The survey of the relationship between test anxiety and self-efficacy among the city of Urmia's medical sciences university students in 2016

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ABSTRACT

The great majority of the students who acquire good marks during the curriculum terms have been found to experience a drop in their final scores at the end of the semester and this can be a result of the high level of anxiety. Physiological and emotional arousal is one of the factors which is claimed to have a very great influence on the self-efficacy and the higher the level of emotional and physiological arousal the lower feeling of efficiency and self-efficacy would be experienced by the individual. Thus, the present study has been carried out with the objective of the survey of the relationship between test anxiety and self-efficacy among the city of Urmia's medical sciences university students. The present study is a descriptive-analytical research in which 400 individuals of Urmia's medical sciences university students have participated in 2016. The information required for the present study have been collected by taking advantage of a three-part questionnaire, the first part of which is related to the demographic characteristics and the second part pertains to the self-efficacy questionnaire and the third part is also including test anxiety questionnaire. The data were extracted from the collected questionnaires and they were subsequently analyzed by taking advantage of SPSS ver.19 software, descriptive statistics, Pierson correlation test and independent t-test. The students' average age was 21.64 ± 2.9 and 158 individuals were male. Generally speaking the students' self-efficacy mean score was 41.06 ± 8.25. The students' test anxiety mean scores were in the range of 21.15 ± 5.07. The relationship between the age with self-efficacy and test anxiety was not found to be statistically significant. Also, the relationship between the gender with the test anxiety and self-efficacy was not statistically significant. There was also found an inverse and significant relationship between the students' self-efficacy and test anxiety. According to the findings obtained by the present study it can be concluded that the self-efficacy beliefs variable is among the effective factors influencing the students' test anxiety reduction.

Keywords: self-efficacy, test anxiety, Urmia

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INTRODUCTION

The university students usually obtain good marks during the terms but their final term scores usually considerably drop and this can be as a result of the high level of their test anxiety. The low rate of anxiety during the course of examinations seem to be necessary for carrying out studies and researches, but the students' anxiety is sometimes to

the extent that their activities are constrained and limited [1, 2]. Test anxiety is a special type of the general anxiety which manifests itself with somatic, cognitive and behavioral signs and symptoms during the period that the students are getting ready for their exams and accomplishing tests. Test anxiety turns to be a big problem when it gets so much severe and enormous that it middles with getting prepared for the exams and test accomplishment [3]. In the study peformed by Abazary et al which aimed at the survey of the anxiety source and rate among the nursing students the results indicated that this field of study besides the instructional environment anxiety they are exposed to the clinical atmospheres. Moreover, when the test anxiety is also added up to such worries may be subsequently followed with academic underachievement and the expression of somatic and psychological disorders in the nursing students [4].

Also one should be attentive to the issue that anxiety is one of the factors that can influence the individual's self-efficacy level, Bandura was of the belief that physiological and emotional arousals are among the factors that influence the individual's self-efficacy. He opined that in cases we are free from being stimulated, nervous or with headache and if we experience lower anxieties then we are more likely to believe that we can conquer our problems successfully. The more we feel we are relaxed and cool our self-efficacy will be more heightened, accordingly. To put it differently, the higher our level of physiological and emotional arousal then the lower our feeling of efficiency and self-efficacy would be [5]. Therefore, based on the self-efficacy theory, factors such as stresses, psychological tensions and pressures, economical conditions, social and curriculum statuses do not seem to be directly influencing the individuals' behaviors rather such an effect is intermediated and exerted via self-efficacy [6]. In the article proposed by Muris et al there was also found a significant relationship between anxiety and phobia symptoms and the generalized anxiety disorder [7].

Generally speaking, self-efficacy points to the individual's perception of his or her capabilities and the effective and qualified accomplishment of the task or assignments [8, 9] and it has to be specified as the confidence in performing academic tasks and assignments such as reading books, answering to the questions posited in the classrooms and getting prepared to sit for the tests in educational environments [10]. Academic self-efficacy beliefs perceived as part of the general self-efficacy beliefs do not seem relevant to the quantity of the individual's skills, rather they point to the beliefs such as studying, doing research papers, asking questions in the classroom, successful communication with the professors, establishing friendly relationships with the other university students, acquiring good marks, taking part in classroom discussions and so forth which are believed by the individual to be performable under special academic and educational conditions and situations. Such individuals can enjoy making use of appropriate solutions to solve their problems through curiosity and they usually exhibit higher strength and resistance in problem-solving activities [11]. The higher levels of academic self-efficacy lead to higher mean scores and stability and perseverance in accomplishing assignments, therefore the university students who have higher self-efficacy possess better academic consistencies and adaptation [12] and they take advantage of more useful learning strategies and finally they will show better functionalities [13]. Also, Wolfk realizes self-efficacy as one of the most important concepts in learning theories which point out the individual's judgment regarding his or her own competencies in successfully accomplishing academic assignments [14]. Therefore, according to the importance of self-efficacy among the university students and the adverse and diminishing effects that can be exerted by anxiety on self-efficacy and consequently on students' performance, thus the present study aims at the survey of the relationship between the test anxiety and self-efficacy among Urmia medical sciences university students.

MATERIALS AND METHODS

In the present study which is a descriptive-analytical research, 263 individuals from the city of Urmia medical sciences university students have participated. The sampling has been based on a randomized method and it has been conducted in 2016. The information required for the present study have been collected by means of a three-part questionnaire the first part of which is related to the demographic characteristics (age, gender), the second part involves self-efficacy questionnaire designed by Pintrich et al. This part of the questionnaire contains 8 questions which are a subgroup of Pintrich's learning strategies questionnaire. The measurement scale utilized here is ordinal MSLQ. The testees provided their answers according to the questionnaire guidelines and their responses were scored based on Likert's 7=-point scale from 1 (it is not true about me at all) to 7 (it is completely true about me). The score obtained for each scale indicates the scores averaged for all of the constituent items. Therefore, in the present study the minimum obtainable score was 8 and the maximum score was 56. The mean scores ranging from 8 to 24 were considered as weak, the mean scores ranging from 24 to 40 were regarded as intermediate and the scores from 40 to 56 were enumerated as being favorable and optimum. The questionnaire reliability score was calculated by Pintrich

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et al as equal to 0.93 and it was also calculated again in our study through making use of Cronbach's alpha method and a reliability rate of 0.90 was acquired.

The third part of the questionnaire was pertaining to the test anxiety questionnaire designed, as well, by Pintrich et al. This part of the questionnaire also included 5 questions which is a subgroup of Pintrich's learning strategies questionnaire. The measurement scale was ordinal MSQL. The respondents provided answers based on the questionnaire guidelines and their responses were scored based on Likert's 7-point scale from 1 (it is not true about me at all) to 7 (it is completely true about me). The score obtained for every scale was the average score acquired for all of the scale's constituent items. Thus, in th present study the minimum and maximum obtainable scores were 5 and 35, respectively. The questionnaire reliability was obtained by Pintrich as equal to 0.80 and it was also again calculated in the current study through taking advantage of Cronbach's alpha method and it was found to be 0.78. The questionnaires were gathered and the data therein were extracted and analyzed by the use of SPSS ver.19 software, descriptive statistics, Pierson correlation test and independent t-test.

RESULTS

In the present study the students' average age was 21.64 ± 2.9 years of age and 158 individuals (60.1%) were male. Generally speaking, self-efficacy mean score was in the range of 41.06 ± 8.25 among the university students which is considered as being in an optimum level. The test anxiety mean score was in the range of 21.15 ± 5.07. There was not found a significant relationship between age and self-efficacy and test anxiety ($P>0.05$). Also, a significant relationship between gender with test anxiety and self-efficacy was missing ($P>0.05$). There was found a significant and inverse relationship between the students' self-efficacy and test anxiety ($P<0.001$), in such a way that the individuals with lower levels of anxiety enjoyed a higher rate of self-efficacy.

Table 1: The specifications related to the relationship between self-efficacy and test anxiety

	Number of individuals in each level	Mean anxiety	Std. Deviation Anxiety	Minimum anxiety	Maximum anxiety
Weak self-efficacy	8	26.50	6.36	20.00	35.00
Intermediate self-efficacy	107	23.49	4.18	16.00	35.00
Optimum self-efficacy	148	19.17	4.67	5.00	29.00

DISCUSSION

The present study indicated that there was a significant and inverse relationship existing between self-efficacy and the test anxiety in the students. The present result point to the idea that the individuals who seem to have doubts regarding their abilities in presenting appropriate output come up to have pessimistic valuation of their own selves accordingly and therefore they are lost of their problem-solving competencies and the anxiety level is increased in them. In a study conducted by Artin on the medicine students in the US it was made evident that the negative feelings such as anxiety can influence the self-efficacy beliefs [13]. Abol Ghasemi et al in their own study asserted that generally self-efficacy increases the likelihood to experience the accessible skills in the university students and anxiety has been found to go other way around and decreases such a likelihood [15]. In the study undertaken by Nie et al on grade nine students in Singapore, it was also demonstrated that self-efficacy has to be recognized as the connector of the task importance and the test anxiety [16]. The studies conducted inside the country including the researches performed by Jamali et al it was believed that the academic self-efficacy should be regarded as a stimulating and motivational factor leading to the increase in academic performance and stress reduction in the university students [17]. In another research it was shown that the perceived self-efficacy latent variable directly or indirectly influences the academic anxiety through adaptive and non-adaptive cognitive coping strategies. Based on this, the individuals with perceived high self-efficacy tend to take advantage of the adaptive coping strategies and therefore they usually experience lower academic anxiety [18]. The results of the present study and the results of the prior studies signified that stress is a variable which is effective on the academic self-efficacy beliefs of the university students and the perception of a high level of stress may lead to a reduction in the academic self-efficacy in the university students.

In elaborating more on the results obtained herein we can infer that the stress and physiological arousal are among the factors effective on academic self-efficacy and they are completely in line with what has been proposed and documented by Bandura [5]. Bandura is of the belief that the skills can easily be affected by self-dubiousness,

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resultantly, even the highly talented individuals make a smaller use of their own beliefs under such conditions as having too low opinion of one's own selves. Due to the same reason, the feeling of self-efficacy enables the individuals to benefit from their own skills and perform remarkably and extraordinarily in confrontation with barriers and hindrances.

The university students should be able to cope with adventitious negative feelings such as depression, anxiety and feeling of disvalue by benefiting from the emotional-intellectual behavior philosophy [19-23]. Therefore, it is suggested that the officials and the advisors should help the students minimize their emotional disorders, lower the intensity of their own self-destructive behaviors, become more self-developing and live happier lives; think clearly and more reasonably, feel better and more appropriate and turn more effective and efficient in achieving their goals and objectives. Also, they are required to teach the students to more effectively treat their negative feelings such as regret, failure, and anxiety.

CONCLUSION

According to the findings of the present study it can be concluded that the self-efficacy beliefs are among the effective factors contributing to the reduction of test anxiety in the university students. Based on this, there is a need for more attentiveness and concentration on the self-efficacy beliefs development in the university students which finally cause a reduction in the anxiety and the stress coping skills and management styles should also be taught to the university students.

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