The Relationship between External Religious Orientation and Self-efficacy and Public Health in Zanjan University of Medical Sciences students

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Abstract
Background and Objective: Considering the general health and self-efficacy of the students and the factors that increase or decrease these variables are important goals of the university system. Therefore, this study aimed to determine the relationship between external religious orientation and general health and self-efficacy in students of Zanjan University of Medical Sciences.
Materials and Methods: This study was a descriptive-correlational study. The statistical population of the study was all students of undergraduate and postgraduate students in Zanjan University of Medical Sciences in the academic year of 2015-2016. Using Cochran method, 350 people were selected by stratified random sampling. Data were collected using George's external religious orientation questionnaire, General Scherer Self-efficacy and Goldberg General Health Questionnaire (GHQ-28). Data analysis was done using descriptive statistics, Pearson correlation and multivariate regression.
Results: The results of Pearson correlation test showed that there is not a significant relationship between the external religious orientation variable and general health (P <0.05). Also, between external religious orientation and self-efficacy variables (r = -0.152, P = 0.038), depression (r = 0.198, P = 0.002) and social function component (r=-0.1171, P = 0.028), there was a significant relationship. Also, the results of multiple regression showed that external religious orientation is only a significant predictor of social function component, which can explain 18.8% of social function variance.
Conclusion: External religious orientation affects students' depression, self-efficacy and social function.

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Introduction

University admission is one of the most influential events of every individual, which can sometimes be accompanied with anxiety and stress, causing problems in relationships and environmental compatibility of these people. These problems, which are mainly caused due to entering a new environment and dealing with different personality types in the professional setting and dormitory, inadequacy of welfare facilities, financial struggles, and decreased support sources and family monitoring, expose students to improper compatibility and general health disorders. The world health organization (WHO) defines general health according to social and biological aspects. According to this organization, general health of individuals is the ability to create relationships with others, participation in social environment changes, and contribution to changes in a constructive manner. In addition, general health requires coordination between instinctive tendencies.

While many experts of this area regard a close relationship between mental health concepts and public health, others distinguish them, believing that mental health is eradicating pathogens, preventing mental diseases and creating a favorable context for the growth and prosperity of human personality and talents (3). On the other hand, general health is the complete state of physical, psychological, and social well-being and it is not regarded as lack of disease or disability. With regard to this definition, it could be stated that psychological aspects of health must be considered to provide complete health. Not only public health includes the absence of mental disorders, but it also comprises aspects of improving mental health status (2). Another important factor affecting psychological aspects and health of students is self-efficiency. During adolescence, self-efficacy beliefs are among the most important factors influencing psychological outcomes. In this period, individuals are faced with new challenges, and methods used to deal with them are affected by self-efficiency beliefs to some extent (4).

Moreover, self-efficiency is an important factor for mental health of individuals. According to Bendora (1997), self-efficiency is the ability of a person to perform a specific task to deal with a new situation. On the other hand, standards of this concept can be individual judgment about abilities based on skill levels, sense of personal competence in a particular framework and focusing on assessing abilities to perform specific tasks

with regard to goals (5). One of factors, which is proposed to be related to the general health and self-efficiency but its role has not been evaluated in previous studies, is religious orientation. Religious thinkers and psychologists have provided various opinions about the effect of religious beliefs on mental health of individuals. On one hand, psychoanalysts, such as Freud, regard religion and religious beliefs as a neurotic disorder. They believe that religious beliefs not only have no effect on mental health, but they are also risk factors for mental diseases. On the other hand, individuals similar to Yong have considered religious beliefs as necessities of mental health of individuals, even if accompanied with superstitions, such as beliefs of early man (6).

According to Allport (1976), differentiating between internal and external religious orientation can help distinguishing individuals, whose goal is religion, from those, for whom religion is a tool. The former pay attention to goodness of their goal, whereas the latter consider the goodness of the tool. Allport stated that the most acceptable method to differentiate between these types of people is to say that a person with external religion uses his religion, whereas an individual with internal religion

lives with his religion. He also affirmed that internal religion is an inclusive religion with internalized and organized principles, which is the goal itself and not a tool for achieving the goal (6). In a research by Nelson et al. (2009), the relationship between religious orientations of the internal, spirituality and depression type with an emphasis on association between being religious and having depression was evaluated in 367 individuals with cancer. According to their results, a significant negative relationship was observed between depression and variables of spirituality and being religious (7).

Ward also evaluated the relationship between being religious and religious conflicts against stress with psychological welfare (depression and anxiety) in students. He found no significant association between being religious, spirituality, gender, prayer, and forgiveness. On the other hand, religious orientation significantly predicted depression and anxiety (8). In a similar research by Messi, the relationship between religious orientation and mental health was assessed. This study was conducted on 242 catholic students, indicating that internal religious orientation had a significant negative relationship with the level of depression (9). Ehteshamzadeh performed a research to

evaluate the relationship between religious orientation and depression in patients with multiple sclerosis (MS). According to results of the mentioned study, a significant association was observed between religious orientation and depression in patients (10).

Given the rapid spread of mood and behavioral disorders among the youth, especially students, there is a need for further research to recognize the factors related to general health and variables, such as self-efficiency. It seems that this issue must be emphasized by educational and cultural institutes. The main subject presented in this study was the relationship between external religious orientation, general health and self-efficiency of students. In other words, it is important to realize whether individuals with external religious orientation are normal, similar to those with deep and internal religious beliefs in terms of general health, and self-efficiency. With this background in mind, this study aimed to determine the relationship between external religious orientation, general health and self-efficiency of students.

Materials and Methods

This descriptive and correlational research was conducted to determine the relationship between external religious orientations, self-efficiency and general health of students in Zanjan University of Medical Sciences, in 2016. Study population included all MSc and PhD students of the mentioned university in the academic year of 2015-2016, which was estimated at 1759 individuals according to the statistics extracted from education management system. Sample size was calculated at 315 using Cochran formula. In addition, given the determined framework of sample selection, sampling was carried out using stratified random sampling. To this end, three schools of medicine, dentistry, and nursing-midwifery were chosen and subjects were randomly selected from each school in proportion to the total population of students in each school. Following the sampling process, questionnaires of the research were distributed among the participants.

Data collection tools were standard external religious orientation scale by George, Goldberg general health questionnaire (GHQ-28) and Sherer general self-efficacy scale (SGSES). The standard external religious orientation scale was designed by George to evaluate the attitude of subjects toward external religious beliefs. This scale contains two sections; the first part was comprised of 24 items, assessing external believing in God.

In this section, participants were asked to select one of the alternatives (from "completely disagree" to "completely agree") that best described their attitude toward the subject asked. In total, 1-24 scores were allocated to this component and a score of 25-39 was indicative of the score of the second component. The sum of these two scores was regarded as general external religious orientation score of participants. It should be noted that there was no item requiring reverse answers. Content validity of the scale was reported to be favorable by George. Moreover, structural validity was used by the researcher to evaluate the validity of test. In this regard, correlation coefficient between this tool and other tools in this field (e.g., Allport, Vernon and Lindsay scales) was calculated, which demonstrated a correlation of 0.88 between the scales, indicating the high validity of the applied scale (11). Furthermore, formal and content validity of the study were confirmed using the opinions of professors in fields of religious education and psychology. To determine the reliability of the research, 30 scales were distributed among the statistical population of the research, who were outside of the selected individuals. After completing the scales, reliability of the tool was estimated at the Cronbach's alpha of 0.83. Therefore,

reliability and validity of external religious orientation scale was confirmed. GHQ-28 is a self-report screening questionnaire, which contains four subscales (physical health, social performance, depression, and anxiety) each comprising of seven items. This tool is used in clinical studies to detect individuals with mental disorders. However, there are various methods to score this questionnaire. In the current research, three-point Likert scale was used, where the "A" alternative was allocated zero score, whereas the other alternatives (B, C, and D) were assigned the scores of one, two and three, respectively. Maximum score of this questionnaire was 84 (10). This questionnaire was negatively scores, meaning that the score of zero was indicative of lack of disorders in general health and high scores demonstrated high level of disorders in individuals. In addition, the cut-off point was estimated at 23, meaning that score of ≥ 23 in screening test was indicative of defects in screening process. It should be mentioned that this cut-off point was determined using previous studies (12). In a research by Ansari and Bahrami, credibility coefficients for subscales of physical health, social performance, depression, and anxiety were estimated at 0.86, 0.85, 0.72, and 0.82 percent,

respectively. Reliability of the mentioned subscales was calculated at the Cronbach's alpha of 0.92, 0.88, 0.91, and 0.83 percent, respectively. On the other hand, reliability of the subscales was estimated at 0.75, 0.69, 0.88, and 0.89 percent, respectively, using split-half technique (13). Similar approach of the external religious orientation scale was used to confirm the reliability and validity of general health questionnaire, meaning that the opinions of professors and experts of this field were applied, and reliability was estimated at the Cronbach's alpha of 0.84.

SGSES contains 17 items, each scored based on the five-point Likert scale (from "completely disagree" to "completely agree"). Items of 1, 3, 8, 9, 13, and 25 were scored right to left, whereas the remaining items were reversely scored (left to right). Therefore, the maximum and minimum scores of this scale were 85 and 17, respectively, where higher scores were indicative of better self-efficacy of the subjects (5). This scale was translated and validated by Barati Bakhtiari (1996, quoted by Foulad Chang, 2007). In the present research, reliability of the scale was estimated at Cronbach's alpha of 0.79 and Guttman split-half of 0.76 (12). However, reliability and validity of this scale was estimated at the Cronbach's alpha of 0.80

in the current research using the formal and content validity method. After obtaining the required permissions from the research deputy of the university, the researcher and questioning colleagues visited the schools and classes of students. At first, objectives and methods of the research were explained, and the researcher answered any questions raised by students. Following that, demographic characteristic questionnaire, George external religious orientation, GHQ-28 and SGSES were distributed among the students to be completed. After collecting the questionnaires, 20 defaced scales were eliminated from the research.

At the end, 295 out of 315 questionnaires were analyzed. Data analysis was performed in SPSS version 23 using descriptive statistics, Kolmogorov-Smirnov test (to evaluate the normal distribution of the data), Pearson's correlation coefficient, and multivariate regression analysis.

Results

In this research, study population comprised of 295 MSc and PhD students from schools of medicine, dentistry, and nursing-midwifery of Zanjan Univeristy of Medical Sciences. Among the subjects, 186 (63.4%) were male and 109 (36.6%) were female. In addition, the

highest frequency of age was related to the age range of 18-21 years. Moreover, the majority of subjects studied in fields of medicine and dentistry. Demographic characteristics of the participants are shown in Table 1. In Table 2, descriptive data related to the variables of the research are presented. As observed, means of external religious orientation, ability to communicate with God, general health, physical health, anxiety, depression, social performance, and general self-efficiency of students were 154.96, 95.86, 58.59, 28.58, 6.72, 6.58, 11.28, 3.93, and 42.80, respectively. According to the results presented in Table 3, a significant relationship was observed between external religious orientation and self-efficiency ($P=0.038$, r=-0.152), depression ($P=0.002$, r=0.198) and social performance ($P=0.028$, r=-0.171). Multivariate regression analysis was applied

to evaluate the effect of predictive variables on variables of the criterion and its subscales. At first, the initial assumptions of this analysis were assessed, indicating the favorable condition of the test to be used in the research. According to the results of the mentioned table, level of significance of Wilk's Lambda test for variable of external religious orientation and components of communication power and dependence on God was below 0.05. On the other hand, analysis of variance (ANOVA) was applied in the context of multivariable regression analysis to realize which variable and component was significantly affected by the predictive variable of the research. As observed, external religious orientation was able to predict only the component of social performance at 18.8%.

Table 1: Frequency distribution (number) in terms of demographic variables of study

		Frequency	Percent	Cumulative Percent
Gender	Male	108	36.6	36.6
	Female	187	63.4	100.0
	Total	295	100.0	
Age	18-21	201	68.1	68.1
	21-24	75	25.4	93.6
	24-30	12	4.1	97.6
	>30	7	2.4	100.0
	Total	295	100.0	
Valid	Medical	63	21.4	21.4
	Dental	59	20.0	41.4
	Pharmacy	56	19.0	60.3
	Nursing and Midwifery	33	11.2	71.5
	Par medicine and Health	32	10.8	82.4
	Medical	52	17.6	100.0
	Total	295	100.0	

Table 2: Descriptive indices of research variables

	N	Minimum	Maximum	Mean	Standard Deviation
External religious orientation	217	61.0	195.0	154.96	19.818
Belief in God	235	36.00	120.00	95.86	11.425
The power of external communication with God	256	23.00	75.00	58.59	9.173
General health	238	11.00	70.00	28.58	11.162
Physical health	274	1.00	18.00	6.72	3.548
Anxiety	273	1.00	20.00	6.58	4.862
Depression	267	1.00	24.00	11.28	4.668
Social function	260	1.00	21.00	3.93	4.735
Efficacy	267	17.00	81.00	42.80	10.731

Table 3: Pearson correlation test for independent and dependent variables

Predictor	**Dependent Variables**	**Pearson Correlation**	*P* **value**
External religious orientation	General health	0.041	0.579
	Physical health	0.029	0.675
	Anxiety	-0.012	0.869
	Depression	0.198	0.002
	Social function	-0.171	0.028
	Efficacy	-0.152	0.038

Table 4: The results of multivariable regression test for general health and self-efficacy variables

Effect		**Value**	**F**	**Hypothesis df**	**Error df**	*P* **value**
External religious orientation	Pillai's Trace	1.833	1.148	305.000	605.000	0.079
	Wilks' Lambda	0.093	1.177	305.000	588.997	0.049
	Hoteling's Trace	3.203	1.212	305.000	577.000	0.026
	Roy's Largest Root	1.310	2.599[c]	61.000	121.000	0.000

Table 5: Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	*P* value	Partial Eta Squared
External religious orientation	General health	7375.872	61	120.916	1.102	0.322	0.357
	Physical health	768.712	61	12.602	1.041	0.418	0.344
	Anxiety	1551.299	61	25.431	1.038	0.423	0.344
	Depression	1236.731	61	20.274	1.105	0.317	0.358
	Social function	1635.528	61	26.812	1.692	0.007	0.460
	Efficacy	5891.900	61	96.589	.841	0.771	0.298

Discussion

The present research was conducted to determine the relationship between external religious orientation and general health and self-efficiency of students in Zanjan University of Medical Sciences. In order to assess the goals and assumptions of the research, the relationship between external religious orientation and general self-efficiency was confirmed and reported to be weak, negative, and reverse. In this regard, increased external religious orientation of the students decreased their general self-efficiency to some extent. Our findings are incongruence with the results obtained by Zahirikhah (2016) and Sadeghi (2014) (14, 15). In the mentioned studies, a significant negative and reverse association was found between external religious orientation and self-efficiency, in a way that the more the

religious orientation was external, the more the self-efficiency of individuals decreased. According to the results of the present research, a positive and direct association was observed between external religious self-efficiency and depression of students, in a way that increased independent variable caused an elevation in the dependent variable. In this respect, our findings are consistent with the results obtained by Ward (2010), Pajovic (2010), Nelson (2009), Queeng (2001), Ground (2012), Solati (2011), Chavoshi (2008), and Janbozorgi (2007) (8, 16, 7, 17, 18, 20, 21). In all of the mentioned studies, a significant relationship was reported between external religious orientation and depression.

While in the mentioned studies, the main focus was on the role of internal religious orientation on improved mental health

(decreased depression and suicide rate), insufficiency of external religious orientation was also pointed out, and stating in some of the studies that exceeded performance of religious rituals was detrimental to health. In this regard, Hasanovich and Pajovic (2010) evaluated the role of ethical and religious beliefs as mental health protective factors in veterans of Bosnia and Herzegovina war. According to the results of the mentioned research, a significant negative correlation was observed between internal religious and ethical beliefs and severe symptoms of post-traumatic stress, depression, and anxiety. In other words, increased ethical and religious beliefs of veterans led to the decrease of the mentioned symptoms (16). Queeng et al. (2001) also marked an association between religious beliefs and variable of depression, in a way that internal religious beliefs reduced depression, whereas external religious beliefs increased depression in the subjects.

However, the relationship between religious orientation and depression has been addressed more explicitly in domestic studies. For instance, the direct and positive relationship between internal religious orientation and depression was pointed out in the research by Ground (2012). In addition, a positive correlation was found between the mentioned

variables in the studies by Solati (2011), Janbozorgi (2007) and Chavoshi (2008). In all of these studies, external religious orientation intensified the level of depression in the subjects. Theoretically, it could be expressed that since internal religious confrontation is the source of emotional and social support and hope, those who apply these sources in everyday life have low levels of depression and anxiety. On the other hand, lack of internalization of these variables will increase the severity of depression in the individuals (17). According to the results of the current research, a negative and reverse association was confirmed between external religious orientation and social performance of students. In this regard, increased external religious orientation of the students decreased their social performance. In this respect, our findings are in line with the results obtained by Ground (2012), Solati (2011), Chavoshi (2008) and Janbozorgi (2007) (18-21). The mentioned studies also indicated that external religious orientation decreased social performance of students.

Conclusion

According to the results of the current research, positive relationship between depression and external religious orientation

was indicative of the reinforcing role of uninternalized religious beliefs in depression of students. In other words, the high level of religious orientation increased depression in individuals. Therefore, given the increasing rate of depression among the youth, especially students, and its adverse consequences (e.g., suicide), recognition of factors related to depression and planning to decrease this component in individuals are of significant importance. One of the methods to decrease depression in students is familiarizing these individuals with accurate and deep religious beliefs so that they could internalize these notions. We all believe that deep and internalized religious beliefs guide a person toward true and lasting peace, protecting him from abnormalities in the community. On the other hand, in a society based on Islamic values, such as our community, its youth and students, who create the future of the society, must move toward deepening of these beliefs so that they could be able to plan for further stages of life, including education and accepting responsibilities with a correct attitude toward religious beliefs and thoughts.

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