, $SD = 0.73$) and Depression (14 items, $\alpha = .83$, $M = 2.34$, $SD = 0.71$) as dispositions rather than as states. Illustrating Anxiety was the self-report that "I'm a restless and tense person." Depression appeared in such claims as, "I feel sad and depressed."

Intrinsic and Extrinsic Orientations. As modified for use in Iran, Allport and Ross (1967) scales measured Intrinsic and Extrinsic Religious Orientations (Ghorbani, Watson, Ghramaleki, Morris, & Hood, 2000). Eight items made up the Intrinsic Scale ($\alpha = .73$, $M = 3.72$, $SD = 0.71$), including, for example, the statement, "My whole approach to life is based on my religion." Three statements each defined the Extrinsic Personal ($\alpha = .71$, $M = 3.82$, $SD = 0.80$) and the Extrinsic Social ($\alpha = .57$, $M = 2.57$, $SD = 1.06$) Orientations. Representative of the Extrinsic Personal motivation was the claim, "What religion offers me most is comfort in times of trouble and sorrow." Reflecting the Extrinsic Social Orientation was the self-report that "I go to activities associated with my religion because I enjoy seeing people I know there."

Quest. The Quest Scale of Batson and Schoenrade (1991a, b) contained 12 items ($\alpha = .69$, $M = 2.42$, $SD = 0.46$). Quest appeared, for example, in statements that "my life experiences have led me to rethink my religious convictions" and that "it might be said that I value my religious doubts and uncertainties."

Muslim Attitudes toward Religion (MARS). The MARS of Wilde and Joseph (1997) contained 14 items ($\alpha = .90$, $M = 4.26$, $SD = 0.71$). Exemplifying these attitudes were assertions that "Islam helps me lead a better life" and that "I fast the whole month of Ramadan."

Satisfaction with Life. The final section of the research booklet presented

the 5-item Diener and colleagues (1985) Satisfaction with Life Scale ($\alpha = .80$, $M = 3.41$, $SD = 0.86$). An illustrative item said that “in most ways my life is close to my ideal.”

Procedure

Procedures conformed to institutional regulations concerning ethical research. All participation in the project was voluntary and anonymous. Researchers obtained permission to conduct the study at each of the involved educational institutions. After this approval, student groups of various sizes responded to the questionnaire booklet in classroom settings.

The scoring of all instruments involved computation of the average response per item. Statistical analyses began with an examination of correlations among scales, followed by multiple regression procedures designed to examine the questions of incremental validity and mediation in the full sample. A multivariate analysis of variance (MANOVA) then looked for differences between the Islamic seminary and general university groups. These analyses also looked at the possible influences of gender on religious and psychological functioning. Statistical procedures concluded with the use of multiple regressions to determine if Muslim Experiential Religiousness mediated contrasts observed between the Islamic seminary and general university groups.

Results

Development of a final Muslim Experiential Religiousness Scale involved a step-by-step winnowing of the original 90 statements down to a smaller number that would be convenient for research purposes. Procedures systematically moved toward an instrument that maximized internal reliability and displayed the desired unidimensional structure. Initial steps in this process examined internal reliabilities and removed all statements that displayed negative or near-zero item-to-total correlations. Once all item-to-total correlations were .30 or greater, subsequent steps used internal reliability assessments along with a principal axis factor analysis with a varimax rotation to identify secondary factors defined by a relatively small number of three or fewer items that could be removed. Final steps adopted a more stringent item-to-total criterion of .50 or greater and employed a factor analysis to confirm the unidimensional structure. In these procedures, potential items included numerous reverse scored statements, but they reduced internal consistency and were eliminated.

English translation of the final 15-item instrument appears in Table 1. An exploratory factor analysis uncovered a unidimensional structure (*eigenvalue* = 6.25, % *variance* = 41.7%) with all loadings equal to .54 or greater. Internal

TABLE 1. Factor loadings of Submission (S), Closeness (C), and Love (L) Items on Muslim Experiential Religiousness Scale

Item	Loading
1. Experiences of submitting to God cause me to feel more vital and motivated. (S)	.62
2. Sometimes, submission to God simultaneously creates within me a fear and a love of God. (S, L)	.54
3. Submission to God has caused me to experience greatness and humility at the same time. (S)	.55
4. What guides me to cope properly with life difficulties has been submission to God's will. (S)	.55
5. I have understood how my passion to be closer to God has internally liberated me in contrast to the enslavement produced by the other passions in my life. (L, C)	.64
6. When I look deeply within myself, I understand that the experience of loving God is worth any effort in my life. (L)	.68
7. My experience of God's presence in my life is important to experience love toward him. (C, L)	.56
8. For me, the core of religious practices and ceremonies is that they help me achieve a close relationship with God. (C)	.60
9. The experience of loving God produces a special enthusiasm within me. (L)	.67
10. Intimate closeness to God is at the core of my efforts to be religious. (C)	.63
11. Submitting to God gives me important insight into my inability in comparison to the greatness of God. (S)	.65
12. Submitting to God is a lovely experience for me because I experience my finite nature in comparison to the greatness of God. (S, L)	.62
13. What has given me peace in all of my life difficulties is being in submission to God's will. (S)	.67
14. In my view, religious practices are a means for orienting my submission toward the infinity of God. (S)	.57
15. Experiencing submission and closeness to God enhances my understanding of God. (S, C)	.64

reliability was high ($\alpha = .90$). A confirmatory factor analysis (CFA) examined the proposed 1-factor model and utilized full information maximum likelihood estimation (Muthén & Muthén, 1998–2010). Adequate fit appeared if two of three fit indices proved to be acceptable, involving a root mean square error of approximation (RMSEA) of .06 or less, a standardized root mean square residual (SRMR) of .08 or less, and a comparative fit index (CFI) of .90 or more (Hu & Bentler, 1999). The 1-factor model demonstrated acceptable fit, $\chi^2(90) = 371.1$, CFI = .91, RMSEA = .07, SRMR = .04.

Correlations, Incremental Validity, and Mediation

Correlations among scales appear in Table 2. Muslim Experiential Religiousness correlated positively with the Intrinsic, Extrinsic Personal, Extrinsic Social, MARS, and Satisfaction with Life measures and exhibited negative

TABLE 2. Correlations among Muslim Experiential Religiousness, other religious, and psychological measures (N = 627)

Measures	2.	3.	4.	5.	6.	7.	8.	9.
1. Muslim Experiential Religiousness	.53***	.49***	.09*	-.04	.58***	-.16***	-.36***	.21***
2. Intrinsic Orientation	-	.38***	-.18***	-.07	.52***	-.31***	-.46***	.14***
3. Extrinsic Personal Orientation		-	.15***	.11**	.40***	.02	-.19***	.14***
4. Extrinsic Social Orientation			-	.10*	.06	.17***	.14***	.20***
5. Quest				-	-.06	.13**	.11**	.01
6. MARS					-	-.17***	-.37***	.31***
7. Anxiety						-	.63***	-.13**
8. Depression							-	-.33***
9. Satisfaction with Life								-

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

linkages with Anxiety and Depression. The Intrinsic and Extrinsic Personal Orientations displayed the same pattern of results except that the Intrinsic Scale correlated negatively rather than positively with the Extrinsic Social Orientation, and the Extrinsic Personal Orientation correlated positively rather than nonsignificantly with Quest, and nonsignificantly rather than negatively with Anxiety. Quest predicted greater Anxiety and Depression, and MARS correlated negatively with Anxiety and Depression and positively with Satisfaction with Life.

Muslim Experiential Religiousness displayed incremental validity relative to the four religious orientations. Table 3 summarizes the statistically significant outcomes and demonstrates that this new scale supplemented the religious orientation instruments in explaining additional variances in the MARS, Depression, and Satisfaction with Life measures.

Table 4 reviews the significant results for procedures examining whether Muslim Experiential Religiousness would mediate religious orientation and MARS relationships with other variables. As Baron and Kenny (1986) note, mediation first requires a significant association between the independent vari-

Table 3. Incremental Validity of Muslim Experiential Religiousness (MER) over Intrinsic (IN), Extrinsic Personal (EP), Extrinsic Social (ES), and Quest (Q) Religious Orientations in Predicting Muslim Attitudes toward Religion (MARS) and Psychological Measures

Measure	Step1				Step2		
	R ²	β for IN	β for EP	β for ES	β for Q	ΔR ²	β for MER
MARS	.33***	.45***	.22***	.12**	-.07	.08***	.37***
Depression	.23***	-.43***	-.04	.06	.08*	.08***	-.19***
Satisfaction with Life	.08***	.17***	.05	.23***	-.01	.01**	.13**

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

TABLE 4. Analysis of Muslim Experiential Religiousness as Mediator (MED) of Significant Religious Orientation and MARS Independent Variable (IV) Relationships with Religious and Psychological Dependent Variables (DV)

Dependent Variable	Step 1			Step 2		
	R^2	IV β with DV	ΔR^2	IV β with DV	MED β with DV	Sobel Z
<i>Intrinsic Orientation as IV</i>						
MARS	.27***	.52***	.13***	.29***	.43***	9.32***
Depression	.22***	-.46***	.02***	-.38***	-.16***	-3.67***
Anxiety	.10***	-.31***	.00	-	-	-
Satisfaction with Life	.02***	.14***	.03***	.04	.19***	3.89**
<i>Extrinsic Personal Orientation as IV</i>						
MARS	.16***	.40***	.20***	.15***	.51***	9.82***
Depression	.04***	-.19***	.09***	-.02	-.35***	-7.14***
Satisfaction with Life	.02***	.14***	.03***	.06	.18***	3.92***
<i>Extrinsic Social Orientation as IV</i>						
Anxiety	.03***	.17***	.03***	.19***	-.17***	-
Depression	.02***	.14***	.14***	.18***	-.38***	-
Satisfaction with Life	.04***	.20***	.04***	.19***	.19***	0.21
<i>MARS as IV</i>						
Intrinsic	.27***	.52***	.08***	.32***	.35***	7.89***
Extrinsic Personal	.16***	.40***	.10***	.18***	.38***	8.02***
Depression	.13***	-.37***	.03***	-.24***	-.22***	-4.72***

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

able and the mediator of a model. Muslim Experiential Religiousness as the proposed mediator did in fact exhibit significant linkages with the Intrinsic ($\beta = .53, p < .001$), Extrinsic Personal ($\beta = .58, p < .001$), and Extrinsic Social ($\beta = .53, p < .05$) Religious Orientations, with MARS ($\beta = .49, p < .001$), but not with Quest ($\beta = -.04, p = .38$). Mediation procedures, therefore, dropped Quest as a potential independent variable in the mediation model. At the top of Table 4 are mediation results when the Intrinsic Scale served as the independent variable. Below these data are findings when the Extrinsic Personal, then the Extrinsic Social, and finally the MARS measures were independent variables.

Mediation also requires that the independent variable serve as a significant predictor of the hypothesized dependent variable on the first step of multiple regression procedures. Table 4 reviews only those analyses exhibiting this outcome and in which mediation, therefore, was a theoretical possibility. On the second step of multiple regression procedures, mediation appears if two conditions are met. First, adding the mediator to the regression equation must explain greater variance in the dependent variable. Second, this addition of the mediator to the prediction equation must also eliminate or diminish the significant association of the independent variable with the dependent variable. Elimination uncovers full mediation whereas diminishment reveals par-

tial mediation. A Sobel Test determines whether the overall mediation effect is statistically significant (Sobel, 1982).

With regard to models in which the Intrinsic Orientation was the independent variable, Muslim Experiential Religiousness fully mediated the positive association of this religious motivation with Satisfaction with Life, and partially mediated its linkages with greater MARS and lower Depression scores.

As the next block of analyses make clear, Muslim Experiential Religiousness also fully mediated Extrinsic Personal associations with lower Depression and greater Satisfaction with Life, and partially mediated its direct linkage with MARS.

The next set of results in Table 4 reveals no evidence of mediation when the Extrinsic Social Orientation operated as the independent variable. Instead, Muslim Experiential Religiousness merely supplemented the variance explained by the Extrinsic Social measure by predicting lower Anxiety and Depression and greater Satisfaction with Life.

Findings for MARS appear in the bottom section of Table 4. In these results, it is noteworthy that significant increases in the variance explained on the second step also demonstrate that the Muslim Experiential Religiousness scale displayed incremental validity over the MARS in predicting Intrinsic, Extrinsic Personal, and Depression scores. With regard to the issue of mediation, the partial mediation of MARS relationships with the Intrinsic and Extrinsic Personal Orientations essentially mirrored the effects observed when these religious motivations served as independent variables and MARS was the dependent variable. In addition, however, Muslim Experiential Religiousness did partially mediate the inverse connection of MARS with Depression.

Islamic Seminary and General University Group Comparisons

MANOVA procedures revealed overall significant differences between the Islamic seminary and general university students, Wilks' Lambda = .829, $F(9, 615) = 14.08$, $p < .001$. As Table 5 makes clear, the seminary group scored higher on Muslim Experiential Religiousness, Intrinsic, Extrinsic Social, MARS, and Satisfaction with Life measures and lower on Depression. Gender differences appeared as well, Wilks' Lambda = .910, $F(9, 615) = 6.78$, $p < .001$. Table 5 also demonstrates that women scored higher on the Extrinsic Personal and lower on the Extrinsic Social orientations.

Education group and gender variables also interacted, Wilks' Lambda = .972, $F(9, 615) = 1.96$, $p < .05$. This outcome reflected patterns of responding to the Muslim Experiential Religiousness, Anxiety, and Depression scales, $F_s(1, 623) > 5.50$, $p < .05$. Independent t-tests clarified these significant interactions by examining gender differences within each educational environment. In the general university group, women ($M = 3.80$, $SD = 0.71$) and men ($M = 3.90$,

TABLE 5. Education Group and Gender Main Effects in Analysis of Religious and Psychological Measures

Dependent Variable	Education Group					Gender				
	Seminary		General		F	Male		Female		F
	M	SD	M	SD		M	SD	M	SD	
Muslim Experiential Religiousness	4.19	0.59	3.86	0.70	35.94***	3.96	0.67	4.09	0.66	2.44
Intrinsic Orientation	4.00	0.68	3.47	0.64	80.71***	3.60	0.69	3.86	0.71	2.94
Extrinsic Personal Orientation	3.90	0.75	3.74	0.84	2.06	3.71	0.82	3.94	0.76	9.46**
Extrinsic Social Orientation	2.62	1.06	2.54	1.06	8.04**	2.79	1.00	2.34	1.08	35.62***
Quest	2.40	0.46	2.44	0.46	0.65	2.44	0.47	2.40	0.45	0.53
MARS	4.44	0.62	4.09	0.74	40.27***	4.22	0.73	4.29	0.68	0.53
Anxiety	2.72	0.75	2.78	0.71	1.33	2.76	0.72	2.75	0.75	0.03
Depression	2.25	0.73	2.42	0.79	6.64*	2.40	0.68	2.28	0.74	1.68
Satisfaction with Life	3.50	0.87	3.33	0.85	8.11**	3.43	0.82	3.39	0.90	2.15

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

$SD = 0.69$) scored similarly in their Muslim Experiential Religiousness, $t(321) = 1.20$, $p = .23$. Women ($M = 4.25$, $SD = .62$), nevertheless, were higher than men ($M = 4.10$, $SD = .62$) in the seminary group, $t(302) = 2.21$, $p < .05$. Anxiety scores of the general university women ($M = 2.90$, $SD = 0.73$) were higher than those of general university men ($M = 2.73$, $SD = 0.70$), $t(321) = 2.03$, $p < .05$. In contrast, women ($M = 2.66$, $SD = 0.76$) scored nonsignificantly lower on Anxiety than men ($M = 2.82$, $SD = 0.74$) in the seminary group, $t(302) = -1.69$, $p = .09$. Finally, general university women ($M = 2.49$, $SD = 0.77$) and men ($M = 2.39$, $SD = 0.64$) displayed similar levels of Depression, $t(321) = 1.22$, $p = .23$. In contrast, women ($M = 2.16$, $SD = 0.70$) were significantly less depressed than men ($M = 2.41$, $SD = 0.74$) in the seminary group, $t(302) = 2.95$, $p < .01$.

To explore the possibility that Muslim Experiential Religiousness mediated differences between the Islamic seminary and general university groups, procedures created a single dichotomous seminary education variable, with 0 indicating general university and 1 indicating seminary. In the mediation model, seminary education served as the independent variable with Muslim Experiential Religiousness as the mediator. Given the main and interaction effects observed for gender, all tests of mediation began with a preliminary step that eliminated variance associated with gender. As required of a mediation model (Baron & Kenny, 1986), the seminary education independent variable predicted the Muslim Experiential Religiousness mediator, $\beta = .32$, $p < .001$.

Multiple regression analysis of the Extrinsic Personal, Quest, and Anxiety scales merely reconfirmed the lack of any association of these measures with type of education, $\Delta R^2 \leq .003$, $p > .17$. These variables, therefore, could not serve as dependent variables in a mediation model. Table 6 summarizes the results in which the seminary education independent variable reliably predicted a dependent variable. Muslim Experiential Religiousness partially mediated

TABLE 6. Analysis of Muslim Experiential Religiousness as Mediator (MED) of Significant Seminary Education Independent Variable (IV) Relationships with Religious and Psychological Dependent Variables (DV)

Dependent Variable	Step 1			Step 2		
	R^2	IV β with DV	ΔR^2	IV β with DV	MED β with DV	Sobel Z
Intrinsic Orientation	.11***	.35***	.21***	.24***	.47***	5.39***
Extrinsic Social Orientation	.01**	.12**	.01**	.09*	.09*	2.12*
MARS	.06***	.26***	.29***	.12***	.57***	5.53***
Depression	.01**	-.10*	.12***	-.02	-.35***	-4.92***
Satisfaction with Life	.01**	.12**	.04***	.07	.20***	3.79***

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

Note: Step 1 and Step 2 came after a preliminary step that controlled for the effects of gender.

seminary education connections with Intrinsic, Extrinsic Social, and MARS scores, and fully mediated seminary linkages with lower Depression and greater Satisfaction with Life.

Discussion

“At the heart of Islam,” writes Nasr (2002), “stands the reality of God, the One, the Absolute and the Infinite, the Infinitely Good and All-Merciful, the one who is at once transcendent and immanent, greater than we can conceive or imagine, yet . . . closer to us than our jugular vein” (p. 3). This investigation presented evidence suggesting that personal experience of this “heart” is a central Muslim spiritual ideal and involves the seamless experience of submission of the finite self in a loving relationship with the nearby experienced infinity of God. In an Iranian sample, a Muslim Experiential Religiousness Scale operationalized these themes of submission, closeness, and love in an internally reliable and unidimensional 15-item instrument. Numerous findings confirmed the validity of this new instrument and the psychological and religious importance of this Muslim spiritual ideal.

As hypothesized, Muslim Experiential Religiousness displayed direct linkages with Intrinsic, Extrinsic Personal, and MARS measures. These religious orientation and attitude variables displayed the adaptive religious and psychological implications that had been observed in previous Muslim investigations (Ghorbani, Watson, & Khan, 2007; Ghorbani et al., 2000). Such relationships, therefore, supported the assumption that Muslim Experiential Religiousness would operationalize religious adjustment. A positive relationship with Satisfaction with Life and negative correlations with Anxiety and Depression confirmed the further expectation that Muslim Experiential Religiousness would predict mental health.

This new scale demonstrated a clear potential for exploring the Muslim psychology of religion. Muslim Experiential Religiousness partially mediated Intrinsic and Extrinsic Personal associations with MARS, Depression, and Satisfaction with Life. Such results implied that Muslim Experiential Religiousness explained at least some influences of these religious motivations on religious and psychological functioning. Indeed, full mediation effects appeared in the Intrinsic and Extrinsic Personal linkages with greater Satisfaction with Life and in the Extrinsic Personal association with lower Depression. Incremental validity results also demonstrated that Muslim Experiential Religiousness could not be reduced to religious motivations because Muslim Experiential Religiousness supplemented the four religious orientations in predicting the MARS, Depression, and Satisfaction with Life. Further evidence of research potential appeared in the ability of this new instrument to clarify MARS data. Muslim Experiential Religiousness partially mediated the MARS relationship with Depression and also displayed incremental validity over MARS in accounting for variance in Intrinsic, Extrinsic Personal, and Depression scores. In short, Muslim Experiential Religiousness successfully clarified both more general religious motivations and a more specific index of Muslim commitments.

Perhaps especially noteworthy were differences between seminary and general university groups. Seminarians sought education in pursuit of explicitly religious careers and should presumably display a stronger Muslim Experiential Religiousness; this difference, in fact, appeared. Moreover, Muslim Experiential Religiousness partially mediated the greater MARS, Intrinsic, and Extrinsic Social scores of the seminarians, and Muslim Experiential Religiousness also fully mediated their lower Depression and higher Satisfaction with Life. In mediating group differences, Muslim Experiential Religiousness, therefore, once again demonstrated its potential to clarify the Muslim psychology of religion.

Other Religious Measures

As in previous investigations (Ghorbani, Watson, & Khan, 2007; Ghorbani et al., 2000), Extrinsic Social and Quest measures yielded an ambiguous pattern of outcomes. The Extrinsic Social Orientation did correlate positively with Muslim Experiential Religiousness, the Extrinsic Personal Orientation, and Satisfaction with Life, but it also exhibited linkages with a lower Intrinsic Orientation and with greater Anxiety and Depression. Extrinsic Social scores also failed to display any relationship with MARS. This negative correlation with the Intrinsic Orientation seemed especially noteworthy in questioning the meaning of this motivation in Iran, as did the failure of Muslim Experiential Religiousness to mediate any Extrinsic Social associations with other variables. Studies in Iran and Pakistan (Ghorbani, Watson, & Khan, 2007), and in India (Kamble, Watson, Marigoudar, & Chen, 2014), and the United States (Watson,

Chen, & Ghorbani, in press) demonstrate that average scores on the Extrinsic Social Scale are lowest among the religious orientations, suggesting that this motivation may have a limited relevance in efforts to understand religious motivation. The failure of Muslim Experiential Religiousness to mediate Extrinsic Social relationships perhaps supported such a conclusion. Given the Extrinsic Social emphasis on using religion to obtain desired social outcomes, future research might examine whether social desirability rather than religious factors mediate the relationships observed for this measure.

Ambiguous data appeared for Quest as well. This scale did exhibit a positive linkage with the clearly adaptive Extrinsic Personal Orientation, but it also correlated positively with the more questionable Extrinsic Social Orientation. In addition, no Quest relationship appeared with Muslim Experiential Religiousness, Intrinsic Orientation, or MARS. Quest also correlated positively with Anxiety and Depression in line with previous demonstrations that this religious orientation can have maladaptive psychological implications (Watson, Morris, & Hood, 1989). These results, therefore, supported previous concerns about the validity of Quest in attempts to understand Islamic religious commitments (Dover et al., 2007).

Gender Differences

Women scored higher on the more-adaptive Extrinsic Personal Orientation, and men displayed higher levels of the more-problematic Extrinsic Social Orientation. Seminary, but not general university, women displayed greater Muslim Experiential Religiousness and lower Depression, and general, but not seminary, women were higher in Anxiety. Overall, these results suggested that Iranian women were at least somewhat more sincerely religious than men and that religion assumed a more central role in enhancing their psychological wellbeing. Such a conclusion would be consistent with a wide range of findings in the psychology of religion (Hood, Spilka, Hunsberger, & Gorsuch, 1996).

Limitations

Limitations of this project necessitate interpretative caution. University and seminary students were not representative of the broader Iranian population. Conclusions based on these data, therefore, may not generalize to the wider society. In addition, Iran is only one Muslim cultural context. It cannot be assumed that similar results would necessarily appear in Muslims living in other geographical locations, where local culture may influence spirituality differently.

Iran is a formally theocratic society, and social desirability concerns can exert a strong influence in such a cultural context. Indeed, the problematic influence of reverse scored items on internal reliability of the Muslim Experi-

ential Religiousness Scale perhaps reflected social desirability issues that may deserve additional research attention.

The present findings were largely correlational, and seminary and general university comparisons rested upon a quasi-experimental design in which random assignment was not possible. As a consequence, no definitive conclusions can be made about causality. It cannot be said, for instance, that Muslim Experiential Religiousness caused Intrinsic commitments, or vice-versa.

The goal of this study was to operationalize an ideal in Muslim spiritual consciousness. Procedures, therefore, pursued the creation of a unidimensional measure that holistically combined themes of submission, closeness, and love. Additional data already demonstrate the usefulness of this unidimensional measure in efforts to understand how spirituality might exert a moderating influence on Muslim commitments (Chen et al., 2013; Ghorbani et al., 2013; Ghorbani et al., in press). Moreover, this new measure displayed expected positive correlations with mental health and religious commitments, but it cannot be assumed that the spiritual ideal is always achieved. Future research may need to analyze disturbances in Muslim spirituality by operationalizing personal difficulties in submitting to God, experiencing closeness, or having a loving relationship with a higher being.

Finally, this investigation focused on hypotheses that an ideal in Muslim spirituality would predict healthier forms of religious and psychological functioning, but the possibility that even ideal forms of spirituality can have negative influences cannot be dismissed arbitrarily. An obvious advantage of the Muslim Experiential Religious Scale is that its availability can now facilitate future research efforts to explore such opposite possibilities as well.

Conclusion

This project created a Muslim Experiential Religiousness Scale to record the intentional submission, pursued closeness, and awe-filled love presumed to be at the heart of a Muslim spiritual ideal. This unidimensional scale was internally reliable, correlated predictably with a range of religious and psychological variables, and differentiated between Islamic seminary and general university student groups. Relative to religious orientation and MARS measures, Muslim Experiential Religiousness displayed incremental validity and mediated at least some relationships with other variables. Scores on this new instrument also mediated contrasts observed between the seminary and general university students. Overall, these results most importantly suggested that the Muslim Experiential Religiousness Scale deserves further use in research attempting to clarify the Muslim psychology of religion (Chen et al., 2013; Ghorbani et al., in press, 2013).

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