

Original Article

Association of Academic Performance with Outcome Expectations and Its Domains in Nursing and Midwifery Students at Kermanshah University of Medical Sciences

Sepideh Bakhtiari B.S.¹, Elham Niroumand M.D.², Ahmad Khoshay M.Sc.^{3*}, Jahangir Setarehgarmy B.S.¹, Sahar Karimy¹

1. Student Research Committee, Kermanshah University of Medical Sciences, Kermanshah, Iran.

2. Social Development and Health Promotion Research Center, Kermanshah University of Medical Sciences, Kermanshah, Iran.

3. Dept. of Nursing, School of Nursing and Midwifery, Kermanshah University of Medical Sciences, Kermanshah, Iran.

**Address for Correspondence. School of Nursing and Midwifery, Dolat Abad St, Isar Sq, Kermanshah, Iran. Zip-code: 67198-51351; Tel: +988318279796; Fax: +988318261083; Email: akhoshay@kums.ac.ir*

(Received: 6 Jan 2014 Accepted: 29 Jun 2014)

Abstract

Introduction: Outcome expectation is considered as a basic and significant variable in education. It is a cognitive-motivational component that takes the individual into account as an active and sensible decision-maker. The present study was conducted to investigate the correlation of outcome expectations with academic performance of students of nursing and midwifery in Kermanshah University of Medical Sciences.

Methods: In this descriptive cross-sectional study, the sample size included 218 nursing and midwifery students selected through convenient random sampling method. The instrument for data collection was the questionnaire of “outcome expectations of career decision-making and discovery targets”, which comprised of 13 questions in three domains of future orientation, job satisfaction and personal expectations. The questionnaires were coded after being completed and the obtained data were fed into SPSS-16 software and analyzed by descriptive statistics, t-test, Kolmogrov-Smirnov, ANOVA and Mann-Whitney tests.

Results: The findings indicated no statistically significant difference between place of living (dormitory or home) and outcome expectations along with its domains (39.4% and 60-6%). However, a significant correlation was reported between discipline, gender, admittance year and academic performance of the students ($p < 0.05$). Moreover, this correlation was significant between future orientation and personal expectations, but not in the case of job satisfaction ($p > 0.05$).

Conclusion: The findings of this study indicated a positively positive significant relationship between students' academic performance and outcome expectations along with its domains.

Keywords: Academic performance, Outcome expectations, Nursing students, Midwifery students.

Citation: Bakhtiari S, Niroumand E, Khoshay A, Setarehgarmy J, Karimy S. Association of academic performance with outcome expectations and its domains in nursing and midwifery students at Kermanshah University of Medical Sciences. *Educ Res Med Sci.* 2014; 3(1): 16-21.

Introduction

Academic success or failure is a major concern in every educational system. Academic achievement in every society is indicative of the success of the educational system in terms of objectives and attention to fulfilling individual needs. Thus, any educational system can be efficient and successful when the students' academic achievement in different periods is at its maximum rate (1). Teachers, students, families, academic achievement and prevention of students' academic failure are the most important components of education for educational authorities in universities.

Despite slight differences in the ability and talent as well as the sameness of the teaching materials students performance indicates that, there are many differences between the course level and students' academic achievement. These differences are caused by various factors the identification of which can assist educational authorities to prevent academic failure and enhance academic output (2, 3).

A lot of studies are required to identify the major factors in academic achievement and to present strategies and take appropriate measures in order to reduce the damage resulting from academic failure (4). Therefore, investigating the factors affecting academic achievement (outcome expectations as one of them) decreases the consequences of failure in an educational environment. Such investigations provide a suitable ground to promote learning, and leads to emergence of appropriate methods to enhance learning and develop academic achievement (3).

Researchers believe that students' grade point average, which is a criterion indicating the academic achievement, is associated with academic satisfaction, and students with higher academic satisfaction have higher grade point average (5, 6). Some studies have shown that academic satisfaction is associated with the individual's motivation, personality, academic achievement and professional accomplishments. Students with higher academic satisfaction make more attempt to obtain a better score (7, 8, 9).

Outcome expectation is a basic and major variable in education. It is a cognitive-motivational element that considers the individual as an active and sensible decision-maker and ignites this question in his/her mind that "what will happen to him/her if he/she has a specific behavior?"

(3). Shank (1991) stated that outcome expectations and values would affect motivation and learning. Outcome expectations are vital self-regulation components that lead to academic achievement through affecting the selection of learning strategies (Rodriguez, 2009). They refer to the behavior resulting from achieving a specific outcome and the amount of value given to that outcome; hence, they are considered significant in education (3, 10, 11).

Students of medical sciences including nursing and midwifery, be able to provide high quality health services in order to promote health in the society. Thus, researchers should endeavor to identify the factors affecting learning and academic achievement of the students and implement an appropriate plan to achieve academic and specialized skills and contribute to students' educational development (12, 13). So far, few studies have been conducted in Iranian universities to analyze the students' outcome expectations in health-related disciplines. Hence, the present study was an attempt to determine the association of academic performance with outcome expectations of the nursing and midwifery students in Kermanshah.

Methods

In this descriptive cross-sectional study, the study sample (n=218) included the undergraduate students of nursing and midwifery school at Kermanshah University of Medical Sciences in the academic year 2013-2014. Participants were selected through convenient random sampling. The first year students were eliminated from the study because of non-participation in academic achievement tests. Prior to administration of the questionnaires, informed consent was obtained from all participants. The objective of the study was explained to them and they were also instructed how to complete the questionnaire. The questionnaire was distributed among all students in different academic years.

To analyze the students' outcome expectations, the standard questionnaire "career decision-making and discovery targets" was used. It included 13 items which was graded based on Likert scale-completely agree to completely disagree-from 1 to 4. The items involved 3 domains of future orientation (7 items), job satisfaction (3 items) and personal expectations (3 items). Couvillion Landry (2003) reported the reliability indices of 84%, 69% and 63% for these scales, respectively (14). ShafiNaderi reported the reliability of 71% for this

questionnaire calculated by Cronbach's alpha. In the case of future orientation, personal expectations and outcome expectations, the reliability indices of 0.65, 0.74 and 0.66 were obtained (4). The students' performance was calculated based on the grade point average of the previous term and number of probationary terms, where M1 is the grade point average and M2 is the number of probationary terms.

$$\text{Academic achievement} = M_1 - \frac{1}{2} M_2$$

Accordingly, using the criteria A and B, the grade point averages were classified as <15 (low academic performance), 15-17 (average academic performance) and >15 (high academic performance). Having been completed, the questionnaires were coded and the obtained data were fed into SPSS-16 software and analyzed by descriptive-

analytical statistics, including K-S, t-test, ANOVA and Mann-Whitney. $P < 0.05$ was considered significant.

Results

A total number of 218 questionnaires were collected. 51.4% of the respondents were male and 60.6% were settled in dormitory. The grade point average (academic performance) of the study sample was 15.82 ± 1.4 . There was no statistically significant correlation between place of living (dormitory or home) and outcome expectations along with its domains; however, a statistically significant correlation was reported between major, gender, academic level and academic achievement of the students ($p = 0.05$). Table 1 presents the distribution of demographic factors affecting students' academic performance in terms of domains of outcome expectations.

Table 1. The distribution of demographic factors affecting students' academic performance in terms of domains of outcome expectations

Domains	Demographic factors	N(%)	P	Z
Future orientation	Male	112(51.4%)	0.049	-1.970
	Female	106(48.6%)		
	Nursing	147(67.4%)	0.001	-3.208
	Midwifery	71(32.6%)		
	Individual home dormitory	132(60.6%)	0.102	-1.635
Job satisfaction	Male	112(51.4%)	0.833	-0.210
	Female	106(48.6%)		
	Nursing	147(67.4%)	0.312	-1.011
	Midwifery	71(32.6%)		
	Individual home dormitory	132(60.6%)	0.044	-2.011
Individual expectations	Male	112(51.4%)	0.002	-3.058
	Female	106(48.6%)		
	Nursing	147(67.4%)	0.001	-4.743
	Midwifery	71(32.6%)		
	Individual home dormitory	132(60.6%)	0.436	-0.780
Total	Male	112(51.4%)	0.27	-2.212
	Female	106(48.6%)		
	Nursing	147(67.4%)	0.001	-3.418
	Midwifery	71(32.6%)		
	Individual home dormitory	132(60.6%)	0.298	-1.040

The mean and standard deviation of the students' performance in terms of outcome expectations and its domains are presented in Table 2. The results obtained from the analysis of the correlation of academic level and academic performance with students' outcome expect-

ation domains indicated maximum level of outcome expectations for senior students' performance. A significant correlation was also observed between academic level and future orientation and personal expectations of students ($p = 0.001$).

Table 2. The correlation of academic level and academic performance with students' outcome expectation domains

Domains	Academic performance	M±SD	P	F
Future orientation	<15	19.91±6.85	0.045	3.154
	15-17	18.07±3.38		
	>17	18.2±4.36		
Job satisfaction	<15	7.51±2.12	0.060	2.851
	15-17	6.908±1.513		
	>17	6.91±1.66		
Individual expectations	<15	9.33±4.32	0.005	5.440
	15-17	7.89±2.04		
	>17	7.96±1.78		
Total	<15	36.73±9.54	0.002	6.596
	15-17	32.87±5.58		
	>17	33.07±6.56		

Discussion

The findings of the present study indicated a statistically significant correlation between academic performance and domains of students' outcome expectations. Students with higher motivation had higher grade point average and better academic achievement. This is in line with the results of the study carried out by Yousefi et al. (2009) in which a directly significant relationship was reported between academic motivation and basic sciences grade point average and clinical total grade point average (15). However, it is not compatible with the findings of the study of Roshan Milani et al. (2008) in which they analyzed the correlation of academic motivation with personal status and academic achievement of basic sciences students at Urmia University of Medical Sciences (16). Satari et al (2001) at Hamedan University of Medical Sciences showed that approximately 50% of students were worried about their future career and 40% of health students had negative attitude towards their future career (17), which is in line with the results of the present study.

In the present study, there was a statistically significant correlation between students' academic level and future orientation and personal expectations domains, and maximum level of outcome expectations was reported for the senior students' performance, which was not statistically significant only in the case of job satisfaction domain. Researchers believe that this may be due to the tendency to further education that exists among students and this tendency is as the result of occupational and financial status of the students in higher educational levels than in undergraduates.

In the study conducted by Keup (2006), there was a significant difference between the mean of academic achievement in different educational levels, and the highest grade point average was reported for the senior students. Lower number of courses in this level, students' familiarity with university atmosphere and presentation of clinical courses in the last year are factors that may increase the students' grade point average and enhance their academic achievement (18).

In the study of Baykal et al. (2005), the first year students had maximum satisfaction from studying and future orientation compared with other academic levels; however, their performance and satisfaction from studying decreased in the second year. This can be due to the fact that the newly-arrived students enter university with many wishes and expectations, but in the second year they find their wishes and expectations unfulfilled and feel hopeless. Also, the seniors reported minimum level of performance and satisfaction of studying. They believed too much work (e.g. projects and assignments) was an element that could interfere with satisfaction decline. On the other hand, concerns to find a job in the future, high number of unemployed people in the country, lack of support from the educational staff of the university are other factors that affect students' performance and expectations (19).

In the present study, a significant correlation was reported between students' attitude towards their outcome expectations along with its domains. Since having sufficient motivation to provide services is in line with establishing a proper attitude during studying, favorable attitude towards major creates a better attitude to future career. This

outcome has been explained in details in the study carried out by Sharifi (2002) (20). To confirm these reports, some studies have analyzed motivation among university faculty members, all of which have indicated job security has a high motivational power to enhance students' performance and progress in universities (21, 22).

Moreover, the results of this study showed a statistically significant correlation between students' academic performance along with domains of outcome expectations and gender, so that the majority of females had higher academic performance than males. In line with these findings, Yousefi et al. (2009) investigated the academic motivation of the medical students at Isfahan University of Medical Sciences and reported a relatively favorable academic motivation in most of clinical medical students, but there were differences in a number of motivational dimensions between males and females (15). Other studies have also revealed significant differences between academic motivation and performance of dentistry students in terms of gender (22). High academic motivation among female students than their male counterparts is seemingly predictable, because the females who have been accepted to university with higher percentage than the males attend university researches with higher motivation. Of course, this trend of high motivation in girls in higher educational levels is an issue that requires further investigations.

In addition, the results of this study showed a statistically significant relationship between place of living and job satisfaction domain of outcome expectations. This is indicative of the fact that students who are far from their families owing to studying and experience the hardships of this situation have more motivation for progress, while, they do not have positive attitude to future and have less achievement than non-dormitory students. Researchers believe that this is due to the sense of security and comfort and facilities that non-dormitory students have in their families; whereas, this is not true in the case of dormitory students on whom problems of education, including financial, welfare and personal problems dramatically influence. Saei et al. (1999) reported that non-dormitory students had higher academic achievement than dormitory students (24), which is in line with the findings of the present study.

Thus, since motivational factors influence academic achievement and students' academic achievement in medical disciplines is associated with the health of the whole society, it is evident that educational systems need to make more attempts to promote education and relevant components; that is learner, teacher and educational facilities (25). Establishment of a Non Governmental Organization including teachers, advisors, supervisors and educational authorities of the faculty for each department to solve the students' problems regarding their future career can to some extent reduce the current problems. Running academic and training camps in organizations with the potential to hire students can also be helpful. Moreover, compilation of educational pamphlets explaining the career responsibilities of students in each major and stating professional regulations of the given major will be useful to promote the students' performance and consequently their academic achievement (12).

Conclusion

There was a positively significant correlation between students' outcome expectations and its domains; however, no significant relationship was found for job satisfaction an attitude towards future career in the analysis of the variables, which may be due to the tendency to continue education, social and occupational promotion and consequently financial promotion in higher academic levels than in undergraduate level.

Acknowledgments

This article is a part of master dissertation of medical education and approved plan of Vice Chancellery of Research and Technology of KUMS. The researchers appreciate all students who helped us in this study. There is no conflict of interest.

References

1. Tamannaefar M, Gandomi Z. Correlation between achievement motivation and academic achievement in university students. *Iranian Quarterly of Education Strategies*. 2011; 4(1): 15-19. [Persian]
2. Rezaei SH. *Defeatism academic, cognition and amends*. 1st. Mashhad: Astan-e-Ghods Razavi Publication; 1997. [Persian]
3. Shafinadery M, Kadivar P, Arabzadeh M, Sarami GH. An analysis of the factor structure, reliability, and validity

- of students' outcome expectancy scale. 2008; 3(10): 21-35. [Persian]
4. Sakaki S, Zahed A. Influential factors on academic achievement of university students in Ardebil. *Journal of Isar & Shahadat*. 2010; 3(4): 1-7. [Persian]
5. John A, Centra J, Rock D. College environments and student academic achievement. *American Educational Research Journal*. 1971; 8(4): 623-634.
6. Lavin D E. The prediction of academic performance. 5st ed. New York: Russell Sage Foundation; 1965.
7. Pace R. Achievement and quality of student effort. *Academic work and educational excellence: Raising student productivity*. 1st ed. Berkeley: McCutchan Publishing Corp; 1986.
8. Bean J. Dropouts and turnover: The synthesis and test of a casual model of student attrition. *Research in Higher Education*. 1980; 12(1): 155-187.
9. Bean J, Bradley R. Untangling the satisfaction performance relationship for college students. *Journal of Higher Education*. 1986; 57(4): 393-412.
10. Schunk. H. Commentary on self-regulation in school contexts. *Learning and Instruction*. 1991; 15(2): 173-177.
11. Rodriguez CM. The impact of academic self-concept, expectations and the choice of learning strategy on academic achievement: The case of business students. *Higher Education Research & Development*. 2009; 28(5): 523- 539.
12. Rejali M, Mostajeran M , Lotfi M. Health student attitude towards their field of study and future career in health faculty of Isfahan University of Medical Sciences-2008. *Health System Research*. 2010; 6(1): 106 -115. [Persian]
13. Bakouei F, Kheirkhah F, Salmalian H, Omidvar S. Effective factors on educational status of midwifery students in Babol University of Medical Sciences. *SDME*. 2010; 7(1): 44- 50. [Persian]
14. Couvillion landry C. Self efficacy, motivation, and outcome expectation correlates of college students intention certainty. *The Department of Educations Leadership, Research, and Counseling*. 2003; 18(2): 51-58.
15. Yousefi A, Ghassemi G, Firouznia S. The relationship between academic motivation and academic achievement in medical students of Isfahan University of Medical Sciences. *IJME*. 2009; 9(1): 79-84. [Persian]
16. Roshan Milan Sh, Aghaii Monvar I, Kheradmand F, Saboory E, Mikaili P, Masudi S et al. A study on the academic motivation and its relation with individual state and academic achievement on basic medical student of Urmia University of Medical sciences. *Journal of Urmia Nursing and Midwifery*. 2008; 9(5): 357- 366. [Persian]
17. Satari J, Jamalian S, Seifoleslami A. The study of nursing, midwifery and health students in Hamadan University of Medical Sciences towards their future career. *Scientific Journal of Hamadan University of Medical Sciences*. 2001; 4(7): 15-19. [Persian]
18. Keup J. Promoting new-student success: Assessing academic development and achievement among first-year students. *New Directions for Student Services*. 2006; 11(4): 27-46.
19. Baykal U, Sokmen S, Korkmaz S, Akgun E. Determining student satisfaction in a nursing college. *Nurse Educ Today*. 2005; 25(3): 255-262.
20. Sharifi M, Taheri Nassaj H. Medical students attitude towards studying medicine. *IJME*. 2002; 4(1): 36- 43. [Persian]
21. Hoseinian ZM. Opinions of faculty members about the motivational factors affecting educational and research performance in Hamadan University of Medical Sciences. *J Shaheed Sadoughi University of Medical Sciences* 2001; 8(5): 83-91. [Persian]
22. Azizzadeh Forozi M, Mohammad Alizadeh S, Fasihi Harandi T. Opinions of faculty members about the motivational factors affecting educational and research performance. *Strides in Development of Medical Education*. 2003; 2(2): 102-108. [Persian]
23. Gallagher JE, Patel R, Donaldson N, Wilson NHF. The emerging dental work force: why dentistry? A questitative study professional career. *BMC Oral Health* 2007; 7(2): 77-83.
24. Saei R. Industrious, compassionate: A Study of factors affecting academic achievement and agricultural colleges offer appropriate educational approach in Shiraz, Iran (Dissertation). University of Shiraz; Iran, 1999. [Persian]
25. Keyvanzade M, Keyvanzade G, Lavasani M. Educational activities, achievement motivation, emotional intelligence. *J Educational Psycho Sciences*. 2008; 37(1): 99-123. [Persian]