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# The relationship between accounting students' emotional intelligence (EQ) and test anxiety and also their academic achievements

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### **ABSTRACT**

The purpose of the present study is to investigate the relationship between the accounting students' emotional intelligence (EQ) and their test anxiety and also their academic achievements in bachelor and associate degrees. The statistical population involved in this study included all the accounting students in Azad University, Ghorveh Branch in the academic year 2012-13. The sample involved in this study included 100 accounting students selected randomly through the random sampling procedure and based on the statistical methodology principles of correlational studies. In this study, the 90-item Bar-on Emotional Quotient Inventory and also the 25 item test anxiety questionnaire by Abolghasemi et al. were used in addition to the students' second semester average. Results showed that there are significant negative correlations between students' emotional intelligence and their test anxiety, and also between their test anxiety and academic achievements. There is also a meaningful positive correlation between the emotional intelligence of the male and female students, but there are significant differences in male and female students' test anxiety suggesting that test anxiety of female students was greater than male students.

**Key words:** Emotional Intelligence (EQ), Test Anxiety, Academic Achievements, University Students, Accounting.

### INTRODUCTION

The emotional intelligence is a topic that attempts to explain and interprets the man excitement, feeling and capability status [1]. The emotional intelligence has been defined as an ability to understand and comprehend the emotions in order for assessing thoughts, manners and to put them in a way that makes emotion and intelligent growth and elevation [2]. The concept of emotional intelligence gives a new depth to the man's intelligence, this intelligence is a tactical competency (personal performance), whilst the recognition intelligence is a strategic capability (long term capability). The emotional intelligence makes it possible to predict the achievement because it demonstrates how a person apply a knowledge in an immediately success. It is a form of social intelligence which is a suitable predictor in special areas such as job and educational performances. In the other word, it has an ability to control feelings and excitements by one and others [3]. In 2004, the emotional intelligence has been defined in more details. This Definition is as follow: The emotional intelligence points to the ability to recognize and differentiate

feelings, excitements ,meanings and concepts, the relations between them, to reason about them and to solve problems by them .The emotional intelligence includes the ability to receive emotions, and coordinate them to understand the information related to them, it also manages them [4]. Another definition of the emotional intelligence is as follow: A series of unrecognizable abilities, powers and skills that have an effect on the ability to encounter wills necessities and environmental pressures successfully [3]. Intelligence Quotient (IQ) in its best form causes only 20 percent of life successes and all 80 percent remaining depends on another factor and the human's fate in the most cases depends on the skills that link to the emotional intelligence to provide person adaptability with the environment and is a better predictor of success in university, work and home than the analytic intelligence [5].

Test anxiety refers to an emotional feeling in which a person encounters some kind of fear resulting from disbelieving in his own capabilities in tackling the challenges presented in an exam or doing a special task or responsibility and its consequences resulting from reducing the capability of the person to overcome the confronted challenges in an exam situation. So a person with too much anxiety is the one knowing the test materials but the intense and high level of anxiety is to the extent preventing the person from showing his abilities in the exam session. Test anxiety is prevalent among university students and is among the serious academic problems and concerns of every educational system [6]. There are many factors which make this situation more serious and as a result reduce the performance of the students. Some of these factors are as follows: low self-esteem, inadequate study amount, negative attitudes towards school or college, fear of failure and negative feelings resulted from previous failure experiences [7]. Also, the more students assume the exam to be threatening, the more they are likely to show stressful reactions in the exam session. In the situations without stressor, they experience less test anxiety and more self-esteem to the same amount [6]. Test anxiety is a common type of performance anxiety with psychological condition involving at least 30 percents of students based on different studies [8]. In fact Test anxiety is a form of evaluation anxiety, meaning that central to its initiation is an evaluative or ego-threatening testing situation. Test anxiety expresses itself in maladaptive cognitive responses (such as worry cognitions and testirrelevant thinking) to academic stressors. These maladaptive responses to high-pressure situations lead to decrements in performance called "choking under pressure", because of the decreased working memory capacity left over to attend to the task [9]. Sarason (1975) knows test anxiety as a kind of self-preoccupation which is identified with inferiority complex and doubt about one's ability and often results in negatives cognitive assessment, lack of concentration, adverse physiological reactions and academics performance failure[10]. In general individuals having test anxiety have low level of self-efficacy and feelings of helplessness and powerlessness and are not able to control and influence the events triggered from the exam session. They also believe that any attempt to succeed in the exam session is futile and doomed to failure. In such circumstances, the initial efforts to overcome the obstacles and difficulties are likely to be ineffective [11]. Success and academic achievement depend on a set of complicated factors needing a great amount of research and studies to be clearly distinguished defined. Having a specific purpose, motivation, stress, study skills, intelligence, physical factors, behavioral abnormality, mental and emotional conditions are among the most important personal factors that play important roles in students' academic achievement or their failure [12]. Continuous assessment of the educational conditions of the university students during their education and having a survey on its relevant factors are among the necessary and indispensible elements of developing and improving the quality of the education system especially in universities. This reality has a significant impact on developing the self-efficacy and improving the performance of the authorities [8]. The results of a study done by Jahangirpour (2012) on the "relationship between the university students' EQ and their anxiety in Gilan" showed that there is a negative correlation between their EQ and anxiety[13]. Sarni(1999) in a study done on 400 people working in different companies found that those who enjoy high level of EQ are much happier, more delighted and more independent in their related jobs than the others and are much stronger when they encounter stressful situations (Jahangirpour, 2012) [13]. Yadyari et al (2007), in a study found that those individuals having high level of EQ encounter less mental stress[14]. Results Haddadikohsar et al (2006), showed that there is a negative correlation between emotional intelligence and stress in people with high emotional intelligence have experienced less stress and better compatibility[15]. Paker (2004)[16], Braket and sallovi (2004)[17], Woitaszewski and Alsama (2004) [18] ,Samari and Tahmasbi (2007)[19] and Lali phaz and Asgari (2008)[20], Hasanvand and Khaledian (2012) [21]; all showed that there is a positive relationship between the exciting intelligence and academic achievement. Results of Cheraghian et al (2008) showed that there is no significant relationship between the university students' test anxiety and their academic performance (their averages); however, in a situation with increased level of test anxiety, their academic performance reduced dramatically[6]. Hong and Karstensson (2002), in their study concluded that individuals who have higher anxiety in general have poorer academic performance [22]. The results of a study done by Khaledian et al (2012), on the relationship between university students' selfesteem and their academic achievements and also their test anxiety showed that there is a significant negative correlation between the students' test anxiety and their successfulness [23]. Results from samari and tahmasbi (2007) [19], Tamanaifar et al (2010) [24], and Hasanvand and Khaledian (2012) [21], study showed that there is no difference between male and female the emotional intelligence. The investigation of research and health testing in

Germany suggest that anxiety in women is twice as much as that of men (Degraaf et al, 2002) [25]. Also Breslau et al (1999) in their study found that anxiety levels twice as many women as men[26]. Research at Jakobi et al (2004) the 12-month prevalence of anxiety in Germany on 4181 patients, the results indicate that these two women are equal to men suffering from anxiety disorders (Cring et al, 2007) [27]. Research results of a survey done by Shart (2003) revealed that female students have a higher level of test anxiety than the test anxiety of male students [8]. In this study, relationship between emotional intelligence test anxiety and academic achievement among students of Islamic Azad University, Ghorveh in year 2012 - 2013 were examined and recommendations based on the results of research to parents, students, university officials, particularly Vice Chancellor University to make them aware of the relationship between emotional intelligence test anxiety and academic performance are presented, and regarding that the emotional intelligence is the most recent transformation to understand the relationship between thinking and excitement, and anxiety is one of the important issues related to student performance and academic performance are closely; it is hoped that considering this study results and outcomes there will be several methods to identify the effective factors in the emotional intelligence, and Test anxiety and also their barriers, actions and behaviours can be formed intelligently to eliminate the higher educational system problems in Ghorveh city and help students to have a health life. It is clear that as we know the emotional intelligence and Test anxiety are important to discover talents and train the effective student forces in order for constructing an illuminated future ,so it is very important to examine the exciting intelligence and Test anxiety in students and as a result to study their influences on academic achievements or failure.

Due to the limited research in emotional intelligence and Test anxiety in students of Azad University of Ghorveh that is one of the universities of Kurdistan Province was the aim of the present study "The Relationship of Emotional Intelligence with Test anxiety and Academic Progress" and, the assumptions are the followings:

- there is a relationship between emotional intelligence, Test anxiety and academic achievement of students.
- Can the components of emotional intelligence predicts Test anxiety?
- there is a difference between the emotional intelligence of boys and girls.
- •there is a difference between Test anxiety and its components in boys and girls.

### MATERIALS AND METHODS

In this research the relationship of the emotional intelligence with the Test Anxiety and the academic achievements is evaluated based on the Bar-on and Abolghasemi et al questionnaires and the final term average scores.

#### **Bar-on emotional intelligence questionnaire:**

In 1980, for the first time the Bar-on the emotional intelligence questionnaire was developed. It contained 133 questions which is the first super cultural questionnaire to evaluate the emotional intelligence. In 1997, this questionnaire had been reviewed and its questions reduced to 177 ones. This review was conducted by an author on 3831 person from 6 different countries and it was customized in the North America. Responses were studied by factorial analysis and finally a general scale for (IQ) and 5 combinational scales and 15 minor scales were determined. In 1382, this test has been implemented in Iran among Tehran university students by Dehshiri (2006)[28] and its questions were declined to 90 ones. In this research, Dehshiri has applied the revaluation method and Kronbakh Alphabet. The questionnaire's answering sheets are regulated based on a scale of 5 degree in likert spectrum as follow( I am agree completely, I'm agree, to some extent, I'm disagree, I'm disagree completely). For the final measurement two methods were used. Revaluation sustainability or time stability coefficients were reported respectively as 85% one month later and 75% 4 month later. Test stability rate in odd-even method was 88% and in kronbakh alphabet was 93% [21].

Test Anxiety Quotient Inventory of Abolghasemi et al. included 25 four- choice questions (never 0, rarely 1, sometimes 2, often3). The lowest score in this test is 0 and the highest score is 75. The highest the score a person gets on this test, the more anxiety-level the person experiences. The scores less than 12 show lack of anxiety, scores between 13 and 37 represent a little anxiety; moderate anxiety is represented by scores between 38 and 62 and the scores more than 63 are considered as the highest level of anxiety. The reliability, internal consistency and validity of the questionnaire used in this survey were 88%, 99% and 72% respectively [6].

In this research, the student academic term averages was considered as a criteria to measure academic achievements. As different social institutions (education and training banks and ...) serve the average more than 14 as a success criteria and less than 14 as weak success criteria or failure ,in this research the average more than `4 indicates academic achievement and below 14 indicates failure [23].

The statistical population in this research includes all the students Accounting Course from Azad University in Ghorveh city; they are studying in the academic year of (2012-2013). According to the scientific rules, 100 students were selected randomly as a sample includes 50 male and 50 female, the questionnaire was distributed among them and results were collected. It is worthy of mention that all questionnaires were completed.

#### **Finding**

Table 1. The Correlation between emotional intelligence scores and test anxiety and academic achievement

	1	2	3	N	Sig		
Emotional intelligence	1	-0.51	0.60	100	0.001		
test anxiety	-0.51	1	-0.42	100	0.001		
academic achievement	0.60	-0.42	1	100	0.001		
17 (100)							

N = (100)

As it can be seen in Table 1, the correlation coefficient between emotional intelligence and test anxiety equals -0.51. Regarding the significant level it can be concluded that there is a reverse and significant relationship between test anxiety and emotional intelligence. It means that increasing in one item, decreases the other one. Based on the results shown in table one, its correlation coefficient (0.60) and the significance level shown, it can be concluded that there is a positive and significant relationship between emotional intelligence and academic achievement. Also based the results shown on table 1 and the related correlation coefficient (-0.42) and regarding its meaningful level it can be concluded that there is a reverse meaningful correlation between test anxiety and academic achievement. It means that the higher the level of the test anxiety is ,the less the academic achievement is expected.

Table 2. the summary of regression models of test anxiety

Dependent variable	R	$\mathbb{R}^2$	F	Sig
test anxiety	0.641	0.411	22.369	0.001

As it can be seen in Table 2, the multiple correlation coefficient of the test anxiety with linear combinations of variables entered into the model such as independence, self-actualization and stress tolerance equals 0.411 which shows about 41 percent of the variance of the test anxiety has been determined by the independent variables entered into the model. The considered statistics of F equals: (F=22.369) and its significant level is less than 0.001, which is statistically significant to confirm the resulted relationship. The other components of the emotional intelligence have been removed from the model due to the lack of the significant coefficients.

Table 3. The regression coefficients of the entered variables into regression models of test anxiety

Dependent variable	Variable predictive	R	$\mathbb{R}^2$	Sig
	Constant	94.86		.000
test anxiety	independent	-1.397	340	.001
	self-actualization	851	219	.043
	stress tolerance	774	203	.045

As it can be seen in Table 3, the regression coefficients for the variables independent (Beta =-0.340), self-actualization (Beta = -0.219) and stress tolerance (Beta = -0.203) is significant. Therefore, these variables were significantly predictive of test anxiety .Among the variables, independence has the most important role in predicting test anxiety.

Table 4. Results from the independent t test to specify the emotional intelligence among male and female students

Variable	Sex	Average	S.D	Average difference	df	t	Sig
emotional intelligence	male female	319.6 310.48	35.009 35.199	9.12	98	1.30	0.197

As shown in Table 4, there is no significance difference between EQ in male and female university students. So the null hypotheses is confirmed .Because the significant level for the differences between male and female students' EQ is greater than 0.05(t=1.299).

Table 5. Results from the independent t test to specify the test anxiety among male and female students

Variable	Sex	Average	S.D	Average difference	df	t	Sig
test anxiety	male female		12.88 14.605	-7.5	98	-2.72	0.008

As shown in Table 5, there is a significance difference between male and female university students' test anxiety so the null hypotheses is rejected. It is shown that test anxiety of female university students is greater. The significant level for the test anxiety differences between male and female students is less than 0.05(t=-2.723).

### **DISCUSSION**

The purpose of the present study is to investigate the relationship between the accounting students' emotional intelligence (EQ) and test anxiety and also their academic achievements in bachelor and associate degrees. Regarding the findings of the present study, it can be concluded that there is a negative significant correlation between the students' emotional intelligence and their test anxiety. It means that the higher the emotional intelligence of an individual is, the less an individual encounters test anxiety and vice versa. The findings of the present study is consistent with the results of the studies of Jahangirpour (2012) [13], Haddadikohsar et al (2007) [15], Yadyari et al (2007) [14], and Sarni(1999) [13]. To explain the results of these studies it can be concluded that those enjoying high level of emotional intelligence have a more positive attitudes towards their emotional capabilities and have better and more developed skills in compensating negative emotional feelings through taking part in pleasant activities. They also have the kind of lifestyles experiencing less negative consequences. In fact, self-awareness comprises the foundations for the emotional intelligence and has a great role in controlling negative emotions like anxiety. Those enjoying high level of emotional intelligence have this kind of self-awareness in a high level [2]. The results also showed that there is a positive and significant relationship between the students' emotional intelligence and their academic achievement .In fact, the more an individual has higher levels of emotional intelligence, the more his academic achievements are expected. These results are consistent with the results of the researches conducted by Parker et al (2004) [16], Brackett and Salovey (2004) [17], Woitaszewski and Alsama (2004) [18], Samari and Tahmasebi (2007) [19], Lalifaz and Asgari (2008) [20], and Hasanvand and Khaledian (2012) [21], In explaining the findings of these studies, it can be noted that regarding the fact that there is a relationship between the students' emotional intelligence and their interpersonal achievements ,it can strengthen the cognitive performances and also the memory capabilities and personal leanings (Hasanvand and Khaledian, 2012) [21]. The results also showed that there is a significant negative correlation between students' test anxiety and their academic achievement. It means that the more a person encounters test anxiety, the less academic achievements he experiences and vice versa. It is consistent with the findings of Cheraghian et al (2008) [6], Hong and Karstensson (2002) [22], Khaledian et al (2012) [23]. Based on their findings, it could be concluded that test anxiety stops and hinders the performance of an individual and prevents them from achieving their favorite results in spite of enjoying a high level of capabilities and information. It is also consistent with the hypothesis of the theory of Atkinson (1996), suggesting that those individuals getting high scores in test anxiety get less scores in assessing the need for achievements [29].

One of the results showed that there is no difference in the emotional intelligence between male and females, such that the violence rate in male was higher than females ,it is in agreement with the results obtained by other researchers such as Samari and Tahmasbi (2007) [19], Tamanaifar (2010) [24], and Hasanvand and Khaledian (2012) [21]. To confirm these findings it can be said that in contrast to the recognition intelligence that is affected by heredity, the emotional intelligence is more affected by the environmental elements and it is acquirable and learnable. At present, women active participation in cultural and environmental areas probably has caused them to have the cultural and environmental facilities as men and the possible differences between the two sexes will be minimized [24].

Also results showed significant different between mean score of anxiety for male and females students. Meaning that females students anxiety is higher than that of males, it is in agreement with the results obtained by other researchers such as Breslau et al (1999) [26], Degraaf et al (2002) [25], Shart (2003) [8], Jakobi et al (2004) [27]. In explaining these findings, it can be said that women are more likely to report symptoms of anxiety; Also psychological differences may also help explain the gender gap, for example, the time may come when men can have more control over their personal position. Explain the social - cultural, such as gender roles, may also play a role. For example, men may experience more fear in the community have to deal with women. Face your fear and anxiety is one of the treatments [27].

The limitation of the study is the lack of previous studies in this regard and relate to some hypotheses of the research. One of the research limitations is the unavailability of the IQ degrees and the cultural and economical positions and their effects on the emotional intelligence and the test anxiety positions and also the student academic performances and lack of awareness of their education and training and unavailability of the enough information about the amount of the problems that students are facing with. In this field, there has been no research in Ghorveh, so because of the Kurdish culture and language of the people in this city, this research can provide a means for future researches, in this way the students can make a sense of importance and we can be familiar with the emotional intelligence and the self-satisfaction rates in this city. Thus, we can identify the methods to increase this emotional intelligence and decrease this test anxiety lead them to obtain the ability to use the capacity of understanding, expressing, emotional intelligence application, self- satisfaction and value. As a result they can make a way to the academic achievement. As the city has a different culture and there are many students from other cultures in it, the present position of the university and in general the city can be explained to the new students, so it helps them. Note that they can be familiar with the emotional intelligence and the test anxiety of the native masters and students, so that they can be lead to a specific purpose. If the expected result achieves, it can conduct masters and students and all the academic society of the city to bring the academic achievement. It is recommended that the university authorities can produce some workshop and classes to increase the student emotional intelligence and decrease the test anxiety via their consultants and psychologists. In order to make students aware of the issues, problems, anxiety and ...using modern methods and with better planning and consultation and advice of a professional act. This result can be a useful tool for clinical psychologists, consulting psychologists, students, Undersecretary of the student affairs in universities, the students' undersecretary of the ministry of science, research and technology.

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## **REFERENCES**

- [1] Hassan zadeh, R. (2007). The motivation and excitement. Tehran: Arabian Publication
- [2] Goleman, D. (1995). Emotional Intelligences: The Theory in Practice; Newyourk: Basic Book.
- [3] Bar-on, R.(1997); "A Measure of Emotional and Social Intelligence in Chicago"; *Canadian Journal of* Behavioral *Science*, Vol. 18, pp. 123-137. & Bar-on, R.(2000); *The Handbook of Emotional Intelligence*; To Ssey-Bass, While Company, Sanfrancisco.
- [4] Mayer, J.D., Salovey, P and Caruso, D.R. (2004). Psychological Inquiry, vol. 15, 3, 249-255.
- [5] Mayer JD, Salovey P. (1997). What is emotion intelligence? In: Salovey P, Sluyter DJ, editors. Emotional development and emotional intelligence: Educational implications. New York: Basic Books; pp. 3-31.
- [6] Cheraghian, B.; Fereiduni Moghadam, M; Baraz Prdnjany, S.; Bavarsad, N. (1387). *Journal of Science and Health*, 3 (3 & 4), 29-25.
- [7] Cassady, JC. Johnson, RE. (2002). Contemporary Educational Psychology;27(2), 270-295.
- [8] Heydari, A., Hadian far, H., Shajarat, A., & Zamiri, A. (2012). *The Relationship between Perfectionism and Self-efficiency and Test Anxiety in Female Students of Islamic Azad University, Ahvaz Branch*, Proceedings of the First National Conference on Health Psychology, 3 to 23.
- [9] Parks Stamm, E. Gollwitzer, P. M., & Oettingen, G. (2010) *Journal of learning and individual differences*, 20: 30-33.
- [10] Sarason, I.G. (1975). Anxiety and self preoccupation. In I.G. Sarason& C.D. Spielberger (eds.), Stress and Anxity. Vol. 2, New York: Hemisphere/ Hastead.
- [11] Schunk, D.E. (1991). Self-efficacy and academic motivation. Educational Psychologist, Vol. 26: 207 231.
- [12] Nabizadeh C, Ghasemi; B, M. (2010). Journal of Contemporary Psychology (Special Issue) &5: 753,751.
- [13] Jahangir Pour, M. (2012). The relationship between Emotional Intelligence and the University Students' Anxiety, Proceedings of the First National Conference on Health Psychology.
- [14] Yadyary, F, Moradi, A.R, Yahiazadeh, S. (2007). Journal of Psychological Studies 3 (1):21 32.
- [15] Haddadi kohsar, A. A., Roshan, R., & Asgharnezhadfarid, A. A. (2007). *Journal of Psychological and Educational Sciences*. 37 (1): 73 97.
- [16] Parker, J. D. A., L. J. Summerfeldt, M. J. Hogan and S. A. Majeski (2004); *Personality and Individual Differences*, Vol. 36, pp. 163-172.
- [17] Brackett, M. A. and P. Salovey (2004); Measuring Emotional Intelligence with Mayer-salovey Caruso Emotional Intelligence Test (MSCEIT); In Gien Geher(Eds); *Measuring Emotional Intelligence: Common Jround and Controversy*; Hauppauge NY: Nove Science Publishers.
- [18] Woitaszewski, S. A. and M. C. Alsama (2004); Roper Review, Vol. 27: 30-45.

- [19] Samari, Ali Akbar and Fahimeh Tahmasbi. (2007). the Quarterly Journal of Fundamentals of Mental Health, Vol. 9, No. 35: 121- 128.
- [20] Lalifaz, A., & Asgari, A. (2008). Psychology and Education Studies of Mashhad University, Vol. 9, No. 1: 167-181.
- [21] Hasanvand, B., & khaledian, M. (2012). International Journal of Psychology and Behavioral Sciences 2(6): 231-236.
- [22] Hong, E., & Karstensson, L. (2002). Contemporary Educational Psychology, 27(2): 348-367.
- [23] Khaledian, M., Kheyrkhah, Z., & Gholizadeh, Z. (2012). The relationship of the self-esteem with the test stress and academic achievement. Sixth seminar of the Gilan students mental health: 310 313.
- [24] Tamanaifar, Mohammad reza; Sedighi Arfai, Fariborz; Salami, Fatemeh. (2010). *The planning and studying quarterly in higher education*. 56: 99-113.
- [25] Degraaf, R., Bijl, R.V., Ravelli, A., Smit, F., & Vollenbergy, W.A.M. (2002). *Acta psychiatric Scandinavia*, 106; 303-313. ERIC
- [26] Breslau, N., Chilcoat, H.D., Kessler, R.C., & Davis, G.C. (1999). American Journal of psychiatry, 156, 902 907. ERIC
- [27] Cring., Davison., Johnson., & Neale. (2007). Mental pathology: Translated by Shamsipour, Hamid. (2009) Arjomand publication, Tehran.
- [28] Dehshiri, Gholamreza (2006); Counseling Researchs And Recents, Vol. 5, No. 18, pp. 97-106.
- [29] Parsa, M. (1387). Motivation and Emotion, Tehran: PNU publications.