

## Construct Validation of a Modified Religious Orientation Scale within an Islamic Context

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### Abstract

*This study added 12 new statements to the Persian version of 21-item religious orientation scale (ROS) and administered it to five hundred thirty six undergraduate students majoring in various fields in two universities in Mashhad, Iran. The application of the Principal Axis Factoring to the data and rotating the results via Varimax with Kaiser Normalization extracted seven factors, i.e., Inspirational, Intrinsic, Social, Concessional, Theo-pacific, Humanitarian and Sacrificial, establishing the ROS as a multidimensional ratōdher that bifactorial measure of religious orientation. The correlational analysis of the factors showed that Inspirational, Intrinsic, Social, Theo-pacific, Humanitarian and Sacrificial factors are significantly related to each other in a positive direction whereas the Concessional orientation towards religion relates significantly but negatively to the Inspirational, Intrinsic, Social, and Sacrificial factors. The implications of the findings are discussed and recommendations are made for future research.*

**Keywords:** Islam, religion, factors, validity, orientation

### 1. Introduction

In the preface to the second Edition of *Encyclopedia of Religion*, Jones (2004) admitted that “there is a very wide spectrum of opinions as to the most serviceable definitions of religion” (p. 8). To avoid confusion, most scholars have shifted their attention from particular religions such as Christianity and Islam (e.g., Gorsuch, 1994) to religious *orientation* in general and defined it as the *motivation* behind religious behaviors (Francis, 2007; Hoge, 1972; Hunt & King, 1971). The emphasis on religious orientations in general rather than certain religious denominations and conducts in particular was originally conceived and subsequently submitted to empirical assessment by Allport and Ross (1967). They identified two major motivations underlying all religious behaviors, i.e., intrinsic and extrinsic. According to them, people with intrinsic orientation find their master motive in religion. Other needs, strong as they may be, are regarded as a less alternate significance, and they are, so far as possible, brought into harmony with the religious beliefs and prescriptions. Having embraced a creed the individual endeavors to internalize it and follow it fully. It is in this sense that he lives his religion (p. 434).

Allport and Ross (1967) characterized believers with the extrinsic motivation as those disposed to use religion for their own ends. The term is borrowed from axiology, to designate an interest that has held because it serves other, more ultimate interests. Extrinsic values are always instrumental and utilitarian. Persons with this orientation may find religion useful in a variety of ways to provide security and solace, sociability and distraction, status and self justification. The embraced creed is lightly held or else selectively shaped to fit more primary needs. In the theological terms the extrinsic type turns to God, but without turning away from self (p. 434).

The verbatim descriptions offered by Allport and Ross (1967) for the intrinsic and extrinsic motivations underlying religious belief and behaviors have been given in this study because these two orientations have been followed in almost all research projects conducted both in the west and in the east. Lillios (2010), for example, administered the short form of New Indices of Religious Orientation (Francis, 2007), the Christian Orthodox Religiousness Scale (Chliaoutakis, et al., 2002) and the revised form of Attitudes Toward Seeking Professional Psychological Help Scale (Fischer & Farina, 1995) to 140 members of the Greek Orthodox Church in the United States and found no significant relationship between the two orientations, religiosity and attitudes toward seeking help.

In the East, Chavoshi et al. (2008) explored the relationship between prayers and religious orientation with mental health by administering Allport and Ross' (1967) ROS and General Health Questionnaire developed by Goldberg and Williams (1988) to 150 Iranian university employees and 150 nonemployees. Chavoshi et al claimed that "the religious orientation of employees was more internal and that of nonemployees was more external" (p. 149) without providing any correlations between religious orientations and mental health.

Similarly, Mohammadzadeh, Najafi and Ashuri (2009) administered Schizotypal Trait Questionnaire A form (Jackson & Claridge, 1991) and Religious Attitude Testing Questionnaire (Ghobaribonab, Gholamalilavasani, and Farokhro, 1386) to 210 university students and found that only the extrinsic religious orientation correlated significantly with all three schizotypal traits, i.e., unusual perceptual experiences ( $r = .40, p < 0.01$ ), paranoid suspiciousness/social anxiety ( $r = .31, p < 0.01$ ), and magical thinking ( $r = .14, p < 0.01$ ).

Common to studies in both the west and east is the acceptance of religion as a two-dimensional construct. Khodadady and Golparvar (2011), however, extracted four factors when they translated the 21-item ROS into Persian and administered it to 329 undergraduate university students and applied three methods of factor extraction, i.e., Maximum Likelihood (ML), Principal Axis Factoring (PAF) and Principal Component Analysis (PCA), to their data. Based on their results, they suggested that the PAF be employed for both exploratory and confirmatory purpose and concluded that "the ROS is neither two dimensional as assumed by Allport and Ross (1967) and taken for granted by Ghorbani et al (2000). Nor is it three dimensional as found by Brewczynski and MacDonald (2006)" (p. 7).

A close examination of the 21-item ROS also showed that it lacked a number of religious practices such as supporting orphans exhorted in various chapters of the *Quran* such as 2:215, i.e., "They will ask thee as to what they should spend on others. Say: "Whatever of your wealth you spend shall [first] be for your parents, and for the near of kin, and the orphans, and the needy, and the wayfarer; and whatever good you do, verily, God has full knowledge thereof." (Asad, p. 69). Twelve new items, i.e., 22 to 33, were, therefore, added to find out whether their addition will bring about the extraction of more rotated factors or not.

## **2. Methodology**

### **2.1 Participants**

Five hundred thirty six undergraduate students, 431 female and 105 male, took part voluntarily in the study. They were majoring in agriculture ( $n = 123, 22.9\%$ ), architecture ( $n = 17, 3.2\%$ ), engineering ( $n = 53, 9.9\%$ ), English ( $n = 95, 17.7\%$ ), psychology ( $n = 23, 4.3\%$ ), Russian ( $n = 67, 12.5\%$ ), science ( $n = 63, 11.8\%$ ) and theology ( $n = 95, 17.7\%$ ). They were freshmen ( $n = 45, 27.1\%$ ), sophomore ( $n = 175, 32.6\%$ ), junior ( $n = 160, 29.9\%$ ) and senior ( $n = 56, 10.4\%$ ) students at Ferdowsi University of Mashhad and Mashhad Branch of Islamic Azad University. Their age ranged between 17 and 38 (Mean = 20.57, SD = 2.30). While 508 (94.8%) spoke Persian, the rest conversed in Arabic ( $n = 1, .2\%$ ), Kurdish ( $n = 1, .2\%$ ), Lori ( $n = 2, .4\%$ ), Turkish ( $n = 5, .9\%$ ), and Urdu ( $n = 1, .2\%$ ) as their mother languages.

### **2.2 Instrument**

The instrument employed in this study consisted of two sections, i.e., demographic and ROS.

#### **2.1 Demographic Questionnaire**

The demographic questionnaire consisted of seven questions. The four open-ended questions dealt with the participants' field of study, university, age and mother languages. The remaining three multiple choice items concerned their gender, year of study and degree they would acquire upon graduation.

## 2.2 Religious Orientation Scale

The religious orientation scale (ROS) designed in this study consists of 33 items whose first 20 were developed by Allport and Ross (1967). Item 21 was added by Feagin (1964). By resorting to the microstructural approach of schema theory, Khodadady and Golparvar (2011) translated the 21 English items to Persian. The approach treats the constituting words of items as schemata whose comprehension depends on the extent to which their readers know what they represent by themselves and in connection with the syntactic, semantic and discursual relationships they enter with each other (see Khodadady, 2001, 2008; Seif & Khodadady, 2003). (The back English translation of the Persian items have been given in the results section when their underlying factors are presented and discussed in some details. The interested readers can, however, contact the corresponding author for the Persian version.)

Take the schema *church* as an example. By itself it refers to a building where Christians usually pray and gather together for special social occasions on *certain days*. Its best Persian equivalent is KALISA. However, the majority of Iranians in general and the participants of this study in particular are Muslim and usually attend mosques for religious purposes *every day*. The attendance in mosques is basically personal in intention but social in performance. This very difference in the function of churches and mosques opposes the translation of church as KALISA in Iran and necessities its replacement with mosques. Observations of this type offer the microstructural approach of schema theory as the most valid rationale in translation.

Twelve other items, i.e., 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, and 33 were added to those of Allport and Ross (1967) and Feagin (1964) by the researchers to reflect some prevalent religious behaviors and beliefs in Iran. Item 22, *I do charitable work like supporting the orphans*, for example, reflects a basically religious commitment undertaken by practicing Muslims to comply with Allah's command revealed as verse 177 in the second surah of the *Quran*, i.e.,

True piety does not consist in turning your faces towards the east or the west- but truly pious is he who believes in God, and the Last Day; and the angels, and revelation, and the prophets; and spends his substance- however much he himself may cherish it- upon his near of kin, and the orphans, and the needy, and the wayfarer, and the beggars, and for the freeing of human beings from bondage; and is constant in prayer, and renders the purifying dues; and [truly pious are] they who keep their promises whenever they promise, and are patient in misfortune and hardship and in time of peril: it is they that have proved themselves true, and it is they who are conscious of God (translated by Asad, 1980, p.55 )”

The 33 statements comprising the ROS were presented on a Likert scale consisting of six points, i.e., completely disagree, disagree, no idea, agree and completely agree. The values of 1, 2, 3, 4, and five were assigned to these points, respectively. The completely disagree and disagree were, furthermore, collapsed to form the single point disagree as were agree and completely agree to establish agree as another single point. The percentage of times with which agree, no idea and disagree points were chosen by participants were then given in Appendix to discuss the results.

## 2.3 Procedure

Upon having the 33-item ROS printed and copied, the instructors in various faculties of Ferdowsi University of Mashhad and Mashhad Branch of Islamic Azad University were contacted. After securing the verbal agreement of some regarding the administration of the ROS to their students, the researchers attended their classes, distributed and collected it in person. However, some instructors volunteered to hold the ROS themselves and provide the researchers with the answer sheets upon their completion. A meeting was set with these instructors and the researchers went through each and all the 33 items comprising the ROS so that necessary explanations could be provided if the instructors raised any questions. Since all the items were in Persian and had already been checked for their content and style, no particular questions were brought up by the instructors. The ROS was administered in a single session lasting for 15 minutes in September and October 2011.

## 2.4 Data analysis

For determining the internal consistency of ROS Cronbach's Alpha was employed. Along with the reliability, the descriptive as well as inferential statistics were estimated by utilizing the IBM SPSS statistics 19.0.

Similar to Khodadady and Ghahari (2011) the PAF was employed to extract the latent variables which were then rotated via Varimax with Kaiser Normalization to get the best possible loadings on the factors. Similar to Khodadady and Yassami (2012) all the acceptably loading items (ALIs), i.e., .30 and higher, on the extracted and rotated factors were reported. However, since Khodadady, Alaei and Natanzi (2011) could establish significant relationship between English language achievement and a given extracted factor when its items cross loading on other factors had been removed, the same procedure was followed in the present study. All the statistical analyses were conducted to address the two questions below;

1. How reliable is the 33-item ROS?
2. What are the factors underlying the 33-item ROS?

### 3. Results and Discussion

The alpha reliability coefficient obtained on the 33-item Persian ROS developed in this study, i.e., 0.89, proved to be higher than the coefficient obtained on the 21-item Persian ROS validated by Khodadady and Golparvar (2011), i.e., .80, and thus answered the first research question, i.e., *how reliable is the 33-item ROS?* The higher reliability of the new ROS highlights the importance of modifying and validating translated psychological measures in terms of the context in which they are used so that they can yield more reliable estimates of the constructs they are designed to measure.

Upon establishing the reliability of the 33-item ROS, the KMO and Bartlett's Test were run to find out whether applying factor analysis to the data was appropriate. The .92 value of Kaiser-Meyer-Olkin Measure of Sampling Adequacy set the sample to which the scale had been administered as *marvelous* (Kaiser & Rice, 1974) and thus provided further evidence as regards the superiority of the 33-item over the 21-item ROS. Furthermore, the significant Bartlett's Test of Sphericity, i.e.,  $X^2 = 7399.012$ ,  $df = 528$ ,  $p < .001$ , indicated that the correlation matrix was not an identity matrix and factor analysis could therefore be run on the data collected.

Table 1 presents the ordered initial and extraction communalities obtained via the PAF. As can be seen, the extraction communalities (ECs) range from .81 to .08. The lowest EC belongs to Item 3, *The prayers I say when I am alone carry as much meaning and personal emotion as those said by me during services*, showing that it shares very little variance with other 32 items and thus does not contribute to the constructs underlying religious orientations.

**Table 1. Ordered initial and extraction communalities**

| Item | Initial | Extraction | Item | Initial | Extraction | Item | Initial | Extraction |
|------|---------|------------|------|---------|------------|------|---------|------------|
| I32  | .736    | .810       | I7   | .487    | .497       | I20  | .396    | .407       |
| I28  | .616    | .739       | I25  | .428    | .496       | I8   | .424    | .407       |
| I30  | .693    | .735       | I9   | .485    | .492       | I21  | .316    | .380       |
| I29  | .562    | .691       | I26  | .416    | .490       | I18  | .315    | .377       |
| I33  | .643    | .689       | I11  | .408    | .478       | I17  | .316    | .355       |
| I6   | .642    | .674       | I10  | .434    | .473       | I16  | .285    | .343       |
| I1   | .619    | .663       | I27  | .455    | .447       | I13  | .324    | .339       |
| I31  | .567    | .586       | I24  | .456    | .439       | I14  | .307    | .338       |
| I5   | .513    | .551       | I22  | .362    | .435       | I23  | .397    | .325       |
| I4   | .479    | .527       | I2   | .439    | .410       | I15  | .260    | .272       |
| I12  | .447    | .521       | I19  | .313    | .409       | I3   | .137    | .080       |

Table 2 presents the seven rotated factors extracted from the 33-item ROS developed and administered in this study. As can be seen, item three whose EC proved to be the lowest is the only statement which does not load acceptably on any factor and thus shows its irrelevance in an Islamic society where no clergyman serves worshippers as their Christian counterparts do in churches. It was therefore translated as *the prayers I say when I am alone carry as much meaning and personal emotion as those said by me in the presence of people*. Saying prayers is, in fact, a part of daily Salats offered five times a day either by a worshiper alone anywhere or in the mosque led by a clergyman or another fellow Muslim in the company of other worshippers.

**Table 2. Seven rotated factors extracted from the 33-item ROS**

| Item | Factors |     |     |      |     |   |   | Item | Factors |     |     |     |     |     |     |
|------|---------|-----|-----|------|-----|---|---|------|---------|-----|-----|-----|-----|-----|-----|
|      | 1       | 2   | 3   | 4    | 5   | 6 | 7 |      | 1       | 2   | 3   | 4   | 5   | 6   | 7   |
| 1    | .34     | .59 | *   | -.35 | *   | * | * | 18   | *       | *   | *   | *   | .56 | *   | *   |
| 2    | *       | .40 | *   | *    | .41 | * | * | 19   | *       | *   | *   | .61 | *   | *   | *   |
| 3    | *       | *   | *   | *    | *   | * | * | 20   | *       | *   | *   | *   | .52 | *   | *   |
| 4    | *       | .62 | *   | *    | *   | * | * | 21   | *       | *   | .59 | *   | *   | *   | *   |
| 5    | *       | .62 | *   | *    | *   | * | * | 22   | *       | *   | *   | *   | *   | .59 | *   |
| 6    | .33     | .59 | *   | *    | *   | * | * | 23   | *       | *   | *   | *   | *   | .35 | *   |
| 7    | *       | .43 | .46 | *    | *   | * | * | 24   | *       | *   | *   | *   | *   | .45 | *   |
| 8    | *       | *   | .45 | *    | *   | * | * | 25   | *       | *   | *   | *   | *   | .66 | *   |
| 9    | *       | *   | .55 | *    | *   | * | * | 26   | *       | *   | *   | *   | *   | .64 | *   |
| 10   | *       | *   | .59 | *    | *   | * | * | 27   | .54     | *   | *   | *   | *   | *   | *   |
| 11   | *       | *   | *   | *    | .60 | * | * | 28   | *       | *   | *   | *   | *   | .32 | .66 |
| 12   | *       | *   | *   | *    | .66 | * | * | 29   | .31     | *   | *   | *   | *   | *   | .67 |
| 13   | *       | *   | *   | .52  | *   | * | * | 30   | .69     | *   | .31 | *   | *   | *   | *   |
| 14   | *       | *   | *   | .54  | *   | * | * | 31   | .53     | *   | .35 | *   | *   | *   | *   |
| 15   | *       | *   | *   | .48  | *   | * | * | 32   | .76     | *   | .31 | *   | *   | *   | *   |
| 16   | *       | *   | .48 | *    | *   | * | * | 33   | .70     | .31 | *   | *   | *   | *   | *   |
| 17   | *       | *   | *   | .56  | *   | * | * |      |         |     |     |     |     |     |     |

\*Loading less than .30

As can be seen in Table 2, Item one, *I try hard to carry my religion over into all my other dealings in life*, is the only statement which loads on three factors, 1, 2, and 4. Whenever an item loaded on more than one factor, its highest positive loading on a given factor was considered as the main contribution of that particular statement and its cross loadings on other items were deleted from reliability and validity analyses. Thus the loading of .59 was considered as the main loading of item one on factor two only and its other loadings were ignored in subsequent analyses.

Table 3 presents the descriptive statistics and the alpha reliability coefficients as well as the variances explained by the seven factors extracted in this study. (The descriptive statistics of individual items are given in Appendix.) As can be seen, the alpha reliability coefficients of the factors range from .89 to .73 and thus establish them as reliable latent variables of religious orientation in Iran. The inclusion of 12 new items does in fact increase the rotated variance explained by extracted factors from 44.8 in Khodadady and Golparvar’s (2011) study to 48.1% in the present study. (Item 3 is excluded because of not loading acceptably on any factor.)

**Table 3. Descriptive statistics of ROSS and its factors**

| Factor        | # of items | Mean   | SD     | Alpha | Rotation sums of squared loadings |               |              |
|---------------|------------|--------|--------|-------|-----------------------------------|---------------|--------------|
|               |            |        |        |       | Total                             | % of Variance | Cumulative % |
| Inspirational | 5          | 17.34  | 5.516  | .89   | 3.111                             | 9.426         | 9.426        |
| Intrinsic     | 4          | 14.50  | 3.872  | .85   | 2.570                             | 7.787         | 17.213       |
| Social        | 6          | 16.54  | 4.762  | .79   | 2.515                             | 7.622         | 24.835       |
| Concessional  | 5          | 12.46  | 3.907  | .69   | 2.188                             | 6.631         | 31.466       |
| Theo-pacific  | 5          | 18.66  | 4.077  | .75   | 2.185                             | 6.621         | 38.086       |
| Humanitarian  | 5          | 16.58  | 3.900  | .73   | 2.093                             | 6.342         | 44.428       |
| Sacrificial   | 2          | 5.99   | 2.323  | .81   | 1.215                             | 3.683         | 48.111       |
| ROSS          | 32         | 102.04 | 17.994 | .89   |                                   |               |              |

Table 4 presents the items loading on the first factor called *Inspirational* in this study. As can be seen, five items, 27, 30, 31, 32, and 33 have loaded acceptably on factor one. The highest loading of item 32 (.76) shows how effectively attending the ceremonies held for mourning the martyrdom of Shiites Imams inspires Iranian Muslims as does the ceremony of the Night of Qadr, item 33, at which the holy *Quran* was revealed to the prophet Mohammad. Visiting the Prophet's or Imams' descendents on Eid Qadir (Item 27), i.e., the day on which the prophet appointed Imam Ali as his successor when he returned from his last pilgrimage to Mecca, inspires Shiite Muslims in Iran.

**Table 4. Items loading on the first factor called *Inspirational***

| Item | Loading | Statement  |
|------|---------|--|
| 31   | .527    | I participate in Qadir and Qorban Salats.                                    |
| 27   | .535    | I visit the Prophet's or Imams' descendents on Eid Qadir.                    |
| 30   | .693    | I participate in ceremonies celebrating the birthdays of the Innocent Imams. |
| 33   | .698    | I attend the ceremony of the Night of Qadr.                                  |
| 32   | .761    | I actively attend the Imams' mourning ceremonies.                            |

Table 5 presents the items loading on the second factor called *Intrinsic* in this study. As can be seen, four items, 1, 4, 5 and 6 have loaded acceptably on factor two. Items four and five have the highest loading on the *Intrinsic* factor and show how closely religious thinking and adopting a religious life are. They do pave the way for carrying the beliefs over into other dealings in personal life and seeking answers when Iranian Muslims face fundamental questions concerning existence and its purpose.

**Table 5. Items loading on the second factor called *Intrinsic***

| Item | Loading | Statement   |
|------|---------|---|
| 6    | .587    | Religion is especially important to me because it answers many questions about the meaning of life. |
| 1    | .592    | I try hard to carry my religion over into all my other dealings in life.                            |
| 5    | .617    | My religious beliefs are what really lie behind my whole approach to life.                          |
| 4    | .618    | It is important to me to spend periods of time in private religious thought and meditation.         |

Table 6 presents the items loading on the third factor called *Social* in this study. As can be seen, six items, 7, 8, 9, 10, 16, and 21 have loaded acceptably on factor three. It shows how important mosques are in establishing social relationships and bestowing a social identity to some undergraduate Iranian students. The very social nature of religious orientation seems to be motivating these students to read religious literature so that they can successfully join mosque groups if they wish to do so.

**Table 6. Items loading on the third factor called *Social***

| Item | Loading | Statement   |
|------|---------|---|
| 8    | .451    | If I were to join a mosque group, I would prefer to join (1) a Quran Study group, or (2) a religious group.   |
| 7    | .455    | I read literature about faith (or mosque).  |
| 6    | .480    | A primary reason for my interest in religion is that my mosque is a congenial social activity.                |
| 9    | .548    | If not prevented by unavoidable circumstances, I attend mosque.   |
| 21   | .588    | One reason for my being a mosque member is that such membership helps to establish a person in the community. |
| 10   | .592    | The mosque is most important as a place to formulate good social relationships.                               |

Table 7 presents the items loading on the fourth factor called *Concessional* in this study. As can be seen, five items, 13, 14, 15, 17, and 19 have loaded acceptably on factor four. As the highest loading statement (.61), item 19 shows that 30% of participants attach more importance to affairs other than religious commitments and thus compromise them whenever their social and economic conditions necessitates doing so (see appendix). They justify their position by employing a number of reasons one of which is replacing religiosity either with morality or neutrality. In response to item 13, for example, while 28% of participants agree that *it doesn't matter so much what they believe so long as they lead a moral life*, 30% take a *No Idea* position, indicating that the majority of *Concessional* participants, i.e., 58%, do not let their beliefs play a significant role in their lives.

**Table 7. Items loading on the fourth factor called *Concessional***

| Item | Loading | Statement  |
|------|---------|--|
| 15   | .482    | I pray chiefly because I have been taught to pray.   |
| 13   | .524    | It doesn't matter so much what I believe so long as I lead a moral life.   |
| 14   | .540    | Although I am a religious person, I refuse to let religious considerations influence my everyday affairs.                  |
| 17   | .563    | Occasionally I find it necessary to compromise my religious beliefs in order to protect my social and economic well-being. |
| 19   | .611    | Although I believe in my religion, I feel there are many more important things in my life.                                 |

Table 8 presents the items loading on the fifth factor called *Theo-pacific* in this study. As can be seen, five items, 2, 11, 12, 18 and 20 have loaded acceptably on factor five. As the highest loading statement, Item 12, *What religion offers me most is comfort when sorrows and misfortune strike*, is closely related to verses 155 and 156 of the second Surah in the *Quran* which gives good tidings to "...the patient [believers] who [bear hardships calmly], when they are visited by an affliction, and say, 'Surely we belong to God, and to Him we return'; (2:156). The very belief in the presence of Allah and His seeing of everything relieves the believers of their sorrow and renders their lives happy and peaceful.

**Table 8. Items loading on the fifth factor called *Theo-pacific***

| Item | Loading | Statement  |
|------|---------|--|
| 2    | .412    | Quite often I have been keenly aware of the presence of God or the Divine Being.   |
| 20   | .518    | Religion helps to keep my life balanced and steady in exactly the same way as my citizenship, friendships, and other memberships do. |
| 18   | .558    | The primary purpose of prayer is to gain relief and protection.  |
| 11   | .600    | The purpose of prayer is to secure a happy and peaceful life.  |
| 12   | .656    | What religion offers me most is comfort when sorrows and misfortune strike.  |

Table 9 presents the items loading on the sixth factor called *Humanitarian* in this study. As can be seen, five items, i.e., 22, 23, 24, 25 and 26 have loaded acceptably on factor six. The participants' responses to item 25 and 26 as the first and second highest loading statements, i.e., .66 and .64, respectively, show that 28% of students visit deprived areas to help their settlers and 59% devote some money to help charitable institutes (see Appendix).

**Table 9. Items loading on the sixth factor called *Humanitarian***

| Item | Loading | Statement  |
|------|---------|--|
| 23   | .355    | I donate on religious occasions.                   |
| 24   | .454    | I consider visiting patients as a religious duty.  |
| 22   | .591    | I do charitable work like supporting orphans.      |
| 26   | .641    | I devote some money to help charitable institutes. |
| 25   | .661    | I visit the deprived areas to help the settlers.   |

Table 10 presents the items loading on the seventh factor called *Sacrificial* in this study. As can be seen, two items, 28 and 29, have loaded acceptably on factor seven. This unique factor has its roots in the Festival of Sacrifices or ID AL-ADHA which takes place on the 10th of Dhu'l-Hijjah, a lunar month. Sacrificing is also ordained in the *Quran* in various parts including chapter 22 verse 36, "And as for the sacrifice of cattle, ... eat of their flesh and feed the poor ..." (translated by Asad, p. 655). The percentage of the students who love to sacrifice an animal on the Festival (37%) is more than those who disagree with such an action (26%) though a higher percentage, i.e., 38%, have taken a no-idea position.

**Table 10. Items loading on the seventh factor called *Sacrificial***

| Item | Loading | Statement   |
|------|---------|---|
| I28  | .656    | I love to sacrifice an animal on Festival of Sacrifices (ID AL-ADHA). |
| I29  | .665    | I love eating the meat of sacrificed animals a lot.                   |

Table 11 presents the correlations among the seven factors underlying the 32-item ROS. As can be seen, with the exception of the *Concessional* factor, all latent variables correlated significantly and highly not only with each other but also with the ROS itself. *Concessional* factor, however, correlates significantly with the *Inspirational* ( $r = -.25, p < .01$ ), *Intrinsic* ( $r = -.40, p < .01$ ), *Social* ( $r = -.21, p < .01$ ), and *Sacrificial* ( $r = -.14, p < .01$ ) factors in a *negative* direction, indicating that the more Iranian Muslim concede to the conditions prevalent in the society, the less religious they become in orientations.

**Table 11. Correlations among the 32-item ROSS and its seven factors**

| Scale and its Factors | ROS   | 1      | 2      | 3      | 4      | 5     | 6     | 7      |
|-----------------------|-------|--------|--------|--------|--------|-------|-------|--------|
| ROS                   | 1     | .833*  | .711*  | .737*  | -.030  | .713* | .700* | .690*  |
| 1 Inspirational       | .833* | 1      | .594*  | .559*  | -.254* | .457* | .555* | .614*  |
| 2 Intrinsic           | .711* | .594*  | 1      | .561*  | -.395* | .498* | .369* | .440*  |
| 3 Social              | .737* | .559*  | .561*  | 1      | -.207* | .398* | .348* | .445*  |
| 4 Concessional        | -.030 | -.254* | -.395* | -.207* | 1      | .006  | -.059 | -.142* |
| 5 Theo-pacific        | .713* | .457*  | .498*  | .398*  | .006   | 1     | .385* | .349*  |
| 6 Humanitarian        | .700* | .555*  | .369*  | .348*  | -.059  | .385* | 1     | .513*  |
| 7 Sacrificial         | .690* | .614*  | .440*  | .445*  | -.142* | .349* | .513* | 1      |

\* Correlation is significant at the 0.01 level (2-tailed)

#### 4. Conclusions

This study added 12 new religious beliefs and practices to the 21-item religious orientation scale (ROS) developed by Allport and Ross (1967) and Feagin (1964) and explored its underlying factors by administering it to 536 undergraduate university students in Mashhad, Iran. Similar to Khodadady and Golparvar's (2011) finding, out of 33 items comprising the modified ROS, one item did not load on any seven factors extracted in the study, i.e., *the prayers I say when I am alone carry as much meaning and personal emotion as those said by me in the presence of people*. The results showed that Iranian Muslims practice Islam not for two, i.e., intrinsic and extrinsic as found in the literature, but for seven purposes, i.e., *Inspirational, Intrinsic, Social, Concessional, Theo-pacific, Humanitarian* and *Sacrificial*. Not only the new 32-item ROS but also its six underlying factors proved to be highly reliable and related to each other *positively* and significantly.

*Concessional* orientation of the 32-item ROS was, however, the only latent variable which is related significantly but *negatively* with *Inspirational, Intrinsic, Social, and Sacrificial* dimensions of religion highlighting the fact that the people who consciously keep religion away from their everyday life look for non-religious sources to inspire and motivate themselves. They also avoid socialization within religious context and show less interest in sacrificing and eating sacrificed animals for divine purposes. Future research projects, however, need to be conducted to find out whether the seven factors of the ROS are related to participants' field of study and whether they bear any significant relationships with abilities such as academic achievement and foreign language proficiency, to name a few.

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## Appendix

## Descriptive statistics of the 33 items comprising ROS

| Item | N   | Mean | Std. Deviation | Disagree % | No Idea % | Agree % |
|------|-----|------|----------------|------------|-----------|---------|
| 1    | 536 | 3.59 | 1.244          | 19         | 20        | 61      |
| 2    | 536 | 4.21 | .982           | 6          | 9         | 85      |
| 3    | 536 | 2.72 | 1.186          | 47         | 25        | 28      |
| 4    | 536 | 3.70 | 1.063          | 12         | 25        | 63      |
| 5    | 535 | 3.45 | 1.204          | 18         | 27        | 54      |
| 6    | 536 | 3.76 | 1.166          | 14         | 19        | 67      |
| 7    | 536 | 3.19 | 1.185          | 30         | 22        | 48      |
| 8    | 535 | 3.08 | 1.317          | 28         | 31        | 41      |
| 9    | 536 | 2.87 | 1.232          | 40         | 26        | 33      |
| 10   | 536 | 2.71 | 1.169          | 41         | 35        | 24      |
| 11   | 536 | 3.65 | 1.231          | 17         | 20        | 63      |
| 12   | 536 | 3.68 | 1.265          | 18         | 17        | 65      |
| 13   | 536 | 2.70 | 1.236          | 42         | 30        | 28      |
| 14   | 536 | 2.53 | 1.163          | 50         | 29        | 21      |
| 15   | 536 | 2.17 | 1.106          | 66         | 18        | 16      |
| 16   | 536 | 2.37 | 1.047          | 56         | 31        | 13      |
| 17   | 536 | 2.27 | 1.150          | 60         | 24        | 16      |
| 18   | 536 | 3.53 | 1.166          | 21         | 21        | 58      |
| 19   | 536 | 2.79 | 1.184          | 40         | 30        | 30      |
| 20   | 536 | 3.59 | 1.099          | 15         | 24        | 61      |
| 21   | 536 | 2.33 | 1.054          | 51         | 35        | 13      |
| 22   | 536 | 3.58 | 1.060          | 13         | 29        | 58      |
| 23   | 536 | 3.09 | 1.136          | 27         | 32        | 41      |
| 24   | 536 | 3.43 | 1.145          | 16         | 32        | 52      |
| 25   | 536 | 2.99 | 1.068          | 24         | 48        | 28      |
| 26   | 536 | 3.49 | 1.189          | 15         | 26        | 59      |
| 27   | 536 | 3.45 | 1.268          | 19         | 26        | 55      |
| 28   | 536 | 3.06 | 1.281          | 26         | 38        | 37      |
| 29   | 535 | 2.93 | 1.247          | 28         | 40        | 32      |
| 30   | 536 | 3.33 | 1.348          | 23         | 24        | 53      |
| 31   | 536 | 3.23 | 1.378          | 28         | 24        | 48      |
| 32   | 536 | 3.37 | 1.336          | 21         | 26        | 53      |
| 33   | 536 | 3.97 | 1.334          | 13         | 10        | 77      |