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THE RELATIONSHIP BETWEEN ACADEMIC ACHIEVEMENT MOTIVATION AND ACADEMIC PERFORMANCE AMONG MEDICAL STUDENTS

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Received on 04-05-2016

Accepted on 30-05-2016

Abstract

Introduction: Academic achievement motivation is critical particularly among university students. With this motivation, individuals gain the essential momentum to successfully complete a task, achieve a goal or a certain degree of competence in their effort, so as to finally be able to acquire the required success in learning and academic achievement. Since making constructive changes requires descriptive information about the status quo and very few studies have been conducted in this area in Zahedan (Iran), it was decided to investigate the relationship between academic achievement motivation and academic performance among medical students.

Methodology: This was across-sectional analytical study. The sample size was 200 students of medical sciences who selected randomly. Data were collected through a two-part questionnaire. The first part included demographic characteristics while the second part concerned about Harter's academic motivation questionnaire. Finally, the data were analyzed through SPSS 19, descriptive statistics, independent t-test, ANOVA, Chi Square test, Pearson correlation test.

Findings: The results showed that the mean age of subjects was 22.74 ± 2.22 and their GPA was 15.82 ± 1.5 . Moreover, 149 subjects were male and 51 were female, where academic performance was greater in women while academic achievement was greater in men. The relationships between academic performance and intrinsic motivation ($P < 0.001$) and academic achievement motivation ($P < 0.001$) were significant, whereas it was statistically insignificant with extrinsic motivation of individuals ($P = 0.068$).

Conclusions: The results showed that there is a significant relationship between academic achievement motivation and academic performance, indicating motivational factors play an important role in academic achievement. Since the progress of medical students is associated with public health, it is recommended that medical education managers and planners pay more attention to motivational factors.

Keywords: Academic performance, achievement motivation, students, Zahedan.

Introduction

Academic achievement motivation is critical particularly among university students and knowledge-seekers. With this motivation, individuals gain the essential momentum to successfully complete a task, achieve a goal or a certain degree of competence in their effort, so as to finally be able to acquire the required success in learning and academic achievement [1]. Similarly, psychologists have stressed the necessity of motivation in education for effective communication with learning new skills, strategies and behaviors [2]. Motivation experts have divided this concept into two main categories, namely intrinsic and extrinsic. Components of intrinsic motivation involve internal and personal incentives, creating sufficient attraction for performing an activity. In contrast, components of extrinsic motivational involve external incentives influencing the individuals to try and achieve an independent goal [1].

In general, achievement motivation refers to a set of behaviors conducive to learning and achievement in education [3]. Those with high achievement motivation tend to become perfect and improve their performance. They are conscientious and prefer to do challengeable things, venturing into avenues where they can evaluate their progress in such a way to be compared with others or based on other criteria [4]. Students who have high achievement motivation show more persistence and seriousness for assignments than other students, performing far better on academic tests [5]. They also tend to evolve and improve their functioning and pursue certain programs such as successfully finishing school, achieving a certain degree of competence in their work at desired success [5,6]. Hence, it can be argued that achievement motivation is one of the most important factors contributing to academic performance of students [7]. Academic performance can be defined through performance assessment of learners and comparison of outcomes and educational goals so as to make decisions to what extent the efforts made by instructors and students have realized the desired goals [8].

Academic achievement is a crucial topic in any education system involving universities, and the consequences of academic achievement will undoubtedly build the future of a nation. The more the framework built for academic

achievement, the higher the scientific and spiritual dimensions are aligned to growth, thus leading to guaranteed transcendence in the future of a nation[9]. It is relatively complicated to study the factors affecting academic performance, because the concept entails wide dimensions influenced by both environmental factors and personal factors[4].

Students from any country are its intellectual capital. One key goal of educational planners in any government is to investigate the student-specific issues, successful education and assurance of physical and mental health. In this regard, one of the goals of the university is to improve the quality of education and academic success among students, because failing students impose a great deal of financial and spiritual costs to universities[10]. Therefore, it is critical to explain the factors associated with academic achievement within higher education.

Since making constructive changes in any area requires descriptive information about the status quo [11] and very few studies have been conducted in this area in Zahedan (Iran), the researchers decided to investigate the relationship between academic achievement motivation and academic performance among students at Zahedan University of Medical Sciences.

Materials & Methods

This was a cross-sectional analytical study examining the relationship between achievement motivation and academic performance among students during 2015. Random sampling was applied and the 200 students were chosen. Data were collected through a questionnaire composed of two parts. The first part dealt with demographic characteristics (age, gender, GPA and faculty), while the second part involved Harter's academic motivation questionnaire which is a modified form of Harter's learning motivation scale (1981). This scale has been devised on the basis of individual differences in motivational dimensions within two intrinsic motivation and extrinsic motivation as well as specific information. This questionnaire was translated by Mahmoud Bohrani. Its validity and reliability were calculated and confirmed in the Persian edition, so that the validity of intrinsic motivation and extrinsic motivation were proven, and its reliability was estimated through Cronbach's alpha and test-retest to be 0.85 and 0.86 respectively for intrinsic motivation and 0.69 and 0.72 respectively for extrinsic motivation. This questionnaire consisted of 33 items scored on a 5-point Likert scale ranging from 1) Never, 2) Rarely, 3) Sometimes, 4) Most of the time, to 5) Almost always. There were 17 items for intrinsic motivation, plus 16 items for extrinsic motivation. The lowest score in achievement motivation was 33 while the highest score was 165. Higher scores on this scale indicated higher motivation in that particular domain. To collect data, the researcher visited students during breaks between classes. Students were first briefed about the objectives. They then

expressed their consent verbally, stressing within the questionnaire, “Your participation in this project shall be deemed upon your informed consent. The information in this questionnaire is confidential and shall not pose any danger to you“. After explaining the purpose of the scheme, the questionnaire was handed to students willing to participate in the study. Finally, the data were analyzed through SPSS 19, descriptive statistics, independent t-test, ANOVA, Pearson correlation and chi square.

Findings:

The results showed that the mean age of subjects was 22.74 ± 2.22 and their GPA was 15.82 ± 1.5 . Moreover, 149 of subjects (74.5%) were men and 51 (25.5%) were female. Academic performance was greater among women while academic achievement was greater among men. The relationship between gender and academic performance ($P=0.002$) was significant, whereas its relationship with academic achievement motivation, intrinsic motivation and extrinsic motivation was not significant ($P>0.05$). The relationships between age and academic performance, achievement motivation, extrinsic motivation and intrinsic motivation were not statistically significant ($P>0.05$). The relationships between field of study and intrinsic motivation ($P<0.002$) and academic achievement motivation ($P<0.03$) were significant, whereas it was statistically insignificant with extrinsic motivation and academic performance of individuals ($P=0.05$).

The relationships between academic performance and intrinsic motivation ($P<0.001$) and academic achievement motivation ($P<0.001$) were significant, whereas it was statistically insignificant with extrinsic motivation of individuals ($P=0.068$).

Table 1: Academic performance, extrinsic motivation, intrinsic motivation and academic achievement motivation among students.

| | Minimum | Maximum | Mean | Std. Deviation |
|------------------------|---------|---------|---------|----------------|
| Intrinsic motivation | 17.00 | 99.00 | 52.0150 | 12.08 |
| Extrinsic motivation | 16.00 | 73.00 | 44.4850 | 8.91 |
| Achievement motivation | 33.00 | 148.00 | 96.5000 | 17.68 |
| GPA | 12.00 | 19.00 | 15.8226 | 1.50 |

Discussion

The aim of this study was investigating the relationship between academic achievement motivation and academic performance among students at Zahedan University of Medical Sciences. The results of this study showed that there is a direct relationship between academic performance of students and achievement motivation. This implies that individuals with high academic achievement tend to have greater academic performance, which is consistent with the study by Firouznia et al. [7] as well as that by Askari et al. [12]. Some researchers have found that the role of motivation in learning issues and academic achievement is far more effective than the degree of intelligence(13). Since the motivational factors affect academic achievement and progress of medical students is linked with the health of the entire society, it is evident that the educational system should make further efforts to promote education and the relevant components including the learner, instructor and environmental and educational facilities. Nevertheless, there was no relationship between extrinsic motivation of students and academic performance of students which might be closely associated with the GPA reports of students, because this study involved GPS as the assessment criteria of student performance.

In this study, achievement motivation was moderate. In a study by Firouznia et al, the total score of motivation among students showed motivation was fairly well[7]. In their study conducted in 2007, Ruhi et al. reported that 52% of students at Golestan University of Medical Sciences had good motivation, 46% had moderate motivation and there were no unmotivated students[14]. Given that the results of this study showed academic performance among students was not desirable and achievement motivation can be a contributing factor, and since achievement motivation among students was not desirable, it is therefore recommended that managers and officials take action to find the degradation factors of achievement motivation and make decision to resolve the issues. After all, the motivational deficiencies may lead to pessimism, anxiety and depression, and also give rise to poor academic performance in students[12]. One of the factors contributing to motivation is the student attitude towards the field of study[11]. Individuals disinterested in their field of study tend to envision no future prospects not receiving any ideal feedback from their environment. Naturally, they make less efforts to achieve success in that field. Bipp et al. introduced factors in motivation and sense of power and authority, which were indirectly correlated with class grades of students[15].

Other results of this study showed that there is a correlation between the educational program and academic achievement motivation, which is consistent with the results of other studies(6,16). However, there was no relationship found between

gender and achievement motivation, which was consistent with the results of some previous studies[14,17]. Molazadeh et al. found no significant gender differences in terms of academic achievement[6]. In a study by Gallagher et al., however, there was a significant relationship between academic achievement motivation and gender(18). Perhaps such discrepancy was due to cultural differences. The achievement motivation in this study was higher among men than women, which was consistent with the results of some studies [19]. In a study, Firouznia et al. compared the means of two groups of students in academic motivation factors, revealing that boys had higher motivation, effort and competitiveness. The probable reason was that men had heavier responsibilities in the future such as housing, living costs and family or desire of career success[7]. This could also be due to the need to take responsibility among boys in the future and finding a suitable job that requires more effort to be successful in education. Nevertheless, Hamida et al. found out in a study on medical students that motivation was significantly higher in women than men[20]. High academic motivation in girls than boys was a predictable result because girls who have been admitted through the university entrance exam in heavy competition with a greater proportion of boys in the medical field are basically more motivated in education. However, it is essential to examine such high motivation of girls in later levels. In a study by Judge et al., the results showed that there were significant differences between male and female students' motivation. In fact, achievement motivation was greater among girls mainly because intellectual preoccupation concerns on the part of boys in relation to their future life such as marriage and employment(21). The academic climate may help academic achievement. Academic climate means environment where students can study and read well and increase knowledge. Academic climate effect on educational performance [22]. However, there are additional factors involved and must be considered in later studies[5]. Nazemzadeh Shoaie et al. Concluded that learning styles of the students are different and it has related to academic performance [23]. Since the findings were based on reports provided by the students, one cannot be sure what students really stated are true.

Conclusions

The results demonstrated that there is a significant relationship between academic achievement motivation and academic performance, indicating motivational factors play an important role in academic achievement. Since the progress of medical students is associated with public health, it is recommended that medical education managers and planners pay more attention to motivational factors. It is also recommended that planning strategies for increasing motivation and

academic achievement be placed at top priority along with continuing education, which can be addressed by officials and educationalists through different strategies to communicate with students.

Acknowledgments:

This study was extracted of a student research project at the Zahedan University of Medical Sciences. The study has approved in research council by deputy of Researches and Technogy too. The authors are thankful of whole medical students who participated in this study and spend time to fill out the questionnaires as well as university officials that assisted and cooperated us in data collection.

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