

The Relationship between Nursing Students' Quality of Life with their Academic Achievement Motivation in Isfahan University of Medical Sciences, Iran

Abstract

Background: Quality of Life (QoL) and academic achievement motivation are important aspects of students' living and studying. There is a lack of studies to address the QoL of nursing students and its relationship with their academic achievement motivation in Iran. Therefore, the present study was conducted to investigate this relationship. **Materials and Methods:** This was a correlational study conducted with baccalaureate nursing students of Isfahan University of Medical Sciences, Iran, from December 2019 to February 2020. Data collection tools consisted of three parts: a demographic questionnaire, the World Health Organization QoL-Brief Questionnaire (WHOQOL-BREF), and the Hermans Achievement Motivation Questionnaire. Pearson correlation coefficient and standard multiple regression were used to evaluate the correlation between QoL mean domain scores and academic achievement motivation score. **Results:** The QoL mean (SD) domain scores of physical, psychological, social, environmental, and academic achievement motivation score were 14.95 (2.43), 13.42 (2.74), 13.96 (3.39), 13.62 (2.54), and 84.40 (7.73), respectively. Pearson correlations between physical, psychological, social, and environmental QoL mean domain scores with academic achievement motivation score was 0.30, 0.35, 0.12, and 0.22 ($p < 0.05$), respectively. Using standard multiple regression, psychological mean domain score ($\beta = 0.31$) was the only statistically significant predictor of academic achievement motivation. **Conclusions:** Relationships exist between academic achievement motivation and QoL domains of nursing students, particularly in the psychological domain. This information provides policymakers to plan multi-faceted arrangements to improve nursing students' academic achievement motivation and QoL particularly in most neglected areas as the psychological aspect.

Keywords: Academic achievement, Iran, motivation, nursing, quality of life, students

Introduction

Academic achievement motivation is an important factor leading university students to successfully perform a mission, achieve an aim or a certain degree of capability, and finally acquire the required success in learning and academic achievement.^[1] Nursing students especially experience more challenges in their academic motivation for various internal and external factors including personal, family, social, educational, and professional issues.^[2] These conditions can affect physical, psychological, and social health of nursing students and their Quality of Life (QoL).^[3] Therefore, assessing and improving QoL of nursing students may affect students' learning, socialization, and academic achievement. Moreover, assessing

QoL can be considered as an indicator of quality of education by policymakers in higher education.^[4]

Despite the importance of studying the relationship between QoL and academic achievement motivation of nursing students in Iran, no study was found in this field. However, relatively similar studies were identified in this area. In a study, regression analysis showed that neither of two variables of emotional intelligence and QoL could significantly predict academic achievement motivation of students at Bam University of Medical Sciences, Iran.^[5] This is not clear whether nursing students were also included in the study or not. In another study, there was a significant positive relationship between lifestyle and academic achievement of nursing students

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in Borujen city, Iran.^[6] Despite the similarities between two concepts of lifestyle and QoL, QoL is a broader concept that assesses physical, psychological, and social domains of individuals. Another study also was conducted in Isfahan University of Medical Sciences, Iran, with medical students. Results showed that the QoL and lifestyle of students and their academic performance were not related to each other.^[7] In another study in Brazil, results confirmed the relationship of many QoL domains with academic success of students.^[8] In this study, the results were evaluated based on three general disciplines (human studies, specific studies, and health studies), and the status of the nursing discipline was not analyzed separately. There is a paucity of research to assess QoL and how this might correlate or predict academic achievement motivation of baccalaureate nursing students in an Iranian context. Therefore, this study was conducted to investigate the relationship between QoL of nursing students and their academic achievement motivation in Isfahan University of Medical Sciences.

Materials and Methods

This was a correlational study conducted from December 2019 to February 2020 in the Faculty of Nursing and Midwifery of Isfahan University of Medical Sciences. The inclusion criteria included all baccalaureate nursing students in different semesters with a personal interest to take part in the study. The number of nursing students studying in the second semester of 2019 in Isfahan University of Medical Sciences at the baccalaureate level of nursing was 670; from whom, 338 students completed the questionnaires (admission rate of 50.30%). Using census sampling, 37 and 301 students (out of 338) completed the questionnaires through online and face-to-face methods, respectively.

Data collection tools consisted of three parts. The first part was a demographic questionnaire (including age, gender, total semester average score, current semester, conditional semesters, withdrawal semesters, marital status, current residence, and current employment status). The second part was the World Health Organization Quality of Life Brief Questionnaire (WHOQOL-BREF)-Farsi version. This tool is a general questionnaire consisted of 26 questions, each of which is scored on a scale of 1 to 5. In all questions except questions 3, 4, and 26, score 1 is assigned to the worst case and score 5 to the best case. Two questions are related to the general state of health and QoL, 7 questions are associated to the physical domain, 6 questions are linked to the psychological domain, 3 questions are related to the social domain, and 8 questions are related to the environmental domain. The mean score in each domain is calculated according to its related questions multiplying to 4, so that the final mean domain score ranging from 5 to 20. There is no cut-off point in interpreting the QoL mean scores so that the higher mean score indicating a better state of QoL.^[9] The internal validity of this questionnaire varies from 66% in the social domain to 84%

in the physical domain and the test-retest reliability for all domains is calculated as 75%, which indicates almost good and excellent correlations, respectively.^[9] The third data collection tool was the Persian version of the Hermans Achievement Motivation Questionnaire consisted of 29 four-choice questions making final scores ranging from 29 to 116. This questionnaire is designed based on the basic characteristics that distinguish high-motivated people from low-motivated ones. Scores between 29-50, 50-72, and 72 and higher indicate poor, moderate, and very good motivation, respectively. Reliability of this questionnaire was measured with a 1073 high school students in Iran, reaching the obtained Cronbach's alpha of 0.80.^[10]

For data collection, the list of students in different semesters and time when classes open were obtained from the faculty education office. After coordination with the class's teachers, one of the researchers met the students at the beginning or end of the class. After explaining the objectives of the research and obtaining the verbal consent, the questionnaires were distributed and collected following completion in the class. It took about 15 minutes for students to complete all three questionnaires. In order to increase students' participation in the research, the mentioned questionnaires were also designed electronically using Cafe software. Students' representatives negotiated with their classmates and following their approval to take part in the study and passing their emails to the research team, the link for completing questionnaires were sent to the students. Two weeks after this initial stage, the link to complete the questionnaire was sent again to remaining students.

Collected data were coded and entered into the SPSS software (version 16 SPSS Inc., Chicago, IL). In this study, the assumption of normality was assessed at the beginning of data checking which generally was satisfactory. The QoL mean domain scores and the total mean score of academic achievement motivation was calculated. Pearson correlation coefficient was used to evaluate the correlation between QoL mean domain scores and total mean score of academic achievement motivation. The criteria to judge the results of correlation coefficient was as follows: less than or equal to 0.20, poor, 0.21-0.40, fair, 0.41-0.60, moderate, 0.61-0.80, substantial, and 0.81-1, almost perfect. Using standard multiple regression, R-square was implemented to determine the proportion of variance in academic achievement motivation which could be explained by the QoL mean domain scores combined.

Ethical considerations

This research study was approved by the ethics committee of Isfahan University of Medical Sciences (IR.MUI.RESEARCH.REC.1398.397). The aims and importance of the study were explained to students. Volunteer participation to complete the questionnaires was considered as a consent. A formal letter for data collection was also obtained from the dean of the faculty.

Results

The majority of baccalaureate nursing students were women 203 (61.10%), in the first semester 78 (23.80%), without conditional semester 325 (98.20%), without withdrawal semester 329 (99.70%), and at single marital status 295 (88.30%). Moreover, the current residency of the majority of students was private homes 193 (57.60%) and dormitories 123 (36.70%). Furthermore, the highest percentage of students 278 (85%) were unemployed.

The QoL mean domain scores and the total mean score of academic achievement motivation are presented in Table 1. The absolute and relative frequency of participants' responses to some example QoL questions with different Likert type questions is presented in Table 2. The absolute and relative frequency of participants' answers to some example questions related to academic achievement motivation is presented in Table 3. Pearson correlations between QoL mean domain scores and total academic achievement motivation score are presented in Table 4. However, using standard multiple regression, the R-square indicated that the QoL mean domain scores together explained only 14% of the variance in academic achievement motivation score. Psychological mean domain score ($\beta = 0.31$) was the only statistically significant predictor of academic achievement motivation score [Table 4].

Discussion

The mean QoL scores of baccalaureate nursing students across physical, psychological, social, and environmental domains varied from moderate to high. Assessing individuals' QoL items also showed that the majority of students (about 50%) in response to the questions "How would you rate your quality of life?" and "How satisfied are you with your health?" have chosen either good or satisfied answers. Similar to previous research studies,^[9] students in the physical domain (including physical ability, sleep and rest status, energy for mobility, ability to work outdoors, and ability to do daily tasks alone) had higher scores, and therefore better condition. With a small difference, students in the psychological domain (including enjoyment of life, sense of meaning in life, power of concentration, satisfaction with self-image, self-satisfaction, as well as emotional state, mood, and feeling of depression) had the lowest QoL score. Students' scores in social domain (including private relationships, sex, and support) and environmental domain (including sense of security, financial ability, access to information, recreational activities, access to health resources, home satisfaction, and accessibility to transportation facilities), with close differences, were located between physical and psychological domains.

Baccalaureate nursing students' academic achievement motivation score was also higher than the average. This

Table 1: Quality of Life (QoL) mean domain scores and the total academic achievement motivation score

Variables	Participants (n)	Minimum	Maximum	Mean (SD)
Physical QoL domain	336	7.43	20.00	14.95 (2.43)
Psychological QoL domain	336	4.67	20.00	13.42 (2.74)
Social QoL domain	335	4.00	20.00	13.96 (3.39)
Environmental QoL domain	336	5.00	20.00	13.62 (2.54)
Total academic achievement motivation score	338	61.00	104.00	84.40 (7.73)

Table 2: Absolute and relative frequency of students' responses about some Quality of Life (QoL) questions of World Health Organization Quality of Life Brief Questionnaire

	Very poor n (%)	Poor n (%)	Neither Poor nor Good n (%)	Good n (%)	Very Good n (%)
How would you rate your quality of life?	13 (3.90)	22 (6.60)	99 (29.60)	161 (48.00)	40 (11.90)
	Very dissatisfied n (%)	Fairly dissatisfied n (%)	Neither dissatisfied nor satisfied n (%)	Satisfied n (%)	Very satisfied n (%)
How satisfied are you with your health?	10 (3.00)	24 (7.20)	59 (17.60)	169 (50.40)	73 (21.80)
How satisfied are you with your personal relationships?	12 (3.70)	39 (12.10)	84 (26.10)	139 (43.20)	48 (14.90)
	Not at all n (%)	A small amount n (%)	A moderate amount n (%)	A great deal n (%)	An extreme amount n (%)
How much do you enjoy life?	15 (4.50)	35 (10.40)	143 (42.60)	117 (34.80)	26 (7.70)
	Not at all n (%)	Slightly n (%)	Moderately n (%)	Very n (%)	Extremely n (%)
How healthy is your physical environment?	15 (4.50)	42 (12.50)	129 (38.40)	115 (34.20)	35 (10.40)
	Not at all n (%)	Slightly n (%)	Somewhat n (%)	To a great extent n (%)	Completely n (%)
Do you have enough energy for everyday life?	6 (1.80)	46 (13.70)	121 (36.10)	132 (39.40)	30 (9.00)

Table 3: Absolute and relative frequency of students' responses to some example questions related to academic achievement motivation

Questions	Answers	n (%)
I usually do	Much more than I resolved to do.	22 (6.50)
	A bit more than I resolved to do.	151 (44.90)
	A little less than I resolved to do.	136 (40.50)
	Much less than I resolved to do.	27 (8.10)
If I was called from my homework to watch television or listen to the radio, then afterward	I always went straight back to work.	64 (19.10)
	I would only take a short pause and then go back to work	44 (13.10)
	I would always wait a little before starting again.	160 (47.60)
	I would find it very difficult to begin again.	68 (20.20)
Work that requires great responsibility	I would like to do very much.	30 (8.90)
	I would only do if I was paid well.	45 (13.40)
	I don't think I would be capable of doing.	86 (25.50)
	Is completely unattractive to me.	176 (52.20)
I would find a life in which one wouldn't have to work at all	Very pleasant.	20 (5.90)
	Pleasant.	68 (20.20)
	Unpleasant.	149 (44.20)
	Very unpleasant.	100 (29.70)
In general I am	Very strongly future-oriented.	8 (2.40)
	Strongly future-oriented.	31 (9.30)
	Not so strongly future-oriented.	173 (51.60)
	Not at all future-oriented.	123 (36.70)
I admire persons who had reached a very high position in life	Very much.	5 (1.50)
	Much.	45 (13.40)
	Little.	165 (49.30)
	Not at all.	120 (35.80)
Organizing something	I like doing very much.	4 (1.20)
	I like doing.	30 (8.90)
	I don't like doing very much.	112 (33.20)
	I don't like doing at all.	191 (56.70)

Table 4: Pearson and Multivariate correlations between Quality of Life (QoL) mean domain scores and total academic achievement motivation score

QoL domain	Total academic achievement motivation score	
	r	Beta
Physical	0.30**	0.13
Psychological	0.35**	0.31**
Social	0.12*	-0.11
Environmental	0.22**	0.02
R ²	14%	

*Statistically significant at ($p < 0.05$). **Statistically significant at ($p < 0.001$)

finding is consistent with several studies in this field. For example, another study in 2014 examined the academic achievement motivation of nursing students at Shahid Beheshti University of Medical Sciences, Iran, with a similar questionnaire. The mean score of students' achievement motivation was higher than the average, which indicated a high level of achievement motivation in students.^[11] Another study was conducted to determine the educational motivation profiles of Tabriz, Iran, nursing

students. The results showed that 9% of students were in the low quantity cluster (low internal and external motivation and high lack of motivation), 46% in medium quantity (average levels in three motivational domains), and 44% in high quantity (high internal and external motivation and low lack of motivation).^[12] As studies have shown, students with high achievement motivation have abilities such as having a high level of aspiration, long-term resistance, tendency to complete semi-finished tasks, dynamic perception of time, having competence in choosing a friend or colleague, and the ability to do things well. High academic achievement motivation of nursing students can be effective in reaching their academic goals and their future professional and social developments.

Pearson correlation coefficients also indicated a direct but poor to fair significant relationship between the mean score of physical, psychological-spiritual, social, and environmental QoL of baccalaureate nursing students with the mean score of their academic achievement motivation. These findings relatively confirmed with multivariate tests (standard multiple regression) indicating that only psychological QoL domain was the most predictor of academic achievement motivation. The findings of this study are consistent with

some other studies. For example, in a study with students of the International Branch of the University of Guilan, Iran, results indicated a significant positive correlation between QoL and academic achievement. In this evaluation, the WHOQOL-Bref was used, but students' grade point average was used to measure academic achievement.^[13] Moreover, the results of another study with students of Guilan University of Medical Sciences, Iran, confirmed that different QoL domains such as physical function, physical role, physical pain, general health, and physical health were significant predictors of students' academic performance. In that study, the SF-36 QoL instrument was used, and the last grade point average of students were considered as the indicator of academic performance.^[14]

The findings of this study should be considered along with its limitations. This study provides up-to-date information about QoL and academic achievement motivation of baccalaureate nursing students in one of the top nursing faculties in Iran. This faculty is located almost in the central part of Iran and is chosen by many students interested in nursing studies from different cities of the country. Therefore, the obtained results can likely be generalized to similar situations. However, for more accurate results, it is suggested that a larger population of baccalaureate nursing students from different provinces of the country with different socio-economic levels be examined. Given the fact that only 14% of variance in academic achievement motivation was explained by QoL mean domain scores at the multivariate level, it is necessary to investigate other variables influencing the academic achievement motivation through qualitative or mixed-methods studies with the aim of a deeper understanding of the main concerns of baccalaureate nursing students.

Conclusion

Baccalaureate nursing students in this study had a reasonable QoL and academic achievement motivation. Moreover, the relationships existed between academic achievement motivation and QoL domains of baccalaureate nursing students particularly in the psychological domain. This information provides policymakers to search for and plan with potential multi-faceted arrangements to improve baccalaureate nursing students' academic achievement motivation and QoL particularly in most neglected areas as the psychological aspect. Psychological counseling and support are very useful particularly in the time of coronavirus when many nursing students are challenging with several psychological and emotional issues. Academic members especially should be qualified in counseling, so they can provide for the instant psychological needs of their students.

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Conflicts of interest

Nothing to declare.

References

1. Arbabisarjou A, Zare S, Shahrakipour M, Ghoreishinia G. The relationship between academic achievement motivation and academic performance among medical students. *Int J Pharm Technol* 2016;8:12272-80.
2. Rafii F, Saeedi M, Parvizy S. Academic motivation in nursing students: A hybrid concept analysis. *Iran J Nurs Midwifery Res* 2019;24:315-22.
3. Aboshaiqah AE, Cruz JP. Quality of life and its predictors among nursing students in Saudi Arabia. *J Holist Nurs* 2019;37:200-8.
4. Mahdi R. Quality of university students' life (Case study: Tehran State Universities). *Iran Higher Educ* 2016;7:1-26.
5. Ghorbani Nia R, Izadi F. The relationship of academic achievement motivation with emotional intelligence and quality of life of university students. *Health Based Res* 2017;3:297-307.
6. Heidari M, Borujeni MB, Borujeni MG, Shirvani M. Relationship of lifestyle with academic achievement in nursing students. *J Clin Diagn Res* 2017;11:JC01-3.
7. Saedi Z, Farahbakhsh K. Relation among quality of life, life style, academic performance with academic achievement in Isfahan University of Medical Sciences student's. *Educ Strategy Med Sci* 2016;9:176-85.
8. de Paula Langame A, Neto JA, Melo LN, Castelano ML, Cunha M, Ferreira RE. Quality of life of university students and their academic performance. *Br J Health Promot* 2016;29:313-25.
9. Bahrami M. Iranian nurses perceptions of cancer patients quality of life. *Iran J Cancer Prev* 2016;9:e4076.
10. Hoomon HA, Asgari AA. Developing and standardization of achievement motivation test (AMT). *Psychol Res* 2001;6:9-32.
11. Mohamadi E, Banaderakhshan H, Borhani F, Hoseinabadi-Farahani MJ. Factors affecting achievement motivation in nursing students: A cross-sectional study. *J Nurs Educ (JNE)* 2015;4:60-7.
12. Vahedi S, Zamanzadeh V. The nursing students' motivational profile and its relationship to their academic achievement: A person-oriented approach. *Q J Nurs Manag* 2012;1:36-46.
13. Yeganeh T, Soltanishal R, Kafee M, Hosseinkhanzadeh AA. The relationship between emotional intelligence, time management and quality of life with academic achievement among college students. *J Rafsanjan Univ Med Sci* 2013;12:219-32.
14. Rezaei S, Mousavi SV, Mousavi SH. A prediction model for academic performance among students of Guilan University of Medical Sciences: Dimensions of quality of life, internet use, and attitude toward addiction. *Iran J Med Educ* 2013;12:731-42.