

# Religious Schema within a Muslim Ideological Surround

## *Religious and Psychological Adjustment in Iran*

*Nima Ghorbani*

Department of Psychology, University of Tehran, Iran

*Please provide email address*

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*P.J. Watson*

Psychology/Department #2803, 350 Holt Hall—615 McCallie Avenue, University of Tennessee at Chattanooga, Chattanooga, TN 37403, U.S.A.

*paul-watson@utc.edu*

*Mahmood Amirbeigi*

Department of Psychology, University of Tehran, Iran

*Please provide email address*

AQ

*Zhuo Job Chen*

Department of Psychology, University of Oregon, U.S.A.

*Please provide email address*

AQ

## Abstract

With Religious Schema Scales in the West, Truth of Texts and Teachings correlates negatively with the commitment to interreligious dialogue recorded by Xenosophia. This measure of fundamentalism also predicts problematic religious and psychosocial functioning. The present project examined Religious Schema Scales in university students and Islamic seminarians in the Muslim cultural context of Iran. Truth of Texts and Teachings correlated positively rather than negatively with Xenosophia and predicted religious and psychological adjustment. The adaptive implications of Truth of Texts and Teachings were especially evident in Islamic seminarians. These results supplemented previous Religious Schema data from India and Malaysia in suggesting that fundamentalism may have more positive implications outside the West. Cross-cultural differences in fundamentalism more generally support arguments of an Ideological Surround

Model that the incommensurability of religious and other social rationalities requires careful research attention.

### Keywords

Religious Schema – fundamentalism – Xenosophia – Iran – Ideological Surround Model

### Religious Schema within a Muslim Ideological Surround: Religious and Psychological Adjustment in Iranian University and Islamic Seminary Students

Fundamentalism displays problematic religious and psychological implications in the West (e.g., Altemeyer & Hunsberger, 19992; Sisemore, 2016). Religious Schema Scales, for instance, include a Truth of Texts and Teachings measure of fundamentalism (Streib, Hood, & Klein, 2010) that predicts anti-Semitic and especially anti-Islamic prejudice in German adolescents (Streib & Klein, 2014). Also within this instrument, Fairness, Tolerance, and Rationality assesses an open-minded sensitivity to others, and Xenosophia records an embrace of interreligious dialogue. These two schemata correlate negatively rather than positively with prejudice. In American and German samples, Truth of Texts and Teachings also displays a robust inverse linkage with Xenosophia, a finding that once again suggests a closed-minded fundamentalist rejection of outside perspectives (Streib et al., 2010).

Religious Schema Scales rest upon a developmental framework that assumes a continuum of religious functioning that ranges from the immaturity of Truths of Texts and Teachings through Fairness, Tolerance, and Rationality to the maturity of Xenosophia (Streib & Klein, 2014, p. 161). Inverse connections of Truth of Texts and Teachings with Xenosophia, therefore, make sense as evidence of their positioning at opposite poles along a single dimension of development. Recent cross-cultural research, nevertheless, challenges the assumption that fundamentalism necessarily operates as a developmental immaturity.

### Fundamentalism Elsewhere

Measures of fundamentalism can display very different implications outside the West. In Hindus in India, Truth of Texts and Teachings correlated positively

not only with Fairness, Tolerance, and Rationality, but with Xenosophia as well (Kamble, Watson, Marigoudar, & Chen, 2014). In Malaysian Muslims, the association of Truth of Texts and Teachings with Xenosophia was once again positive, just as it was with Fairness, Tolerance, and Rationality (Tekke, Watson, İsmail, & Chen, 2015). Indian and Malaysian data, therefore, have not support a positioning of Truth of Texts and Teachings and Xenosophia at opposite ends of a developmental continuum.

Further evidence that fundamentalist perspectives may operate differently outside the West has appeared in studies using the Religious Reflection Scale (Dover, Miner, & Dowson, 2007). Research with American Christians identified two factors within this instrument (Watson, Chen, & Hood, 2011). Faith Oriented Reflection appeared in such self-reports as, "Faith in Christ is what nourishes the intellect and makes the intellectual life prosperous and productive." Illustrating Intellect Oriented Reflection was the claim, "I believe as humans we should use our minds to explore all fields of thought from science to metaphysics." These two factors correlated negatively, and Faith Oriented Reflection predicted lower and Intellect Oriented Reflection predicted greater psychological openness. Findings for Faith and Intellect Oriented Reflection, therefore, paralleled data for Truth of Texts and Teachings and Xenosophia in suggesting a polarization between more fundamentalist and more open perspectives in the United States.

Use of these factors adapted for use in other cultural contexts yielded strikingly different results. Faith Oriented Reflection correlated positively rather than negatively with Intellect Oriented Reflection in Indian Hindus (Kamble et al., 2014) as well as in Iranian (Ghorbani, Watson, Chen, & Dover, 2013) and Malaysian (Tekke et al., 2015) Muslims. Faith Oriented Reflection was also like Intellect Oriented Reflection in displaying linkages with greater psychological openness.

### Clarification of Cultural Contrasts

Subsequent studies clarified these cross-cultural contrasts in four most important ways. First, dissimilarities between Christianity on the one hand and Islam and Hinduism on the other could not explain the differences. Christians in Iran were like Muslims and Hindus living outside the West in displaying positive associations of Faith Oriented Reflection with both Intellect Oriented Reflection and Openness to Experience (Watson Ghorbani Vartanian, & Chen, 2015). Cultural context rather than religion explained the contrasts.

Second, the incompatibility between Faith and Intellect Oriented Reflection in the West was attributable to fundamentalism (Watson et al., 2011; Watson,

Chen, & Morris, 2014; Watson, Chen, Ghorbani, & Vartanian, 2015). Support for that claim came through use of a scale that, in part, defines the fundamentals of faith as the “essential truth . . . opposed by forces of evil which must be vigorously fought” (Altemeyer & Hunsberger, 1992, p. 118). Statistical controls for this Fundamentalism Scale eliminated the inverse relationship of Faith with Intellect Oriented Reflection and sometimes transformed it into a positive relationship. Partial correlations controlling for Fundamentalism also transformed the inverse linkage of Truth of Texts and Teachings with Xenosophia into either nonsignificant (Watson et al., 2014) or positive (Watson, Chen, Ghorbani, & Vartanian, 2015; Watson, Chen, Morris, & Stephenson, 2015) relationships.

Third, in the United States, a Defense against Secularism Scale wholly or partially mediated inverse linkages of Faith Orientated Reflection, Fundamentalism, and Truth of Texts and Teachings with Intellect Oriented Reflection (Watson, Chen, Morris, & Stephenson, 2015). Defense against Secularism included such beliefs as “reason is a weapon that the culture uses to destroy faith” and “secularist beliefs urge the use of reason and open-mindedness in political life because the real motive is to destroy our religious beliefs.” In short, a “culture war” against “forces of evil” that must be “vigorously fought” at least partly explained the polarization between American commitments to religious fundamentals and to the intellect. Where this “war” was less prominent, in Iran, Malaysia, and India, for example, commitments to fundamentals and to reason were compatible rather than incompatible.

Fourth and finally, even in the United States, at least some forms of fundamentalism have potentials for openness. A Biblical Foundationalism Scale expresses a less war-like commitment to fundamentals (Watson et al. 2003). When statistical procedures control for its covariance with Religious Fundamentalism, Biblical Foundationalism predicts not only sincere religious commitments, but also greater Intellect Oriented Reflection; Fairness, Tolerance, and Rationality; Xenosophia; and Openness to Experience (Watson, Chen, Morris, & Stephenson, 2015) along with greater religious Tentativeness, Ecumenism, Universality, Exploration, and Complexity (Watson et al., 2014). Hence, the more fundamentalism can be disconnected from a “culture war” in the West, the more it can reflect openness.

### **Religious Schemas within Ideological Surrounds**

One possibility for understanding differences in fundamentalism across societies may appear in an Ideological Surround Model (ISM) of cultural processes

(e.g., Watson, 1993, 2011; Ghorbani, Watson, Saeedi, Chen, & Silver, 2012). This model most basically assumes that communities organize their social rationalities relative to an ultimate standard (Taylor, 2007). For traditional theistic communities, that standard will be some vision of God. For Western social scientific and other secular communities, the at least implicit standard will be some reading of nature. Theistic religions, therefore, operate as supernatural and secularisms as natural social rationalities. Thought and practice within all communities will approach greater rationality to the extent that social life more closely conforms with communal understandings of their standard. All social rationalities, therefore, can make progress in social life through improvements in thought and practice and through deeper insights into their standard.

Religious and secular rationalities can agree in at least some of the inferences that they draw from their standards. Both rationalities may demand, for instance, the health and well-being of children. Commonalities at this inferential level will mean that social rationalities are not wholly incompatible. Supernatural and natural social rationalities will nevertheless, always be incommensurable (MacIntyre, 1988). Traditional religious rationalities will explain nature and everything else as a creation of God. Secular rationalities will explain belief in "God" and everything else as a product of nature. When in conflict at the inferential level, these rationalities will share no higher standard for adjudicating differences. This absence of a shared metric of ultimate evaluation makes them incommensurable by definition. Religious and secular arguments over abortion illustrate disagreements at the inferential level. No appeal can be made to a culture-free objectivity for resolving this conflict, since no noncontroversial standard exists for judging the ultimate standards upon which the derivative inferences rest. In these instances, secular rationalities will tend to interpret religious rationalities as irrational and vice versa.

Incommensurability will mean that the dynamics of social rationalities can vary across ideological surrounds. In societies committed to a secular surround, Truth of Texts and Teachings can appear as an immature commitment to an irrational supernatural standard that is explained away by some more ultimate natural standard that may operate within, for example, Xenosophia as a derivative inference. For those committed to Truth of Texts and Teachings, life as a minority community within a dominating secular surround can be experienced as a "culture war" that uses Xenosophia as a "weapon." In these circumstances, Truth or Texts and Teachings will correlate negatively with Xenosophia. Within societies more strongly defined by a theistic religious ideological surround, Truth of Texts and Teachings will instead reflect a mature rational commitment to the ultimate supernatural standard that explains the

creation of nature and all the positive potentials within it, including, for example, Xenosophia. Here, Truth of Texts and Teachings will correlate positively rather than negatively with Xenosophia.

### Present Project

The present project used the ISM to clarify the Religious Schema Scales in Iran. Analysis focused not only on Iranian university students, but also on Islamic seminarians who presumably would display especially strong commitments to the ultimate standards that govern social life in Iran. A first expectation was that Truth of Texts and Teachings would correlate positively with Xenosophia as well as with Fairness, Tolerance, and Rationality.

Examination of additional religious implications of the Religious Schema Scales involved use of Religious Orientation (Gorsuch & McPherson, 1989) and Extrinsic Cultural Religious Orientation (Ghorbani, Watson, Zarehi, & Shamohammadi, 2010) scales. The Intrinsic Religious Orientation involves an effort to make religion the ultimate motivating factor in life. The Extrinsic Personal Orientation reflects a reliance upon religion in order to achieve a sense of well-being. The Extrinsic Social Orientation represents the use of religion as a means to desired social ends. Intrinsic and Extrinsic Personal Orientations predict religious and psychological adjustment in Iran (Ghorbani, Watson, & Khan, 2007). The Extrinsic Social Orientation appears instead to be weak and ambiguous. Development of the Extrinsic Cultural Scales responded to shortcomings of the Extrinsic Social measure by assessing positive social influences that may motivate religious commitment. The assumption was that all three Religious Schemas would reflect Iranian religious adjustment and would thus correlate positively with Intrinsic, Extrinsic Personal, and Extrinsic Cultural scores.

Evaluations of psychological functioning focused on instruments previously established as valid in clarifying Muslim religious commitments. Recording relative mental health were measures of Integrative Self-Knowledge (Ghorbani, Watson, & Hargis, 2008), Self-Control (Tangney, Baumeister, & Boone, 2004) and the Empathic Concern and Perspective Taking dimensions of empathy (Davis, 1983). Depression and Anxiety Scales (Costello & Comrey, 1967) assessed maladjustment. As indices of psychological and not just religious adjustment in Iran, Religious Schema Scales should predict better mental health.

Especially important in testing the ISM were comparisons between Islamic seminarians and university students. Career choices of Islamic seminarians

suggest a more dominant commitment to Muslim standards of social rationality. This stronger commitment should be obvious in at least three ways. First, seminarians should score higher on Truth of Texts and Teachings, but not necessarily on the two other Religious Schema Scales. Second, in a within-subject analysis, Truth of Texts and Teachings should be the strongest religious schema in seminarians, but not necessarily in university students. Third, the dynamics of seminarian social rationality should more strongly reflect a commitment to Muslim fundamentals. Relationships of Truth of Texts and Teachings with adjustment should, therefore, be stronger in seminarians.

### Hypotheses

In summary, this project examined Religious Schema Scales within the Muslim cultural context of Iran. Procedures tested six most important hypotheses suggested by the ISM.

First, Truth of Texts and Teachings should correlate positively with Xenosophia as well as with Fairness, Tolerance, and Rationality.

Second, all three Religious Schemas Scales should correlate positively with the Intrinsic, Extrinsic Personal, and Extrinsic Cultural Religious Orientations.

Third, Religious Schema Scales should correlate positively with Integrative Self-Knowledge, Self-Control, Empathic Concern, and Perspective Taking and negatively with Depression and Anxiety.

Fourth, Islamic seminarians should score higher on Truth of Texts and Teachings than university students.

Fifth, for Islamic seminarians, Truth of Texts and Teachings should be strongest religious schema.

Sixth, Islamic seminarians should display stronger relationships of Truth of Texts and Teachings with religious and psychological adjustment than university students.

### Method

#### *Participants*

Research participants were 188 men and 210 women enrolled at a university or Islamic seminary in Iran. Their average age was 26.0,  $SD = 5.7$ . No significant age differences appeared due to institution, gender, or institution-by-gender interaction effects ( $ps > .05$ ). The university sample included 95 women

and 103 men enrolled at the University of Tehran or at the Bu Ali University of Hamedan. Seminarians attended institutions in Hamedan and included 115 women from the Alzahra Religious Learning Center and 85 men from the Akhund-e-Hamedani Center.

### *Measures*

All scales appeared in a single booklet. Development of a Persian expression of Integrative Self-Knowledge occurred during scale construction. Translation of Religious Schema Scales into Persian took place in preparations for the present study with all other instruments translated prior to previous Iranian projects. In all these procedures, one individual translated a scale from English into Persian with another then translating it back into English. Meaningful differences between original and back-translated statements were rare and easily resolved through revisions in the Persian translation. All instruments used 1-to-5 Likert response options. As in previous studies, a maximization of internal reliabilities involved the elimination of any item that failed to display a positive item-to-total correlation. Statistical procedures scored all constructs in terms of the average response per item. Description of the scales below follows the order in which they appeared in the booklet.

#### Integrative Self-Knowledge

Included in the Integrative Self-Knowledge Scale (Ghorbani et al., 2008:  $M = 3.58$ ,  $SD = 0.62$ ,  $\alpha = .80$ ) were 12 statements expressing an attempt to unite past, present, and desired future self-experience into a meaningful whole. Exemplifying this construct was the self-report, "By thinking deeply about myself, I can discover what I really want in life and how I might get it."

#### Religious Schema

Five statements made up each Religious Schema Scale (Streib et al., 2010). Indicative of Truth of Texts and Teachings ( $M = 4.07$ ,  $SD = 1.03$ ,  $\alpha = .91$ ) was the belief, "What the texts and stories of my religion tell me is absolutely true and must not be changed." Fairness, Tolerance, and Rationality ( $M = 3.84$ ,  $SD = 0.68$ ,  $\alpha = .73$ ) appeared in such self-reports as, "When I make a decision, I look at all sides of the issue and come up with the best decision possible." Illustrating Xenosophia ( $M = 3.46$ ,  $SD = 0.64$ ,  $\alpha = .58$ ) was the claim, "It is important to understand others through a sympathetic understanding of their culture and religion."

#### Religious Orientation

Gorsuch and McPherson (1989) scales adapted to the Iranian context assessed three religious motivations. The 8-item Intrinsic Scale ( $M = 3.57$ ,  $SD = 0.70$ ,



$\alpha = .76$ ) said, for instance, "My whole approach to life is based on my religion." Three statements defined the Extrinsic Personal Orientation ( $M = 3.51$ ,  $SD = 0.91$ ,  $\alpha = .83$ ; e.g., "What religion offers me most is comfort in times of trouble and sorrow") and also the Extrinsic Social Orientation ( $M = 2.42$ ,  $SD = 0.93$ ,  $\alpha = .70$ ; e.g., "I go to activities associated with my religion because I enjoy seeing people I know there").

#### Extrinsic Cultural Religious Orientation

The Extrinsic Cultural Religious Orientation Scale included four factors defined by 32 total items (Ghorbani et al., 2010). Sixteen items measured Family and Social Order ( $M = 2.87$ ,  $SD = 0.81$ ,  $\alpha = .97$ ) and said, for example, "A religious life is important because it promotes better family relationships." Disorder Avoidance ( $M = 2.95$ ,  $SD = 0.79$ ,  $\alpha = .82$ ) appeared in 5 items (e.g., "Most of the problems of society result from the failure of people to be sincerely religious"). The Peace and Justice subscale ( $M = 2.81$ ,  $SD = 0.81$ ,  $\alpha = .87$ ) also included 5 statements (e.g., "My motivation for being religious is a desire to develop a human society that is peaceful, just, and happy"). Exemplifying the 6-item Cultural Foundations subscale ( $M = 2.74$ ,  $SD = 0.79$ ,  $\alpha = .89$ ) was the assertion, "I am religious because I know that the loss of religious life leads to the decline of civilization and culture."

#### Self-Control

Thirteen items made up the brief Self-Control Scale (Tangney et al., 2004:  $M = 3.43$ ,  $SD = 0.55$ ,  $\alpha = .76$ ). A representative expression of this construct said, "I am good at resisting temptation."

#### Anxiety and Depression

Costello and Comrey (1967) scales recorded dispositional Depression (14 items) and Anxiety (9 items). Removal of one item improved the internal reliability of the Anxiety Scale. A representative expression of Depression ( $M = 2.64$ ,  $SD = 0.67$ ,  $\alpha = .77$ ) said, "I feel sad and depressed." Illustrating Anxiety ( $M = 2.67$ ,  $SD = 0.65$ ,  $\alpha = .86$ ) was the self-report, "I'm a restless and tense person."

#### Empathic Concern and Perspective Taking

Empathy measures came from the Interpersonal Reactivity Index (Davis, 1983). Each included 7 statements, but removal of one improved the internal reliability of Perspective Taking. Empathic Concern ( $M = 3.76$ ,  $SD = 0.59$ ,  $\alpha = .67$ ) assessed an emotional sympathy for others ("I often have tender, concerned feelings for people less fortunate than me") Perspective Taking ( $M = 3.45$ ,  $SD = 0.54$ ,  $\alpha = .62$ ) recorded a cognitive ability to understand another's point of view (e.g., "I try to look at everybody's side of a disagreement before I make a decision").

### *Procedure*

All procedures conformed to institutional guidelines for the conduct of ethical research. Participants were volunteers, and all responding was strictly confidential. Student groups of varying size responded to the questionnaire booklet in a classroom setting. After construction of an SPSS data file, preliminary analyses examined gender effects on responding. An examination of relationships among measures occurred next, followed by analyses of differences between Islamic seminary and university students.

### **Results**

#### *Preliminary Analysis*

Preliminary correlations revealed that women scored higher than men on Truth of Texts and Teachings (.20), the Intrinsic Religious Orientation (.19), the Extrinsic Personal Orientation (.17), Family and Social Order (.17), Disorder Avoidance (.18), Peace and Justice (.19), Cultural Foundations (.11), Self-Control (.10), and Depression (.13,  $ps < .05$ ). All subsequent statistical procedures, therefore, controlled for gender.

#### *Relationships*

Table 1 presents partial correlations among religious variables. Religious Schema Scales correlated positively. The connection of Truth of Texts and Teachings with greater Xenosophia was of central theoretical importance. Truth of Texts and Teachings also displayed direct associations with each religious motivation. The same pattern appeared for Fairness, Tolerance, and Rationality except that no significant relationship appeared with the Extrinsic Social Orientation. Xenosophia predicted greater Peace and Justice. All Religious and Extrinsic Cultural Religious Orientations correlated positively.

With regard to psychological measures, Anxiety and Depression co-varied directly,  $r_{ab.c} = .51, p < .001$ , and displayed inverse partial correlations of at least  $-.26, ps < .001$ , with Integrative Self-Knowledge, Self-Control, and Perspective Taking. A negative linkage also appeared between Anxiety and Empathic Concern,  $r_{ab.c} = -.19, p < .001$ . Self-Control predicted greater Empathic Concern,  $r_{ab.c} = .11, p < .05$ , and Perspective Taking,  $r_{ab.c} = .11, p < .05$ . The two empathy measures correlated positively,  $r_{ab.c} = .25, p < .05$ .

Relationships of religious with psychological constructs appear in Table 2. Of the Religious Schema Scales, Fairness, Tolerance, and Rationality most consistently predicted mental health by displaying correlations that were

TABLE 1 Relationships among religious schema and religious orientation measures

Scale	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Truth of Texts and Teachings	-	.15**	.14**	.64***	.38***	.23***	.69***	.65***	.53***	.59***
2. Fairness, Tolerance and Rationality		-	.40***	.19***	.11*	-.04	.10*	.16**	.18***	.11*
3. Xenosophia			-	.01	.06	.00	.09	.08	.14**	.09
4. Intrinsic Religious Orientation				-	.61***	.17***	.59***	.59***	.47***	.52***
5. Extrinsic Personal Orientation					-	.17**	.48***	.50***	.44***	.43***
6. Extrinsic Social Orientation						-	.41***	.31***	.35***	.42***
7. Family and Social Order							-	.80***	.81***	.79***
8. Disorder Avoidance								-	.69***	.76***
9. Peace and Justice									-	.75***
10. Cultural Foundations										-

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

Note. Relationships are partial correlations controlling for gender.

positive with Integrative Self-Knowledge, Self-Control, Empathic Concern, and Perspective Taking and negative with Anxiety and Depression. Truth of Texts and Teachings exhibited the same pattern except for nonsignificant associations with Integrative Self-Knowledge and Perspective Taking. Xenosophia predicted higher Empathic Concern and Perspective Taking.

Among religious motivations, the Intrinsic Orientation correlated with all but Perspective Taking to predict better adjustment. The Extrinsic Personal Orientation only correlated positively with Empathic Concern. Poorer mental health implications appeared in Extrinsic Social connections with Integrative Self-Knowledge and Depression that were negative and positive, respectively. All four Extrinsic Cultural Orientations pointed toward greater Empathic Concern. Relationships that were negative with Integrative Self-Knowledge and positive with Self-Control suggested that Family and Social Order and Cultural Foundations had ambiguous psychological implications.

Positive relationships among Religious Schema Scales suggested a need to determine the extent to which each explained independent variance in other measures. All three schemas, therefore, served as simultaneous predictors of religious and psychological functioning on the second step of multiple regression procedures after gender had been entered in on the first step. Table 3 summarizes these results. Truth of Texts and Teachings explained almost all Religious Schema relationships with religious motivations. Fairness, Tolerance, and Rationality did, however, predict higher and Xenosophia lower levels of the Intrinsic Orientation. Fairness, Tolerance, and Rationality also consistently predicted better adjustment. Truth of Texts and Teaching explained variance in greater Self-Control and in lower Anxiety and Depression. Xenosophia displayed negative linkages with Integrative Self-Knowledge and Self-Control and a positive association with Anxiety.

### *Comparisons between Seminary and University Students*

In a multivariate analysis of covariance (MANCOVA) controlling for gender, Islamic seminary and university students displayed significant overall religious and psychological differences, Wilks' Lambda = .585,  $F(16, 369) = 16.36$ ,  $p < .001$ . Seminarians scored higher on Truth of Texts and Teachings; on the Intrinsic, Extrinsic Personal, and Extrinsic Social Religious Orientations; and on all four Extrinsic Cultural Religious Orientations. University Students were higher in Perspective Taking (see Table 4).

With regard mean differences within institutions, Religious Schema as a within-subject variable displayed a significant interaction with Institution as a between-subject variable, Greenhouse-Geisser  $F(1.78, 700.08) = 99.64$ ,

TABLE 2 Relationships of religious schema and orientations with psychological measures

Scale	Integrative Self- Knowledge	Self-Control	Anxiety	Depression	Empathic Concern	Perspective Taking
Truth of Texts and Teachings	.04	.19***	-.16**	-.12*	.13*	-.05
Fairness, Tolerance and Rationality	.28***	.16***	-.27***	-.19***	.21***	.25***
Xenosophia	-.02	-.02	-.01	.00	.12*	.12*
Intrinsic Religious Orientation	.17**	.24***	-.26***	-.13*	.20***	.00
Extrinsic Personal Orientation	-.02	.06	-.08	-.09	.16**	-.03
Extrinsic Social Orientation	-.17**	-.05	.07	.10*	-.08	-.09
Family and Social Order	-.12*	.13*	-.07	-.03	.17***	-.03
Disorder Avoidance	-.08	.09	-.08	-.01	.21***	.01
Peace and Justice	-.08	.07	-.03	-.01	.18***	-.01
Cultural Foundations	-.12*	.13**	-.04	-.03	.19***	.00

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

Note. Relationships are partial correlations controlling for gender.

TABLE 3 Multiple regressions with truth of texts and teachings (TTT); fairness, tolerance, and rationality (FTR); and xenophobia (XEN) simultaneously predicting religious and psychological measures

Scale	Gender			Religious Schema		
	R <sup>2</sup>	Gender β	ΔR <sup>2</sup>	TTT β	FTR β	XEN β
Intrinsic Religious Orientation	.04***	.19***	.41***	.63***	.15***	-.14**
Extrinsic Personal Orientation	.03**	.17**	.14***	.38***	.06	-.01
Extrinsic Social Orientation	.00	.01	.06***	.25***	-.08	.00
Family and Social Order	.03**	.17**	.46***	.69***	.00	.01
Disorder Avoidance	.03***	.18***	.42***	.65***	.08	-.04
Peace and Justice	.03***	.19***	.28***	.51***	.09	.04
Cultural Foundations	.01*	.11*	.34***	.60***	.02	.00
Integrative Self-Knowledge	.00	-.02	.09***	-.01	.33***	-.14**
Self-Control	.01*	.10*	.07***	.19***	.18**	-.12*
Anxiety	.00	-.03	.10***	-.14**	-.30***	.13*
Depression	.02*	.13*	.05***	-.11*	-.21***	.10
Empathic Concern	.02**	.14**	.06***	.10	.19**	.03
Perspective Taking	.00	.04	.06***	-.09	.23***	.04

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

TABLE 4 *Religious and psychological differences between Islamic seminary and university students*

Measures	Seminary		University		F
	M	SEM	M	SEM	
Truth of Texts and Teachings	4.46	.06	3.35	.06	160.12***
Fairness, Tolerance and Rationality	4.08	.05	4.07	.05	0.05
Xenosophia	3.45	.05	3.48	.05	0.19
Intrinsic Religious Orientation	3.86	.05	3.28	.05	81.63***
Extrinsic Personal Orientation	3.67	.06	3.35	.06	12.35***
Extrinsic Social Orientation	2.61	.07	2.22	.07	17.92***
Family and Social Order	3.30	.05	2.45	.05	152.01***
Disorder Avoidance	3.29	.05	2.61	.05	87.67***
Peace and Justice	3.13	.05	2.49	.05	72.87***
Cultural Foundations	3.07	.05	2.39	.05	85.98***
Integrative Self-Knowledge	3.53	.05	3.64	.04	2.97
Self-Control	3.45	.04	3.41	.04	0.52
Anxiety	2.28	.05	2.23	.05	0.45
Depression	2.61	.05	2.68	.05	1.16
Empathic Concern	3.74	.04	3.78	.04	0.44
Perspective Taking	3.37	.04	3.54	.04	10.63**

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

Note. Islamic seminarian  $N = 191$ ; university student  $N = 196$ .

$p < .001$ . This outcome served as warrant for examining Religious Schema measures within each institution separately. An overall difference appeared in the seminarians, Greenhouse-Geisser  $F(1.91, 375.92) = 7.54, p < .01$ . All post hoc comparisons were significant with Truth of Texts and Teachings highest, Xenosophia lowest, and Fairness, Tolerance, and Rationality in between (see Table 4 for descriptive statistics). Significant mean differences also appeared in university students, Greenhouse-Geisser  $F(1.56, 305.19) = 15.93, p < .001$ . Only two post hoc comparisons proved to be statistically significant. Fairness, Tolerance, and Rationality was stronger than both Truths of Texts and Teachings and Xenosophia.

As hypothesized, the MANCOVA also uncovered significant institutional differences in the covariance among measures, Box's  $M = 487.11, F(136, 457113.34) = 3.43, p < .001$ . The theoretically important question was whether partial correlations for Religious Schema Scales differed across institutions. In multiple regressions designed to test that possibility, gender, a seminary grouping variable (1 = seminary students, 0 = university students), a Religious Schema Scale, and the product term of that Religious Schema Scale with the seminary grouping variable served as predictors of other constructs. The product term assessed the null hypothesis that the slope of seminary students equaled the slope of university students. This standardized slope reflected the partial correlation; so, a significant product term identified a difference between partial correlations.

Among Islamic seminarians, Truth of Texts and Teaching displayed a significant partial correlation of .43,  $p < .001$ , with Fairness, Tolerance, and Rationality, and this result was significantly stronger than the .07,  $p > .05$ , linkage observed for university students,  $t = 4.70, p < .001$ . Other relationships between Religious Schema Scales did not differ across institutions. The association of Truth of Texts and Teachings with Xenosophia was .19,  $< .01$ , in seminarians and .18,  $< .05$ , in university students,  $t = .91, p > .05$ . The relationship of Fairness Tolerance, and Rationality with Xenosophia was .38,  $p < .001$ , in seminarians and .43,  $p < .001$ , in university students,  $t = -1.14, p > .05$ .

Table 5 summarizes all other partial correlation comparisons. Truth of Texts and Teachings predicted mental health in seminarians but not in university students. Truth of Texts and Teachings also correlated more strongly with the Intrinsic Orientation in seminarians and more strongly with the Extrinsic Social Orientation and Family and Social Order in university students. Fairness, Tolerance, and Rationality was a more robust predictor of the Intrinsic Orientation and Cultural Foundations in seminarians. The positive partial correlation of Xenosophia with Empathic Concern was significant and stronger in the university student sample.



TABLE 5 Religious schema partial correlations with other measures in seminary (SEM) and university (UNI) students

Measures	TTT			FTR			XEN		
	SEM	UNI	t	SEM	UNI	t	SEM	UNI	t
Intrinsic Religious Orientation	.59***	.52***	2.08*	.42***	.09	2.47*	.08	-.02	.84
Extrinsic Personal Orientation	.35***	.33***	-.41	.32***	.03	1.44	.17*	.01	.87
Extrinsic Social Orientation	-.14	.27***	-2.84**	-.03	-.06	.49	.06	-.03	.89
Family and Social Order	.33***	.64***	-1.96*	.25***	.05	1.50	.16*	.12	-1.16
Disorder Avoidance	.43***	.60**	-.62	.34***	.09	1.80	.17*	.06	.46
Peace and Justice	.19**	.50***	-1.86	.27***	.15*	.68	.22*	.13	.33
Cultural Foundations	.32***	.54***	-.81	.27***	.02	1.99*	.17*	.05	.83
Integrative Self-Knowledge	.31***	.00	3.18**	.38***	.22**	1.31	-.10	.05	-1.27
Self-Control	.35***	.14	2.79**	.21*	.14	.40	-.05	-.01	-.44
Anxiety	-.42***	-.12	-3.52***	-.37***	-.21**	-1.07	-.02	.01	-.27
Depression	-.19**	-.08	-1.57	-.22**	-.17*	-.38	-.03	.03	-.61
Empathic Concern	.39***	.08	3.66***	.24**	.21*	.08	.01	.21**	-2.10*
Perspective Taking	.22**	-.04	2.84**	.25***	.26***	-.01	.10	.13	-.48

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

Note. Religious Schema measures are Truth of Texts and Teachings (TTT); Fairness, Tolerance, and Rationality (FTR); and Xenosophia (XEN).

## Discussion

Most basically, the ISM argues that religions and other cultural processes operate as rationalities organized around different ultimate standards (Watson, 2011; Tekke et al., 2015; Ghorbani, Watson, Tavakoli, & Chen, 2016). These incommensurable rationalities will not always, but will at least sometimes differ. The absence of an objective higher standard for evaluating ideologically specific ultimate standards will mean that disagreements between social rationalities cannot be given an indisputable interpretation by some “master” rationality. For the psychology of religion, the implication is that research should maintain at least some sensitivity to the possible influences of incommensurable rationalities. The present focus on fundamentalism in Iran supported that suggestion.

### *Truth of Texts and Teachings in Iran*

Clear support came in three most important lines of evidence. First, the fundamentalism of Truth of Texts and Teachings in Iran correlated positively with the embrace of interreligious dialogue recorded by Xenosophia. This outcome contrasted with negative linkages typically observed in the West, but paralleled other results obtained with Hindus in India (Kamble et al., 2014) and Muslims in Malaysia (Tekke et al., 2015). Fundamentalism, therefore, can mean different things within different ideological surrounds. Evidence more specifically suggests that data in the West reflect the aggressiveness of a fundamentalism engaged in a culture war against secular rationality (Watson, Ghorbani, Vartanian, & Chen, 2015; Watson, Chen, Morris, & Stephenson, 2015). Where secularism is less influential, and aggressive defense less necessary, Truth of Texts and Teachings can predict greater Xenosophia.

Second, Truth of Texts and Teachings more broadly predicted religious and psychological adjustment. Evidence of adaptive religious functioning appeared in direct relationships with the Intrinsic, Extrinsic Personal, and Extrinsic Cultural Religious Orientations. Multiple regressions confirmed Truth of Texts and Teachings as central in explaining all positive Religious Schema connections with these religious motivations; although, Fairness, Tolerance, and Rationality did also contribute to the prediction of the Intrinsic Orientation. The mental health advantages of Truth of Texts and Teachings appeared in correlations that were positive with Self-Control and Empathic Concern and negative with Depression and Anxiety. Multiple regressions also demonstrated that Truth of Texts and Teachings explained unique variance in all but the Empathic Concern psychological construct. Overall, these data identified

the fundamentalism of Truth of Texts and Teachings as broadly adaptive within an Iranian Muslim ideological surround.

Third, Islamic seminarians scored higher than university students on Truth of Texts and Teachings, and Truth of Texts and Teachings was their strongest religious schema. Seminarians also displayed a higher mean on all other religious constructs except for Xenosophia, which did not differ across institutions. In addition, Truth of Texts and Teachings more strongly predicted the Intrinsic Orientation and five of six measures of psychological adjustment in the Islamic seminarians. Institutional contrasts, therefore, suggested that the Muslim ideological surround of Iran promoted the social construction of a culturally prosocial fundamentalism.

### *Complexities and Other Findings*

Numerous additional findings clarified the Religious Schema and other variables. Against expectations, Truth of Texts and Teachings displayed a stronger positive correlation with Family and Social Order in university than in seminary students. This was a difference in degree only because the positive linkage was also significant in seminarians. Definitive explanation of this result will require additional research, but the difference is noteworthy in confirming that an integration of fundamentalism into Iranian cultural life may be at least sometimes stronger outside formal religious contexts.

The relationship of Truth of Texts and Teachings with the Extrinsic Social Orientation was also stronger in university students. In this instance, the contrast was not a difference in degree only because the connection was nonsignificantly negative in seminarians and significantly positive in university students. The Extrinsic Social Orientation was also the only religious motivation to unambiguously predict maladjustment, correlating negatively with Integrative Self-Knowledge and positively with Depression. A nonsignificant negative rather than a positive seminarian linkage with this more problematic religious orientation perhaps revealed that the adaptive potentials of fundamentalism become clearer as the Iranian Muslim social rationality becomes stronger.

At same time, however, seminarians displayed a higher Extrinsic Social mean. This result may have reflected the fact that pursuit of religious careers by seminarians in Iran required a greater sensitivity to social dimensions of religion as a practical reality. Consistent with that possibility were positive Extrinsic Social correlations with all other religious motivations. The Extrinsic Social Orientation, therefore, exhibited at least some integration with the Intrinsic and other adaptive forms of religious commitment.

Family and Social Order and Cultural Foundations predicted lower Integrative Self-Knowledge, and thus had at least some negative psychological implications. Positive linkages with Self-Control and Empathic Concern, nevertheless, suggested mental health advantages. Direct relationships of Truth of Texts and Teachings with these two Extrinsic Cultural Orientations were weaker in seminarians, with this contrast being significant for Family and Social Order. Less robust seminarian connections with these two more ambiguous Extrinsic Cultural motivations perhaps served as a further, subtle sign of the benefits of Truth of Texts and Teachings in Iran.

Expectations that Truth of Texts and Teachings would predict psychological adjustment received only weak support in the full-sample. No linkages appeared with Integrative Self-Knowledge and Perspective Taking, and other connections with relative mental health were not especially robust. Noteworthy were the generally stronger and significant relationships of Truth of Texts and Teachings with all indices of psychological adjustment in seminarians. For university students, these associations were nonsignificant. University students also scored lower on each religious motivation. Data for the less religious university students, therefore, obscured potentials of the fundamentalist social rationality to predict mental health in the full sample.

Importantly, however, university students were not more maladjusted than seminarians. Indeed, the only psychological difference between these two groups was the higher Perspective Taking of university students. The implication, therefore, was that the psychological functioning of university students was not as closely aligned with Muslim ultimate standards. Perhaps, their adjustment reflected progress in meeting subordinate standards within the Iranian cultural context, like those associated with their pursuit of non-religious careers.

Fairness, Tolerance, and Rationality was broadly adaptive in Iran. This religious schema correlated positively with all but the ambiguous Extrinsic Social religious motivation, and a multiple regression procedure confirmed that it combined with Truth of Texts and Teachings to define a stronger Intrinsic Orientation. This measure also proved to be the most consistent religious predictor of mental health, with these associations continuing to be significant in the multiple regression results. These multiple regression data identified Fairness, Tolerance, and Rationality as central among the religious schemas in defining relative mental health. Positive correlations of Fairness, Tolerance, and Rationality with the Intrinsic and Cultural Foundations motivations were stronger in seminarians. Indeed, seminarians exhibited five out of six significant relationships of Fairness, Tolerance, and Rationality with

religious motivations, but no parallel significant effects appeared for the university students.

In contrast, Xenosophia was less well developed in Iran. While correlating positively with the two other schemas, its only other full-sample relationship with a religious construct was a direct connection with Peace and Justice. The religious potentials of Xenosophia, nevertheless, seemed evident in its positive linkages with the Extrinsic Personal and all four Extrinsic Cultural Religious Orientations in the seminarians. Xenosophia did predict slightly stronger Empathic Concern and Perspective Taking in the full sample, but this Empathic Concern effect seemed more attributable to university students. In addition, these relationships and the connection with Peace and Justice disappeared in multiple regressions that accounted for the two other religious schemas. Multiple regressions also uncovered problematic Xenosophia linkages that were negative with the Intrinsic Orientation, Integrative Self-Knowledge, and Self-Control and positive with Anxiety. Overall, these data perhaps revealed that maturation of Xenosophia confronts greater challenges within a Muslim society than in the West where pluralism is a more obvious feature of daily life.

### *Limitations*

Conclusions of this project must, of course, be framed within an awareness of its limitations. First, university students and Islamic seminarians were not representative of Iran. The dynamics of fundamentalism and of religious functioning more generally might differ in the population as whole or in specific subgroups within it. Indeed, contrasts between seminarians and university students already confirm the existence of differences in subgroups.

Second, Iran is overwhelming Shiite in its commitments. Differences might appear in other Muslim societies or in Muslims living as a minority community in the West. The ISM in fact suggests that the fundamentalism of Muslims living as a subgroup within dominantly secular cultures could display noteworthy contrasts with fundamentalism in Muslim societies.

Third, internal reliabilities of Empathic Concern, Perspective Taking, and, most importantly, Xenosophia were relatively low. Stronger relationships might have appeared with sounder psychometric instruments. On the other hand, the lower alpha for Xenosophia could serve as yet one more indication of its more immature development in Iran.

Finally, all conclusions rested on correlations that can support no inferences about causality. It cannot be said, for instance, that the fundamentalism of Truth of Tests and Teachings caused greater Xenosophia and Self-Control.

These and all other relationships may have reflected the influence of some other, unexamined variable. Any attempt to establish causality will need to use of non-correlational research designs.

### Conclusion

As interpreted by the ISM, social rationalities are organized around incommensurable ultimate standards and can differ in their dynamics. Support for that interpretation appeared in the present demonstration that the fundamentalism of Truth of Texts and Teachings in the Muslim society of Iran operated differently than it has in ideological surrounds positioned within in the more dominate secularism of the West (e.g., Streib et al., 2010; Streib & Klein, 2014). Data obtained with Hindus in India (Kamble et al., 2014) and Muslims in Malaysia (Tekke et al., 2015) support the same point. Empirical evidence, therefore, confirms that incommensurability exists in social rationalities.

Ultimately, in response to the challenges of incommensurability, the ISM is committed to a standard that rejects relativism as a derivative inference (Watson, 2006, Ghorbani et al., 2012). Central to this commitment is a belief that the “space” between incommensurable rationalities requires the expansion of dialogue (Ghorbani et al., 2016). Incommensurability, in other words, requires *xenosophia*, but perhaps *xenosophia* of a specific kind. Dialogue about ultimate standards might have some role to play, but the absence of an objective standard for definitively evaluating ultimate standards may limit the potential of such dialogues.

A more productive approach might involve dialogues that focus on inferences derived from ultimate standards. Derivative inferences will at least sometimes agree across ideological surrounds and will thus reveal opportunities for constructing greater “common ground.” Other derivative inferences will be in obvious conflict. Still, a derivative inference within one ideological surround may have more positive implications within another. Insights into that possibility may promote greater understanding across ideological surrounds. Findings for Truth of Texts and Teachings in Iran illustrate such a possibility and most importantly support a conclusion that incommensurability requires *xenosophia* (also see e.g., Khatami, 2001). *Xenosophia* expresses a confidence that wisdom (*sophia*) is to be found in the perspectives of the alien (*xeno*). Across ideological surrounds, *xenosophia* and wisdom more generally will presumably be centrally important derivative inferences of the future.

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