Published online 2020 April 21.



Brief Report

The Relationship Between Religious Attitudes and Academic Motivation of Nursing and Midwifery Students: A Descriptive-Analytical Study

Naval Heydari 💿 1, Roksana Janghorban 💿 2 and Marzieh Akbarzadeh 💿 3, *

¹Student Research Committee, Department of Nursing, School of Nursing and Midwifery, Shiraz University of Medical Sciences, Shiraz, Iran
²Department of Midwifery, Community Based Psychiatric Care Research Center, School of Nursing and Midwifery, Shiraz University of Medical Sciences, Shiraz, Iran
³Department of Midwifery, Maternal-Fetal Medicine Research Center, School of Nursing and Midwifery, Shiraz University of Medical Sciences, Shiraz, Iran

^{*} Corresponding author: Department of Midwifery, School of Nursing and Midwifery, Maternal-Fetal Medicine Research Center, Shiraz University of Medical Sciences, Shiraz, Iran. Email: akbarzadm@sums.ac.ir

Received 2019 June 06; Revised 2019 November 14; Accepted 2019 December 25.

Abstract

Religious attitude is one of the factors affecting mental health; thus, considering motivation as a psychological factor, this study aimed to investigate the relationship between religious attitudes and academic motivation of nursing and midwifery students. This descriptive-analytical study was conducted on 139 nursing and midwifery students of Shiraz University of Medical Sciences who were selected randomly in 2016. The questionnaire consisted of 3 parts of demographic data, religious attitude questionnaire of religion attitude scale-review (RAS-R), and academic motivation adopted from the questionnaire developed by Hermens. The mean score of the students' academic achievement motivation was 83.56 ± 8.29 , and that of religious attitude was 97.2 ± 15.5 . The relationship between the total score of the student's academic motivation and religious attitudes based on the Pearson correlation coefficient test was significant, with P < 0.001 at a significance level of 0.01. Based on the linear regression test, also the relationship between the two variables at a significance level of ≤ 0.05 was significant with P < 0.001, r = 0.412, and r² = 0.164. So, a positive relationship was observed between religious attitudes and academic achievement motivation in students.

Keywords: Religious, Attitude, Academic, Motivation, Student

1. Background

One of the main goals of clinical education is the development of knowledge and skills of students (1). To achieve these two goals and high-quality education, attention to academic achievement motivation is important because students who do not have enough motivation are not ready enough to learn (2). Changes in nursing students' learning motivation are a challenge for nursing instructors that can affect the survival of the students in this field and their academic achievement (3). Intelligence is not the only determinant of academic achievement in nursing students, and a key determinant of academic achievement is the motivation (1). Nowadays, particular attention to the mental-training structures such as motivation is growing, and a large number of studies show that motivational beliefs cause academic achievement (4). Academic motivation is an internal process that stimulates the activity aiming at achieving educational achievement (5). Based on self-determination theory, 3 critical constructs of motivation are comprised of internal motivation, external motivation, and lack of motivation; also, academic motivation has this multi-dimensional nature (6). There are many individual motivational factors for students, which should be found out and strengthened by educators to achieve better learning (3). Motivation is a psychological factor (2). The studies in recent decades have pointed to the positive role of religion in mental health. Religious beliefs increase the resistance of people against disasters, maintain physical and mental health, prevent diseases, and increase hope (7). Religion even improves the quality of life, hope for others, and social relations (8). One of the most important outcomes of the educational system for the individual and community is academic achievement. Identification of effective components provides appropriate conditions for educating literate and creative individuals, especially in medical sciences, because we need to favorably train experienced human resources through spending many expenses to supply medical and health care (9). Owing to the role of spirituality on academic achievement (10) and the

Copyright © 2020, Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/) which permits copy and redistribute the material just in noncommercial usages, provided the original work is properly cited.

positive role of religion on mental health (7).

2. Objectives

Its impact on motivation as a psychological factor, the researchers of this study aimed to investigate the relationship between religious attitudes and achievement motivation in nursing and midwifery students; in the case of a positive relationship between these two factors, it can be said that educational achievement motivation can be improved by strengthening religious attitudes. Hence, it will be considered a positive step in the field of clinical training.

3. Methods

This descriptive-analytical study was conducted on nursing and midwifery students in semesters 5 to 8 who were studying at the school of nursing and midwifery in Shiraz in 2016. Based on the study by Mozaffari Makki Abadi et al. (11), we used the following formula and parameters.

$$N = \frac{\left(Z_{1-\alpha/2} + Z_{1-\beta}\right)^2}{C^2} + 3$$

 $C = 1/2Ln \; \frac{1+r}{1-r}$

r = 0.32, 0.05 = α , 1- β = 0.9 the sample size was estimated to be 98 people with 20% loss.

Although 120 were estimated, 139 were sampled in this study, given that a whole sample class was to be obtained.A simple random sampling method was used by selecting the students from the class list via a random digits table. Inclusion criteria were studying in semester 5 to 8 of nursing and midwifery. Owing to the observed decrease in the students' academic motivation in higher semesters, and lack of willingness to participate in the study was the exclusion criterion. After sampling, the questionnaires were completed by the subjects. Data collection tool included three parts; the demographic section was included, variables such as age, gender, and marital status were searched.

To investigate religious attitudes, we used the RAS-R Religious Attitude questionnaire. It included 25 questions in 6 areas related to religious attitudes that included worship, morals and behavior, effect of religion on life and behavior, social issues, science and religion, worldview, and beliefs. The correlation of each item score, with the total score of the questionnaire, was valid at the level of 0.0001. The reliability of the questionnaire through two methods of Spearman-Brown and Guttman achieved, respectively, was 0.948 and 0.933. Cronbach's alpha coefficient was equal to 0.954. Each item was scored based on a 5-point Likert scale, so the total scores ranged from 25 to 125. According to this scale, individuals who have received a score more than or equal to 100 have high religious attitudes; people with a score between 51 and 99 have moderate religious attitudes, and those with a score less than or equal to 50 have low religious attitudes (12).

To investigate academic motivation, Hermans Achievement Motivation test was used. This questionnaire includes 29 questions and has been prepared based on 10 features that distinguish those with high achievement motivation from people with low achievement motivation. Scoring strategy is based on the Likert scale, and the score range is between 29 and 116. High scores indicate high motivation. Content validity was used, which was based on previous research conducted on achievement motivation. The correlation coefficient of each question has been calculated by development-oriented behavior. The questionnaire's coefficients ranged from 0.30 to 0.57. Based on Cronbach's alpha, the reliability coefficient was 0.84. Based on test-retest in the original study it was 0.84 (13).

Data were analyzed using SPSS 22. Descriptive statistics such as mean and standard deviation, Pearson correlation coefficient, linear regression, and independent *t*-test were used. The significance level was less than 0.05.

3.1. Ethical Considerations

The Ethics Committee of Shiraz University of Medical Sciences approved the study protocol (ethic code: IR.SUMS.REC.1395.S101, proposal no.: 94-10543). Written informed consent was obtained from all the participants. The confidentiality of all participants' personal information was assured. Furthermore, they were allowed to withdraw from the study at any time.

4. Results

A total number of 139 students who had entered the university between 2011 and 2014 were enrolled in this study. The mean age of the students was 22.8 \pm 1.8. Fifty-seven participants (41%) were midwifery students, and 82 participants (59%) were nursing students. Out of them, 108 (77.7%) were female, and 98 participants (70.5%) were single. Moreover, 111 students (79.9%) were interested in their field of study. The mean scores of the students' achievement motivation and religious attitudes were 83.56 \pm 8.29 and 97.2 \pm 15.5, respectively. Based on Pearson, correlation coefficient test, the relationship between total scores of achievement motivation and religious attitudes was significant at the level less than 0.01 and P < 0.001 and based on linear regression test, the relationship between these two variables was significant (P < 0.001, r = 0.412 and r² = 0.164).

The comparison of the mean scores of religious attitudes and achievement motivation shows that the mean score of academic motivation in midwifery students is significantly more than the score achieved by nursing students; however, there was no significant difference between these two fields in terms of religious attitudes (Table 1).

Table 1. Comparison of the Mean Scores of Religious Attitudes and academic Motivation Among Nursing and Midwifery Students

Field	Academic Motivation	Religious Attitude	P Value ^a
Midwifery	86.17 ± 9.47	99.66 ± 16.34	< 0.001
Nursing	81.75 ± 6.87	97.58 ± 14.98	< 0.001
P value ^b	0.002	0.733	

^aPaired *t*-test was used.

^bIndependent *t*-test was used.

Based on the data collected, 1 student (0.7%) had a low religious attitudes, 73 students (52.5%) had moderate religious attitudes, and 65 students (46.8%) had high religious attitudes. Based on regression analysis, variables such as age, sex, field of study, family income, marital status, field of education, guaranteed future work, low willingness in the field of study with academic achievement was assessed. Thus, only the field of study had a significant effect on academic motivation, and there was a statistically significant relationship (P = 0.005).

5. Discussion

According to the findings of the current study, the majority of students had moderate and high religious attitudes. A study on Qom medical students showed that the majority of them had desirable spiritual health (14). The comparison of the mean score of achievement motivation between midwifery and nursing students indicated less motivation for nursing students compared to midwifery ones. Rose states that the decline in achievement motivation in nursing students and their uncertainty and unwillingness to be recruited is one of the problems of this field (3).

The most important category, which encourages people to perform a task or activity, is intrinsic motivation, and motivation should be changed to intrinsic one to achieve better performance (1). Studies consider intrinsic motivations such as interest, excitement, trust, high performance, perseverance, creativity, and confidence as categories to improve the learning outcomes (15). Based on studies, there is a relationship between intrinsic motivation and students' score and rank (3). According to a research, nursing students chose this field because of intrinsic motivations such as philanthropy (16); however, some

Shiraz E-Med J. 2020; 21(10):e95005.

of them choose it due to extrinsic motivations such as job security and high income (17), but most studies consider intrinsic motivations more significant than other factors in increasing learning outcomes and improving students' performance (3). A study conducted on 105 psychology residents in Toronto also showed a positive relationship between intrinsic motivation and lifelong learning (18).

On the other hand, religious attitude can be considered an intrinsic motivation. In the present study, it was concluded that the more religious people had higher achievement motivation, and the relationship between these two variables was significant. A study conducted on 158 African-American adolescents in America showed that adolescents who paid less attention to religion were exposed to less academic performance (19). In a study in Indian college students, the academic achievement of Hindu students was correlated with their religious attitudes (20). Another study in Iran showed a significant positive relationship between academic achievement and the spiritual well-being of economics, management, and humanities students (21). Also, in Medical Students of Qom, a significant relationship was observed between spiritual health and academic grade point average (14). A research carried out on 683 rural adolescents showed that people who considered religion an important asset in their life were highly motivated, and those with higher religious attitudes received higher scores (22). Another research on African-American and European-American college students showed a correlation between spiritual beliefs, religious participation, and academic performance (23). Several studies have strongly indicated that religiosity and religious participation and performance are in connection with education and training outcomes (24). Therefore, improving religious attitudes can increase the students' achievement motivation and, ultimately, their academic achievement. However, further studies are suggested to investigate the causes of this relationship and how to use religion to promote achievement motivation. Some of the limitations of this study were restriction of the research population to higher semester students, lower sample size, and disregarding the influence of other factors on the study outcomes such as demographic variables. Thus, given these limitations, further studies in nursing and midwifery and other fields of medical sciences students are suggested to be conducted.

5.1. Conclusions

In the present study, the majority of students had moderate and high religious attitudes. Nursing students had less academic achievement motivation, and a positive relationship was observed between religious attitudes and academic achievement motivation in students.

Acknowledgments

The authors would like to thank Shiraz University of Medical Sciences, Shiraz, Iran, and also Center for Development of Clinical Research of Nemazee Hospital and Dr. Nasrin Shokrpour for editorial assistance.

Footnotes

Authors' Contribution: Marzieh Akbarzadeh and Naval Heydari prepared the first draft of the manuscript and made critical revisions to the paper and responded to reviewers. Roksana Janghorban helped the search articles and selection of research questions near.

Conflict of Interests: The authors declare no conflict of interest.

Ethical Approval: The study was approved by the Ethics Committee Shiraz University of Medical Sciences.

Funding/Support: This study was funded by the Vice-Chancellor of Research Affairs of Shiraz University of Medical Sciences (grant number: 94-01-08-10548).

Informed Consent: Written informed consent was obtained from the participants before the study.

References

- Aktas YY, Karabulut N. A Survey on Turkish nursing students' perception of clinical learning environment and its association with academic motivation and clinical decision making. *Nurse education today*. 2016;**36**:124–8.
- Bacanlı H, Sahinkaya O. The adaptation study of academic motivation scale into Turkish. *Procedia-Social and Behavioral Sciences*. 2011;12:562– 7.
- Rose S. Academic success of nursing students: Does motivation matter? Teaching and Learning in Nursing. 2011;6(4):181-4.
- 4. Green J, Liem GAD, Martin AJ, Colmar S, Marsh HW, McInerney D. Academic motivation, self-concept, engagement, and performance in high school: Key processes from a longitudinal perspective. *Journal of adolescence*. 2012;**35**(5):1111–22.
- 5. Zusho A, Pintrich PR, Coppola B. Skill and will: The role of motivation and cognition in the learning of college chemistry. *International Journal of Science Education*. 2003;**25**(9):1081–94.
- 6. Ryan RM, Deci EL. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist.* 2000;**55**(1):68.
- Yang KP, Mao XY. A study of nurses' spiritual intelligence: a crosssectional questionnaire survey. Int J Nurs Stud. 2007;44(6):999–1010. doi:10.1016/j.ijnurstu.2006.03.004. [PubMed: 16650425].

- Divsalar K, Nejadnaderi S, Nakhaee N, Rouhani S. Religious attitude associated with general health and smoking in Iranian students. *Addict Health.* 2010;2(1-2):1–7. [PubMed: 24494094]. [PubMed Central: PMC3905503].
- Boehler ML, Schwind CJ, Folse R, Dunnington G, Markwell S, Dutta S. An evaluation of study habits of third-year medical students in a surgical clerkship. *The American journal of surgery*. 2001;**181**(3):268–71.
- Beauvais AM, Stewart JG, DeNisco S, Beauvais JE. Factors related to academic success among nursing students: a descriptive correlational research study. Nurse Educ Today. 2014;34(6):918–23. doi: 10.1016/j.nedt.2013.12.005. [PubMed: 24380623].
- Mozaffari Makki Abadi M, Tabbodi M, Rahgozar H. The relationship between spiritual well-being and academic achievement. European Online Journal of Natural and Social Sciences: Proceedings. 2013;3(3440-45).
- Ebrahimi A, Neshat doost H, Kalantari M, Molavi H, Asadolahi G. [Factor structure, Reliability and Validity Religious Attitude Scale.isfehan university]. Journal of Fundamentals of Mental Health. 2008;10(2):107–16. Persian.
- 13. Tamannaifar MR, Gandomi Z. Correlation between achievement motivation and academic achievement in university students. *Educ Strategy Med Sci.* 2011;4(1):15–9.
- Tabibi M, Ahmari Tehran H, Soltani Arabshahi SK, Heidari S, Abdi Z, Safaeipour R. The association between spiritual health and academic achievement in medical students of Qom University of Medical Sciences, 2011. *Qom University of Medical Sciences Journal*. 2013;7(2):72–8.
- Vansteenkiste M, Lens W, Deci EL. Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational psychologist*. 2006;41(1):19–31.
- 16. Gambino KM. Motivation for entry, occupational commitment and intent to remain: a survey regarding Registered Nurse retention. *Journal of Advanced Nursing*. 2010;**66**(11):2532–41.
- 17. Rognstad M, Aasland O, Granum V. How do nursing students regard their future career? Career preferences in the post-modern society. *Nurse Education Today*. 2004;**24**(7):493-500.
- Sockalingam S, Wiljer D, Yufe S, Knox MK, Fefergrad M, Silver I, et al. The Relationship Between Academic Motivation and Lifelong Learning During Residency: A Study of Psychiatry Residents. *Academic Medicine*. 2016;**91**(10):1423–30.
- Butler-Barnes ST, Williams TT, Chavous TM. Racial pride and religiosity among African American boys: Implications for academic motivation and achievement. *Journal of youth and adolescence*. 2012;**41**(4):486–98.
- Kumar P, Mittal A. Religious attitude, modernization and aggression of college going students and its impact on their academic achievement. *International Journal of Education and Psychological Research*. 2014;3(2):39–45.
- Makki Abadi MM, Tabbodi M, Rahgozar H. The relationship between spiritual well-being and academic achievement. European Online Journal of Natural and Social Sciences: Proceedings. 2015;2(3 (s)):pp. 3440-5.
- Milot AS, Ludden AB. The effects of religion and gender on well-being, substance use, and academic engagement among rural adolescents. *Youth & Society*. 2009;**40**(3):403–25.
- Walker KL, Dixon V. Spirituality and academic performance among African American college students. *Journal of Black Psychology*. 2002;28(2):107-21.
- 24. Glanville JL, Sikkink D, Hernandez EI. Religious involvement and educational outcomes: The role of social capital and extracurricular participation. *The Sociological Quarterly*. 2008;**49**(1):105–37.