Available online at **www.ijmrhs.com**

Special Issue: Nursing and Healthcare: Current Scenario and Future Development

ISSN No: 2319-5886

International Journal of Medical Research & Health Sciences, 2016, 5, 7S:349-353

Relationship between Self-Efficacy and Academic Achievement of Zahedan Medical Sciences Students in 2016

Azizollah Arbabisarjou[1], Sadegh Zare[2*], Mahnaz Shahrakipour[3] and Gholamreza Ghoreishinia[2]

[1]Pregnancy Health Research Center, Zahedan University of Medical Sciences, Zahedan, Iran
[2]Community Nursing Research Center, Student Research Committee,Zahedan University of Medical Sciences, Zahedan, Iran
[3]Department of Biostatistics and Epidemiology, School of Health, Pregnancy Health Research Center, Zahedan University of Medical Sciences, Zahedan, Iran
**Corresponding Email:zaresadegh93@yahoo.com*

ABSTRACT

Students with higher self-efficacy utilize higher tendency, endeavor, and strength in performing academic tasks and feel ensure of their ability, thus self-efficacy can influence their academic achievement. Current study was conducted aiming at investigating relationship between self-efficacy and academic achievement of students of Zahedan University of Medical Sciences. It is a descriptive – analytical research on 190 students of Zahedan University of Medical Sciences during 2015 – 2016. Subjects were selected randomly and two-part questionnaire was used as data collection tool. First part was related to demographic characteristics and second part was related to self-efficacy questionnaire. Finally data were analyzed by SPSS 19 Software using deceptive statistics, Pearson correlation and independent t. Average age of individuals was 21.46 ± 312 and 82 students were female. Relationship between gender and self-efficacy of students was significant and self-efficacy was higher in females. But relationship between gender and academic achievementis not significant. Relationship between age and academic achievement was not significant. Relationship between self-efficacy and academic achievement of students was measured through Pearson correlation test and significant relationship was observed. People with higher self-efficacy have more optimal academic status compared to people with low self-efficacy and there is direct positive relationship between GPA and self-efficacy.

Keywords: Self-efficacy, academic achievement, students, Zahedan

INTRODUCTION

Achievement to productivity and improvement of educational system quality can be considered as the most effective factor in development of the countries. Experiences of advanced countries like Japan regarding full-scale development denote investment on educational and human resources. In line with achievement to these goals and improvement of quality, academic success of students is one of the basic gals of educational plans. However, academic failure today is one of the concerns for parents and education practitioners. One of the major preoccupations of professors, education authorities of universities and families of students is academic achievementand preventing from their academic failure [1]. High self-efficacy is accompanied by high internal

motivation, preservation of motivation and behaviors directed to progress, stability when confrontation with problems and better problem solving [2, 3]. Some believe that there is close relationship between self-efficacy and personal performance on providing assigned tasks. In addition, self-efficacy is the medium between knowledge and its practice [4]. Linnenbrink and Pintrich state that self-efficacy can lead to better learning and progress [5].

Self-efficacy can be defined as one's belief about ability to perform respective functions [6]. In academic environment, self-efficacy refers to student's beliefs in relation with the ability to perform specified academic tasks. Students with higher self-efficacy utilize higher tendency, endeavor, and strength in performing academic tasks and feel ensure of their ability [7]. In the study on intermediate variables related to education it was shown that self-efficacy can help improvement of learning methods of students, especially in activities with self-regulation, and predict outcomes of academic progress [8]. Beliefs related to self-efficacy influence goals and dreams and constitute outcomes of human behavior. People with higher self-efficacy consider greater goals and get more committed and thus their behavior becomes more optimal. While people with lower self-efficacy do not have suitable behavior outcome, self-efficacy specifies the way of investigation of obstacles by people. People with lower self- efficacy quickly get convinced that their behavior is vain in coping with problems and overlook any more endeavors. While people with high self- efficacy eliminate obstacles by self-management skills improvement and patience and have higher strength and control against problems and experience lower uncertainty [9]. Students with high self-efficacy probably use more self-regulating strategies compared to people with low self-efficacy. In other words, self-efficient people attempt more to perceive academic materials, think deeper on academic materials, and plan for performing their academic tasks [5]. Considering role of self-efficacy in learning of students, and its impact on academic achievement, current study was conducted on relationship between self-efficacy and academic achievement of students of Zahedan University of Medical Sciences.

MATERIALS AND METHODS

It is a descriptive – analytical research on 190 students of different faculties of Zahedan University of Medical Sciences including medicine, dentistry, nursing, health, paramedical, and rehabilitation faculties during 2015 – 2016. Subjects were selected randomly and inclusion criteria included passing at least one academic semester. Two-part questionnaire was used as data collection tool. First part was related to demographic characteristics (age, gender, and total GPA) and second part was related to self-efficacy questionnaire which was designed by Pintrich et al. it included 8 items which is a subset of Pintrich Learning Strategies survey. MSLQ measurement scale is consequential. Subjects rate their answers based on questionnaire guide on a seven-point Likert scale ranging from 1 (totally not true about me) to 7 (totally true about me). Score of each scale is mean of its constructing items. Final score was obtained as 0.93 by Pintrich et al. it was measured as 0.90 using Chronbach alpha in the current study.
For data collection, after selection of samples, firstly purpose of the plan was described to the students and questionaire was distrbuted among them following gaining oral consent. After completion of questioniare, it was collected and revised by the author and it was returned to students in case of incompletness, and they were asked to complete it. Finally data were analyzed by SPSS 19 Software using deceptive statistics, Pearson correlation and independent t, and significance level was considered less than 0.05.

RESULTS

Average age of individuals was 21.46 ± 312 and 82 (43.82%) students were female. Independent t test showed that relationship between gender and self-efficacy of students was significant (P = 0.036) and self-efficacy was higher in females. But relationship between gender and academic achievement as not significant (P = 0.28) and GPA was higher in females. Relationship between age and elf-efficacy was measured by Pearson correlation test and it was shown that there is no significant relationship between self-efficacy and age of students (P = 0.864). Also, relationship between age and academic achievement was not significant (P = 0.388). Relationship between self-efficacy and academic achievement of students was measured through Pearson correlation test and significant relationship was observed (P = 0.006).

Level of responses to items of self-efficacy questionnaire is given in Table 1. Data related to relationship between gender and self-efficacy is given in Table 2.

Table 1: Response to items of self-efficacy questionnaire

Questionnaire Items	1	2	3	4	5	6	7
I believe that I would take great score in exam.	3.2%	6.8%	8.9%	18.9%	25.3%	22.1%	14.7%
I'm sure that I can learn most provided difficult subjects	1.1%	2.6%	10.5%	17.9%	18.9%	28.4%	20.5%
I'm sure that I can learn basic concepts which are taught	5.3%	4.2%	4.2%	13.2%	18.9%	26.3%	27.9%
I'm sure that I can learn the most complicated subjects provided by teacher	3.2%	4.7%	10.5%	14.2%	25.8%	22.1%	19.5%
I'm sure that I can do my best in tasks and exams	3.7%	4.2%	14.7%	19.5%	20%	19.5%	18.4%
I expect to have good performance in the exam	3.2%	7.4%	9.5%	13.7%	20.5%	23.2%	22.6%
I'm sure that I can take mastery over taught skills	3.2%	7.4%	8.4%	18.4%	22.1%	24.2%	16.3%
Considering problems of class, trainers and my skills, I think I will have good performance in the class	4.2%	7.9%	10.5%	18.4%	18.4%	25.3%	15.3%

Table 2: Data related to gender and self-efficacy relationship

	Gender	Mean	Std. Deviation	P Value
Self-efficacy	Male	4.8252	1.07365	0.036
	Female	5.1418	.95030	

DISCUSSION

Results of current study showed there is significant relationship between self-efficacy and academic achievement. Many studies have shown that there is strong relationship between high levels of self-efficacy and academic achievement. Overall, research works show that self-efficacy beliefs have positive impacts on motivation of students and their progress [2, 3, 10 -12]. According to Wolters, self-efficacy has significant role on motivation and behavior of students in progress situations. Self-efficacy is related to beliefs that learners have about themselves, task difficulty, and outcomes resulting from task [13]. Bandura maintains that students with high self-efficacy determine greater goals for themselves, show more strategic flexibility in search for solutions, achieve higher intelligence functioning and are more accurate in evaluation of their performance quality compared to students with the same cognitive ability [14]. Self-efficacy is essentially considered as part of motivational beliefs. People with high self-efficacy show higher resistance if they fail and attempt again for success, while people with low self-efficacy refrain from re-confrontation with the task [15].

Identification of existing problems and deficiencies in clinical education of students and acting for their modification and elimination leads to better achievement of educational goals, training self-efficient and skilled people, as well as promotion of care service quality. Studies conducted on medical professional education merely address environmental and relational issues in clinical environments [16 -19] and learner is not adequately taken into account as an efficient, active, and self-regulating element. In clinical environments, trainers should always seek for ways to promote and enhance clinical skills and abilities of their students [20]. Negligence to self-efficacy development in clinical performance and self-regulated learning of students leads to reduce quality of human resource trained in medical professions. Also, students should be self-efficient, active and creative in learning-teaching process and direct his learning in complicated practical environments with creating personal approaches [21-23].

Finally it should be stated that different tools and methods and subjects are used in different studies in order to investigate relationship between academic achievement and self-efficacy, thus more research works are needed to support these findings.

CONCLUSION

People with high self-efficacy have more optimal academic status compared to people with low self-efficacy and there is positive direct relationship between GPA and self-efficacy. Thus, it is suggested academic status progress is planed using self-efficacy promotion methods and more studies are conducted for understanding self-efficacy role and role of other factors related to academic achievement.

Acknowledgement
This study was the result of a student research project approved at Zahedan University of Medical Sciences. Hereby, we express our deep gratitude to those people who participated and collaborated in this study and Research

authorities of Zahedan University of Medical Sciences who helped us in the process of data collection and financial support.

REFERENCES

[1] Hosseini MA, Dejkam M, Mirlashari J. Correlation between Academic Achievement and Self–esteem in Rehabilitation Students in Tehran University of Social Welfare & Rehabilitation. Iranian journal of medical education. Iranian Journal of Medical Education; 2007;7(1): 137–142.
[2] Pajares F, Miller MD, Johnson MJ. Gender differences in writing self-beliefs of elementary school students. Journal of educational Psychology. American Psychological Association; 1999;91(1): 50.
[3] Pajares F, Valiante G. Influence of self-efficacy on elementary students' writing. The Journal of Educational Research. Taylor & Francis; 1997; 90(6): 353–360.
[4] Bandura A. Self-efficacy mechanism in human agency. American psychologist. American Psychological Association; 1982;37(2): 122.
[5] Linnenbrink EA, Pintrich PR. The Role of Self-Efficacy Beliefs Instudent Engagement and Learning Intheclassroom. Reading &Writing Quarterly. Taylor & Francis; 2003;19(2): 119–137.
[6] Bandura A. Social foundations of thought and action: A social cognitive theory. Prentice-Hall, Inc; 1986.
[7] Bong M. Role of self-efficacy and task-value in predicting college students' course performance and future enrollment intentions. Contemporary educational psychology. Elsevier; 2001;26(4): 553–570.
[8] Lent RW, Schmidt J, Schmidt L. Collective efficacy beliefs in student work teams: Relation to self-efficacy, cohesion, and performance. Journal of Vocational Behavior. Elsevier; 2006;68(1): 73–84.
[9] Bandura A. Health promotion by social cognitive means. Health education & behavior. Sage Publications; 2004;31(2): 143–164.
[10] Zimmerman BJ, Martinez-Pons M. Student differences in self-regulated learning: Relating grade, sex, and giftedness to self-efficacy and strategy use. Journal of educational Psychology. American Psychological Association; 1990;82(1): 51.
[11] Pajares F, Miller MD. Role of self-efficacy and self-concept beliefs in mathematical problem solving: A path analysis. Journal of educational psychology. American Psychological Association; 1994;86(2): 193.
[12] Pintrich PR, De Groot E V. Motivational and self-regulated learning components of classroom academic performance. Journal of educational psychology. American Psychological Association; 1990;82(1): 33.
[13] Wolters CA. Understanding procrastination from a self-regulated learning perspective. Journal of Educational Psychology. American Psychological Association; 2003;95(1): 179.
[14] Bandura A. Self-efficacy: The exercise of control. New York: Freeman; 1997.
[15] Yetkin İE. The role of classroom context in student self-regulated learning: An exploratory case study in a sixth-grade mathematics classroom. The Ohio State University; 2006.
[16] Cheraghi F, Shamsaei F. Problems of clinical education from viewpoint of nursing students. Hamedan Scientific Journal of Nursing and Midwiery Faculty. 1996;6(14): 51–58.
[17] Bolorian Z. Process of clinical education promotion. Abstracts book of congerss of quality care in nursing education. Hamedan: Medical Science of Hamedan Publication. 2000; 33–34.
[18] Ghiasvandian S. Effect of preceptorship model in quality of clinical education of nursing students. Teb and Tazkie. 2004;52(4): 10–17.
[19] Mohamadi N, Khodavisi M, Jafarian N, Safari Anari Z, Safary Anvary F. The study of the problems of clinical education from the view point of nursing trainers and students. Scientific Journal of Hamadan Nursing & Midwifery Faculty. 2005;13(23): 43–51.
[20] Rahimi A, Ahmadi F. The obstacles and improving strategies of clinical education from the viewpoints of clinical instructors in Tehran's Nursing Schools. Iranian Journal of Medical Education. Iranian Journal of Medical Education; 2005;5(2): 73–80.
[21] Hassani P, Cheraghi F, Yaghmaei F. Self-efficacy and self-regulated learning in clinical performance of nursing students: A qualitative research. Iranian Journal of Medical Education. Iranian Journal of Medical Education; 2008;8(1): 33–42.
[22] Salar AR, Zare S, Miandoab NY. The evaluation of emotional intelligence among Zahedan medical sciences university Staff in 2016. INTERNATIONAL JOURNAL OF MEDICAL RESEARCH & HEALTH SCIENCES. SUAMTHI PUBLICATIONS SUAMTHI PUBLICATIONS, AHMEDNAGAR, 00000, INDIA; 2016;5(5): 23–27.
[23] Salar AR, Zare S. The survey of Zahedan medical sciences university training hospitals' nurses' ethical sensitivity in decision making in 2016. INTERNATIONAL JOURNAL OF MEDICAL RESEARCH & HEALTH

SCIENCES. SUAMTHI PUBLICATIONS SUAMTHI PUBLICATIONS, AHMEDNAGAR, 00000, INDIA; 2016;5(5): 1–8.