

# Developing a Religiosity Scale for Iranian College Student

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## Abstract

The present study was designed to develop a religiosity scale to be used with university students. 2182 university students, studying at the undergraduate, graduate and postgraduate levels were selected through stratified random sampling from among all the university students in Tehran. The scale was developed in four stages (three initial stages and one final stage). The results verified the criterion validity, differential validity and construct validity of the scale. The reliability was examined with the use of retest technique and the Cronbach Alpha coefficient. Religiosity was found to be a complex construct with various dimensions of cognition, emotion, and behavior. It encompasses attributes such as relation with God, with others, with one's self and with the universe.

**Key words:** religiosity scale, university students, scales developing.

## Introduction

In today's world, scientific researches into religion which use reliable methods constitute one of the most favorite research areas in academic spheres. Religion encompasses a potpourri of complex set of behaviors, attitudes and beliefs with its particular psychological sedimentations and implications for emotions.

The complicated, mysterious and profound facet of religious experience makes its assessment a difficult and a big challenge. Methodology plays a significant role in research, particularly religious research, i.e. adoption of a proper, logical and scientific methodology leads to reliable data and findings and eliminates methodological errors. Thus, in religious researches, methodological considerations, such as theoretical frameworks, role of theory in research, the justification for selecting appropriate methods and instruments, and finally, the resources for designing and developing relevant scales, are of great significance (Khodayarifard, et. al, 2005).

Due to methodological and psychometric problems in developing the religiosity instruments, and also lack of ethnic, regional and national norm scales, and lack of standard and unified procedures in administration and scoring which may lead to inaccurate results, there is a need for standard tests which are both feasible and administrable. One may argue that there are already some very valid and reliable scales (See for instance, Hood; 2003, Hill 1999), the scales, albeit effective in the Western world, have difficulty reaching the Iranian culture. In the past few decades, Iranian and international scholars (Golzari, 1999; Azarbaijani, 2001; Bahrami's, 2004) have tried to develop religiosity scales.

The present research explores the remedial treatments and intervention programs that can address the issue of religiosity and its promotion. The tests may delineate parts with significant implications for understanding the process of religiosity. So the major goal of the present study is to develop and construct a religiosity scale to be used for university students.

## Research Method

According to the results of third pilot study, the finalized version of scale was administered to 2182 university students (960 male and 1222 female). Of these,

89.9 % were born in cities and 10.1 were born in villages; 89.9 % were single and 10.1 % were married; 78 % were undergraduate students, 12.8 % were postgraduate students, and 8.8 % were Ph.D candidates.

### **Results**

Criterion validity of the scale was examined. For this, the correlation coefficient was calculated for the scale and Bahrami's (2004) religious orientation test which consists of 4 subscales and possesses adequate validity and reliability. The results showed there is a positive and significant correlation between the religiosity components of scale and the subscales of religious orientation and assigning religious values, and a negatively significant correlation between religiosity components and the subscales of disorganization and pleasure seeking. In order to measure the construct validity of the religiosity of scale, a factor analysis which used principle components and the Varimax rotation was used. The results showed the presence of four factors, which together explain 49.34 % of the total variance of the test. The first factor has 42 items and was named "one's relation with God". The second factor has 39 items and named "relationship with others". The third factor has 22 items and named "relationship to one's self". The fourth factor has 10 items and named "one's relation to the universe".

To assess the reliability of the scale, the retesting technique was used in a 6 week interval; the results showed a positive and significant correlation between the components of religiosity and total religiosity in the first and second administration of scale. Also the obtained Alpha coefficients for the four components of religiosity and total religiosity in are high (between 0/76 – 0/95).

### **Discussion and Conclusion**

The study's goal was to develop a scale of religiosity for university students. On the strength of the theoretical principle of Islam, the theoretical structure of religiosity was defined in terms of four major components: religious cognition, religious beliefs, religious emotions and religious commitments and obligations.

An item Bank was then established with 410 questions based on the defined structure, from which three types of initial scales were developed: an open-ended scale, a situational scale, and a Likert Scale one. Findings of the initial study with a sample group of 30 subjects showed that most of the concepts covered in the open-ended scale exist in the item pool. On the other hand, the findings showed that the Likert Scale items were more appropriate than the ones in the situational scale, because the Likert Scale is, first of all more appropriate than other scales such as Bogardus and Threston, and second, showed high correlation with them.

In this scale the subjects were asked to rank their attitude toward any of the given phrases / statements on a range consisting of 5 scales: totally agree, agree undecided, disagree, and totally disagree. The scales were scored 5, 4, 3, 2, and 1. The advantages of the Likert over other scales are as follows: it can reliably divide people in terms of a certain attitude; it provides accurate information about the respondents' degree of agreement or disagreement; it provides the possibility to design statements or phrases whose relation to the attitude under study is not obvious. In other words, the scale makes it possible to design indirect questions, and this is a major privilege in assessment of qualities such as religiosity. The five point Likert scale was therefore used in the study. Through three initial studies, the details of which were reported earlier, scale was developed, each with 113 items. The items were administered in the universities of Tehran, using stratified random sampling in 15 higher education centers, considering the share of each in the sample group, the educational level, and gender. 2182 university students in Tehran responded to scale.

After the final administration, the criterion validity of the scale was calculated. The correlation between the scale and Bahrami's (2004) religious orientation scale

was calculated. The results showed significant correlation between the four subscales in both scale, and thus acceptable validity. The validity of the construct of the students' religiosity scale was examined through factor analysis with principle components.

The scale was observed to possess four factors, which together explained 49.34 percent of the variance of the whole test. The factors were identified as 'one's relation to God', 'one's relation with others', 'and one's relation with one's self', and 'one's relation with the universe'. The scale was as well checked for its ability to distinguish. The results of the study showed that religiosity construct is complex and multidimensional. This finding is in line with the findings of Golzari (2004), Azarbaijani (2001), Ghobari, Lavasani and Mohammadi (2003), Bahrami (2004), Morrow, Worthington and Mc Cullough (1993).

In an attempt to design an instrument to assess religiosity, Golzari (1999) identified seven subscales for the test titled 'modesty'. In his attempt to design a religious orientation test, Azarbaijani (2001) identified ten categories, while Ghobari, Mohammadi and Lavasani (2003) identified six factors in their attempt to develop a scale for spiritual experiences.

Morrow, Worthington and Mc McCullough (1993) developed a scale to assess religious values. It consists of 62 questions, scored on a five-point Likert scale. The factor analysis revealed the presence of seven factors or subscales.

One of the major features of the present study is its use of Islamic resources and its focus on cognitive, behavioral and emotional dimensions in defining religion and religiosity, and also providing an Islamic framework as a valid theoretical basis for developing a student religiosity scale. One of the delimitations of the study is its use of self-reporting technique in assessing religiosity among university students. For further research, other techniques such as structured interviews and observation in natural or experimental settings are recommended.

In view of the huge impact of culture on thinking styles and its crystallization on the unconscious level, the authors acknowledge that in addition to having the general characteristics of reliable and valid scales, the religiosity scales need to be mindful of the cultural configuration in multifarious stages.

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