Relationship of Religious Attitude and Self-control with Quality of Life among the Students of University of Qom and Qom University of Medical Sciences: A Path Analysis

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Abstract

Background and Objectives: Quality of life is a key component of health, associated with the individual and social living conditions of a person. Religious or spiritual parameters are among the most important determinants of quality of life (QOL) and its outcomes, and they are more significant and effective when the university students are involved. Therefore, the present study was conducted to evaluate religious attitude and self-control among the students of University of Qom and Qom University of Medical Sciences in Qom, Iran. This study was also targeted toward evaluating the relationship between these variables and QOL in the same population.

Methods: This cross-sectional study was conducted on 298 students selected through multistage stratified random sampling technique. The participants’ religious attitude, self-control, and QOL were assessed based on the questionnaires of 40-point, 24-point, and 26-point scales, respectively. The data were analyzed through path analysis using the SPSS (version 20) and Mplus software.

Results: Out of 298 participants, 160 (54%) respondents were the students of Qom University of Medical Sciences, and 178 (60.3%) students were female. According to the results, religious attitude showed a positive correlations with QOL and self-control. The results of path analysis revealed that religious attitude had an indirect effect on QOL through affecting self-control, in addition to a direct effect on QOL. The overall effect of religious attitude on QOL was estimated at 0.372, while the effect of self-control on QOL was reported as 0.449.

Conclusion: As the findings indicated, the promotion of religious attitudes can improve self-control, thereby leading to the improvement of QOL.

Keywords: Attitude, Iran, Quality of life, Religious, Self-Control, Students, University.

Introduction

Good life has always been a major human concern from the era of ancient philosophers, which was conceptualized and entered the literature as “quality of life (QOL)” about a century ago (1). There is no consensus on the definition of QOL, and the existing definitions consider this concept as a multifaceted combination of various components and features that overlap and correlate with other concepts in life, such as health.

QOL has been studied in terms of its relationship with numerous factors, including health and happiness (2), socioeconomic status (3), social support (4), psychopathological profile (5), personal characteristics (6), physical fitness (7), weight, and diet (8). More recent investigations on the relationship between QOL and other determinants, such as
the meaning of life (9) in a number of studies is indicative of the entrance of QOL studies into the spiritual domains. Since the late 20th century, religion and spirituality have been considered for investigating QOL in more general domains rather than being exclusively applied for the evaluation of elderly people and patients. Many studies have demonstrated a correlation between spirituality and QOL (10). According to the United States National Institute of Health report in 2005, people participating in religious rituals showed 25% lower mortality rate compared to those who did not attend such ceremonies (11). Other studies indicated that life expectancy and longevity had a positive relationship with religiosity, and this was true about happiness and life satisfaction (12). Since the relationship between QOL and religion focuses mostly on one’s subjective perceptions rather than the objective indices (13), it seems that religious attitudes affect QOL through altering one’s conceptualization of the meaning of life (14). Religion, along with factors like gender, ethnicity, and race, and probably more than them all, affects one's perception of different concepts, including QOL. As a result, religious beliefs and spirituality are among the most important mental and social variables that play an undeniable role in predicting QOL. Pargament believes that religion could lead to the establishment of hope, sense of closeness to others, calmness, self-actualization opportunity, sense of comfort, control of impulsive behaviors, closeness to God, and problem solving aid (15). In other words, religion affects QOL through influencing positive psychological states, including life satisfaction, happiness and health promotion, well-being, success, and actualization. In addition, it can have an inhibitory role against crimes, pre-marital sexual affairs, gambling, and drug consumption, which have been reported to have inverse relationships with anxiety and depression (16). This inhibition, known as self-control, is one of the most prominent mechanisms of religion’s effect on QOL and can play a determining role in preventing high-risk behaviors and unhealthy habits (17,18). Self-control as the tendency to avoid impulsive thoughts, feelings, and behaviors (17) has a strong relationship with religion (16). It is an internal source for controlling, eliminating, and changing the reactions that might result from a physiological process, habit, learning, or pressure (19). People with good self-control behave contrary to or different from the prevailing reaction, which is expected to occur naturally for the satisfaction of a short-term need (16). Consequently, the relationship of religion with health and social behavior could be attributed to the role of religiosity in self-control and self-regulation (16). QOL of university students is of remarkable importance due to their age and the role of alumni in the future of the society. Therefore, effort has been made to evaluate QOL and its correlation with religious attitude and self-control in this population. With this background in mind, the present study aimed to assess the relationships of the three above-mentioned variables among the students of University of Qom and Qom University of Medical Sciences.

Methods
This cross-sectional descriptive correlational study was performed on 3,130 students of University of Qom (n=1,510) and Qom University of Medical Sciences (n=1,620). The participants were selected by the multistage stratified random sampling method and were divided into two groups through proportional allocation. In this regard, the total sample size was divided into the two universities, proportional to the number of the students. Next, the sample size of each university was determined proportional to the number of the students in each faculty. Afterwards, the samples were selected randomly from each faculty. Finally, a total of 298 questionnaires, filled out by 160 students from the Qom University of Medical Sciences and 138 students from the University of Qom, were subjected to statistical analysis. The data were collected using three scales, namely religious attitude, self-control, and the
World Health Organization QOL-BREF questionnaires. The religious attitude questionnaire consists of 40 six-point Likert scale items. The validity and reliability of this questionnaire have been evaluated by Khodayarifard et al. (20).

The self-control of the participants was assessed utilizing the self-control questionnaire entailing 24 six-point Likert scale items. Nikmanesh et al. have confirmed the validity and reliability of this questionnaire (21).

For the evaluation of QOL, WHOQOL-BREF questionnaire was employed. This scale is composed of 26 items in four domains of physical, psychological, social, and living environment, rated on a five-point Likert scale. The validity and reliability of this tool were examined by Nejat et al. (22).

The data were analyzed by Spearman’s rho and path analysis in the SPSS (version 20) and Mplus software. The qualitative variables were presented as absolute and relative frequencies, and the quantitative variables were reported as the measures of central tendency and variability. Path analysis was applied as an extended multivariate regression because the independent variables were correlated and the assumption of variables independency was not met for the multivariate regression.

Path analysis was used to examines the direct and indirect effects of independent variables on the dependent variable. To this aim, a conceptual model was considered in which the religious attitude affects QOL both directly and indirectly through imposing impact on self-control. In this model, self-control and QOL are defined as internal variables, while religious attitude is known as the external variable. The ei represents error, and the one-direction arrows indicate the direction of the influence imposed on the dependent variable by the independent variable.

In order to calculate the QOL questionnaire scores, first, the scores of items 3, 4, and 26 were reversed. The questionnaires with more than two unanswered questions in the physical, psychological, and environmental domains, as well as the ones with more than one unanswered question in the social domain were omitted according to the questionnaire instructions.

Regarding the self-control questionnaire, the scores of items 1, 2, 3, 4, 5, 6, 8, 17, 20, 22, and 24 were reversed and then the sum of the scores was calculated. The reliability of the questionnaire was evaluated using Cronbach’s alpha coefficient (68%).

With regard to the religious attitude questionnaire, the scores of items 2, 4, 10, 20, 23, 25, 29, 31, 34, and 38 were reversed and summed up. The reliability of the questionnaire was assessed using Cronbach’s alpha coefficient, which was calculated as 92%.

The present study was approved by the Ethics Committee of Qom University of Medical Sciences with the code of IR.MUQ.REC.1394.89.

**Result**

A total of 298 students from the University of Qom and Qom University of Medical Sciences participated in this study. The demographic characteristics of the participants are summarized in Table 1.

<table>
<thead>
<tr>
<th>Table 1. Demographic characteristics of the study population</th>
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<td><strong>Variable</strong></td>
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As the results show, the mean age of the participants was 21.9±3.9 years (age range: 18-
49 years) and the mean number of semesters being passed by the students was obtained as 4.6±2.3 (range: 1-11).

Table 2. Standardized direct, indirect, and total impacts derived from the conceptual model

<table>
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<th>Relationship</th>
<th>Direct effect</th>
<th>Indirect effect</th>
<th>Total effect</th>
</tr>
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<tbody>
<tr>
<td>Religious attitude on self-control</td>
<td>0.45*</td>
<td>0</td>
<td>0.45</td>
</tr>
<tr>
<td>Religious attitude on quality of life</td>
<td>0.2*</td>
<td>0.17</td>
<td>0.37</td>
</tr>
<tr>
<td>Self-control on quality of life</td>
<td>0.39*</td>
<td>0</td>
<td>0.39</td>
</tr>
</tbody>
</table>

*Significant at 1%

As could be seen in Table 1, the majority of the students were female and 73.6% of the participants were single. In addition, 66.3%, > 99%, and almost 74% of the subjects were local, Shia, and bachelor students, respectively. The self-control score had the correlation coefficients of 0.49 (P=0.01) and 0.47 (P=0.01) with QOL and religious attitude, respectively. Furthermore, the religious attitude was reported to have a correlation coefficient of 0.39 (P=0.01) with QOL. Table 2 demonstrates the standardized direct, indirect, and total impacts derived from the conceptual model shown in Figure 1.

Figure 1. Conceptual diagram representing the path analysis

According to the results, the effect of self-control on QOL was 0.02 units higher than its impact on religious attitude.

Discussion

This cross-sectional study concentrated on religious attitude and self-control as predictive variables and their relationship with QOL as independent variable among the students of University of Qom and Qom University of Medical Sciences. Our findings demonstrated that religious attitude had a significant relationship with QOL and self-control. In addition, there was a significant relationship between self-control and QOL among the study population. In other words, religious attitude not only had a positive correlation with QOL among the students, but also affected QOL through positive correlation with self-control.

Despite the multiplicity of the studies separately investigating each of the above-mentioned variables, no studies were found addressing the relationship among the three variables. However, the study of religiosity and its related variables and their consequences have received special interest on the part of the researchers, which implies that the belief system of an individual is a major determinant of his/her QOL, given the vast effect it exerts on his/her attitude and judgement about the environmental realities.

According to Koenig et al., several studies demonstrated that religious people who committedly follow the rituals, except for the extremists, enjoy a better life regarding both physical and psychological aspects (23). The results of a recent review on the relationship of QOL with religiosity and spirituality provided evidence confirming the above-mentioned relationship through studies focusing on different variables, including religious affiliation, religious coping, and rituals (e.g., prayers) (24).

The results of the present study regarding the relationship between the religiosity and QOL are consistent with those of the studies investigating these factors in patients with diabetes (25), acquired immune deficiency syndrome (26), and chronic diseases (27) as well as studies reporting spirituality, religion, and personal beliefs to affect QOL in patients with spinal injuries (28). In addition, the results of the studies evaluating the relationship of spiritual health with the QOL and health of nurses (29, 30), and the relationship between spiritual beliefs and QOL among artists (31) are in line with our findings.

In spite of using different terminologies such as religiosity, religious attitude, spiritual
health, and spiritual beliefs, they seem to be common and overlapping concepts. In general, the correlation between religiosity and QOL level suggests that more religious people enjoy greater social support, hope, optimism, sense of having a meaningful life, and self-control (32). As the current study confirms, this relationship might be partly due to the fact that people’s understanding of a good life is determined based on their cultural values. In other words, QOL is mainly perceived by subjective criteria, such as happiness or life satisfaction. Therefore, QOL could be considered as the result of religious attitude, beliefs, and behaviors (12). It seems that the positive relationship of internal religious orientation with life satisfaction, psychological coping, self-control, improved personal performance, self-esteem, and purposefulness in life, and at the same time, its inverse relationship with anxiety, mental disorders, depression, and impulsiveness (33), are explainable in the light of a mediator variable, namely self-control, whose relationship with religious tendency and its effect on QOL have been asserted in a large body of evidences (34).

According to the General Theory of Crime by Gottfredson and Hirschi, the level of one's self-control explains the rate of his deviant or criminal behaviors. People with high self-control are more capable of avoiding crimes, while on the contrary, those with low self-control are more prone to criminal behaviors (35). As a result, self-control could be considered as a predictive variable for proper compatibility, lower harms, better scores, and interpersonal success (36). Impulsive behaviors and decisions mainly result from temptations without sufficient consideration of the consequences of the behavior or decision, some forms of which are indicative of mental disorders. Contrary to the impulsive desires, self-control is an inhibitory force that enables the person to adjust the decisions and behaviors toward long-term targets. Self-control could be defined in distinct domains, such as emotion control, thought control, attention control, and food consumption control (37). Studies on students' alcohol consumption or their tendency to drinking alcohol, declared religiosity as the most effective variable with negative relationship (38). In Iran, the study of the influence of self-control on committing crimes among the students of two universities in Tehran, demonstrated the relationship of low self-control with indolence, physical activity, self-centering, risk-taking, rash, drug abuse, drinking alcohol, and other deviant behaviors (39).

Furthermore, religious attitude in students has been confirmed to have a positive relationship with general health and patience, as well as a negative relationship with disturbed general health (40). Findings of Yun et al. in South Korea, showing that different deviant behaviors, such as drinking alcohol, smoking, internet addiction, and mobile phone addiction among the adolescents are predictable by low self-control, are consistent with the findings of the present study (41).

It is noteworthy that although self-control emerges since childhood and develops over time, childhood self-control is a strong predictor of success, health, possessions, safety, and happiness in adulthood, regardless of one's intelligence and economic status (42). Notwithstanding, self-control could be acquired and developed, as the results of an interventional study showed that self-control training had a significant effect on promoting QOL in patients with migraine. It seems that this occurs as a result of improved physical activity, general health, social performance, mental health, and happiness, in addition to reduced physical pain, as well as limited physical and emotional roles (43).

People with higher self-control are more capable of following the religious commands despite the temptations and consequently, more successful in avoiding the negative and deviant behaviors, as well as reacting appropriately within social behaviors (44). These underscore such interventions, having in mind that a part of society more willing to violate self-control, is the part exerting the most significant economic burden on society (42).

The findings are also in line with evidences about the lives of the American adolescents,
asserting the positive and constructive impact of religion on their attitudes and behaviors. The positive effects could be categorized into three key aspects, namely behavioral order, acquired competencies, as well as social and organizational connections (45). In this way, the students with higher self-control showed better psychological compatibility, interpersonal relationships, and improved performance in result-oriented tasks (46). Duckworth et al., emphasized the role of self-control on educational performance in students, even more than intelligence (47).

On the other hand, it should be noted that university students, especially freshmen, are under remarkable pressure. They have to deal with such difficulties as distance from home, moving among different circles of fellows and social groups, excessive educational expectations, and adaptation to the new social environment (48). QOL in the student communities is affected by several factors. Psychological issues, including depression, inadequate social interactions, and low self-esteem have significant consequences in the life, academic performance, and behaviors of the students. Moreover, improved QOL allows taking more advantage from the university facilities, participating in leisure activities, and attending the scientific environment of the university (49).

Based on evidences, showing that beliefs, knowledge, and religious behaviors lead to the enhancement of self-regulation and self-control, and the obvious role of religion in health, wellbeing, and social behaviors through self-control, as well as the significant positive relationship between self-control and internal religious tendency, (16, 50) it seems necessary to pay special attention to the promotion of religious attitudes and self-control among university students.

The cross-sectional studies are not suitable for evaluating the causal relationships. Therefore, the design of this study can be considered as a limitation. In addition, all the participants of this study were Muslim, which limits the generalizability of the findings to other religions.

Conclusion

According to the results of this study and other consistent investigations, effort should be made by universities to improve the belief and value system, as well as moral norms and religious values, in the society. It seems that sins result from sensual temptations in different people, especially the youths. Consequently, the improvement of self-control and piety seems to be a good strategy to confront such temptations. The collegiate life is remarkably important and could be considered as a transition period, during which the person is vulnerable in terms of psychological aspects. Therefore, the internal enrichment of the students in terms of religion and spirituality is of significant value during this period of life.

Further evaluations are required to find out whether religiosity and self-control have a causal relationship or there is just a correlation between these two variables. However, the results were indicative of the role of religiosity in the promotion of people’s tolerance against internal and external pressures, as well as in the enhancement of their self-control, which results in improved QOL. In other words, the boosting effect of religious attitude on self-control indicates that any attempt toward developing religious attitude among the student communities might lead to higher self-control.

Conflict of interest

The author declares no conflict of interest.

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