Original Article

Achievement Motivation and Academic Motivation among Students of Kermanshah University of Medical Sciences in 2013

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Abstract

Introduction: Students are often similar in terms of learning ability and talent. However, there are remarkable differences in their academic performance during their schooling, which can be due to the differences in their academic motivation and achievement motivation. The current study was carried out to compare achievement motivation and academic achievement among the students of Kermanshah University of Medical Sciences (KUMS) in 2013.

Methods: In this descriptive Analytical cross-sectional study, the study sample included all students of KUMS studying in various majors in the academic year 2013-2014. A total of 301students (148 males and 163 females) were selected through stratified random sampling method. Herman's achievement motivation scale and Vallerand's academic motivation scale were used to collect the data. The obtained data were analyzed by SPSS-16 software using descriptive statistics (frequency, mean and standard deviation) and inferential statistics (one-way ANOVA and Scheffe's post-hoc tests).

Results: The mean of academic motivation among the studied sample was 116.73 ± 24.45. There was a significant difference between the students' academic motivation and achievement motivation and their majors ($p=0.006$). The most motivated 125.37 ± 21.05 and the least motivated students 108.45 ± 26.87 were the medical students and undergraduate students of public health, respectively ($p=0.001$).

Conclusion: An average academic motivation was reported for the students, and it was significantly different among various majors. Given the low academic motivation among the undergraduate students of public health and nursing, it seems necessary to take appropriate measures in order to improve their academic motivation.

Keywords: Academic motivation, Achievement motivation, students

Introduction

The students' academic performance is an important concern for every educational system. The academic performance of every educational system is indicative of its progress and achievement (1). Academic motivation and achievement motivation are two significant factors in the analysis of academic performance. Academic motivation is highly important for students. It refers to the learner's internal desire that guides the learner's behavior towards learning and academic achievement and is influenced by both internal

and external factors. Academic motivation refers to the required stimulation to do the assignments, to achieve the goals or to acquire a certain degree of competence in one's work, and to gain academic achievement consequently (2).

In addition to academic motivation, which is a key factor in students' schooling, achievement motivation is another major element related to the students' education. Achievement motivation can be defined as a person's desire to achieve goals according to a set of standards (3). It has been frequently observed that students are quite similar in terms of learning ability and talent. However, they indicate remarkable differences in academic achievement and other aspects of education. The results of various researches have shown different levels of academic motivation and achievement motivation.

A study investigated academic motivation among male students at Yazd University of Medical Sciences and indicated that 32.4% of students having average academic motivation (4). Another study examined academic motivation among students of Zabol University and showed that 17.8% of them had low motivation, 68.5% had average motivation and 13.7% had high academic motivation (5).

Since few studies have investigated academic motivation, and given the vital role of achievement motivation and academic motivation in accomplishing the objectives of educational systems, the researchers have always been looking for the ways to increases students' academic achievement and motivation. Further, students play a vital role in providing and promoting the people's health. Hence, the current research was aimed to compare achievement motivation and academic motivation among the students of Kermanshah University of Medical Sciences (KUMS) in the academic year 2013-2014.

Methods

The study sample of this descriptive Analytical cross-sectional study included all associate, bachelor, master and Ph.D. students of KUMS in the academic year 2013-2014. A total of 301 (148 male and 163 female) students were selected through stratified random sampling. To the collect the data, Herman's achievement motivation scale and Vallerand's academic achievement scale were used.

Herman's achievement motivation scale, which includes 29 items, was made in 1970 to measure the people's achievement motivation. The range of scores is 29-116; 29-58 indicates low motivation, 58-87 shows average motivation and 87-116 indicates high motivation (5). The reliability of the scale has been reported to be 88% and 82% by Cronbach's alpha coefficient and test-retest

measure (6, 7). Therefore, this questionnaire is an appropriate tool to measure the students' achievement motivation.

Vallerand's academic motivation scale was used to measure the students' academic motivation. This scale consists of 7 subscales, three subscales are related to intrinsic motivation (motivation to know, motivation to accomplish and motivation to experience stimulation), three subscales are about extrinsic motivation (integrated regulation, introjections, regulation and external regulation) and one subscale is about a motivation. The academic motivation scale includes 28 items. Scoring is based on mean and standard deviation of the students' scores; the scores <114 is considered as low motivation, scores 114-148 as average motivation and scores >148 as high motivation. With regard to psychometric characteristics, Vallerand reported Cronbach's alpha coefficients of 83%-86% for the subscales of academic motivation; only extrinsic integrated motivation (62%) was not included in this range. The reliability indices of the academic motivation subscales obtained from test-retest method, however, were reported to be 71-83% over one month interval. The results of confirmatory factor analysis confirmed the seven-factor scale and showed that academic motivation scale is an appropriate tool (8).

The obtained data in this study were analyzed by SPSS-16 software using descriptive statistics (frequency, mean and standard deviation) and inferential statistics (one-way ANOVA and Scheffe's post-hoc).

Results

From 301 studied students, 46% were male and 54% were female, with the mean age of 23.16±3.33. 80(26.6%) of them were medical students, 41(13.6%) were pharmacy students, 43(14.3%) were dental students, 48 (15.9%) were nursing students, 44(14.6%) were public health students and 45(15%) were postgraduate students. The mean of students' academic motivation was 116.73±24.45 out of the total 189. There was a significant difference between the students' academic motivation and their majors (p=0.006). The mean of intrinsic motivation was 49.59±14.49 out of 84, the mean of extrinsic motivation was 57.08±12.82 out of 77 and the mean of lack of motivation was 9.70±5.4 out of 28 (Table 1).

The academic motivation of medical students was higher than nursing and public health students (p<0.05). However, no significant difference was reported between postgraduate, dental and pharmacy students and medical achievement motivation and 92(30.6%) had high level of achievement motivation (Table 2). 140(46.5%) students were reported to have low academic motivation,

134(44.5%) had average academic motivation and 27(9%) had high academic motivation.

The most motivated students among the faculties were the students of medical faculty 125.37±21.05 and the least motivated students were undergraduate students of public health faculty 108.45±26.87. The means of academic motivation for postgraduate, dental, pharmacy and nursing students were reported to be 121.15±27.15, 116±23.14, 110±23.45 and 109.62±21.06, respectively. There was a significant difference between students' academic motivation and their majors (p=0.006). Also, a significant difference was reported between the students' achievement motivation and their majors (p=0.001) (Table 3).

Table 1. Distribution of academic motivation' dimension among students of Kermanshah University of Medical Sciences.

Academic motivation	MD(SD)	Maximum	Minimum
Internal	49.59(14.49)	84	16
External	57.08(12.82)	84	20
Lack of motivation	9.70(4)	28	3

Table 2. Distribution of achievement motivation among students of Kermanshah University of Medical Sciences

Level of achievement motivation	N	Percent
High	92	30.6
Moderate	206	68.4
Low	3	1
Total	301	100

Table 3. One way analysis of variance of achievement motivation and academic motivation

		Sum of squares	df	Mean squares	F	P
Academic motivation	Between group	13906.37	5	202.208		
	Within group	163888.91	295	60.744	5.006	0.006
	Total	77795.129	300			
Achievement motivation	Between group	1011.44	5	3160.553		
	Within group	17919.41	296	554.608	3.330	0.001
	Total	18930.85	301			

Discussion

The findings of the current research indicated an average level of academic motivation for the studied sample. These results are in line with the findings of the study by Ramazani et al. (2002) in which 73.3% of students were reported to have average and high academic motivation and 17.8% had low academic motivation (5). Moreover, in a similar study carried out at Golestan University of Medical Sciences, about 46% of students had low and average academic motivation (9). Also, Miskel et al. reported that half of the students had no academic motivation, which is in line with the results of the present study (10).

The results of the study conducted by Motazaker et al on academic motivation showed that 43.8% of students had high motivation, 50.4% had average motivation, 5.1% had low motivation and 7% had no motivation, which is partially compatible with the findings of the current study (11).

The results of this study revealed that the most motivated and the least motivated students were medical students 125.37±21.05 and undergraduate students of public health 108.45±26.87, respectively. These findings can be attributed to the following factors:
1- Positive attitude in the society towards, the students of medicine, dentistry and pharmacy as well as hope for the future in these students. Molavi et al. (2007) showed that students with less hope for the future had lower academic motivation. Certainty about the future with regard to further education and appropriate social and economic status positively affect students' academic motivation (12).
2- Integrative course and educational facilities to help students follow their goals. Salehi (2010) reported that lack of educational facilities cause a reduction in students' academic motivation (13).
3- Better foresight for earning. In line with this, Safdari et al. emphasized the role of socio-economic factors on

academic achievement (14). Also, Molavi et al. considered future economic status as an important factor influencing academic motivation and achievement (12). Moreover, Kooshan reported employment and financial issues as the most important concerns for nursing and midwifery students (15).

The findings of achievement motivation in the studied sample showed that 1% had low motivation, 68.4% had average motivation and 30.6% had high motivation. The total score of achievement motivation was reported to be 82.85, which is indicative of a relatively high level of achievement motivation and in agreement with the results of the study by Firouznia that indicated a rather high achievement motivation (3).

Conclusion

The findings showed an average academic motivation for students, and there was a statistically significant difference between students' academic motivation and different majors. Given the low academic motivation of undergraduate students of public health and nursing students, it is necessary for the university authorities to pay more attention to the factors associated with academic motivation. Further studies are suggested to investigate the factors affecting achievement motivation in order to find appropriate ways to promote it.

Acknowledgments

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