Research Article

EFFECTS OF EMOTIONAL INTELLIGENCE TRAINING ON EXAMINATION STRESS, SELF-EFFICIENCY, AND EDUCATIONAL FUNCTION OF THE STUDENTS WHOSE FATHERS ARE WORKING IN AFFILIATED PLANS, IN HIGH SCHOOLS OF A NON-PROFIT ORGANIZATION

*Mahnaz Bahadori[1] and Mahnaz Mehrabi Zadeh Honarmand[2]
[1]*Department of Psychology, Islamic Azad University, Kish International Branch*
[2]*Department of Psychology, Shahid Chamran University of Ahvaz, Iran*
*Author for Correspondence

ABSTRACT
This paper aims to study the impact of emotional intelligence on test anxiety, self-efficacy, and educational performance of high school students whose fathers work rotating shifts in Oil Company in Ahvaz. Experimental research is a pre-test/post-test one with control group. Our population consists of 34 high school students (1st and 2nd grades) at non-public National Martyrs High Schools in Ahvaz in school year 2013-2014 selected according to higher than normal SD. They were divided into two groups randomly: test group (n=17) and control group (n= 17). 20-item STA to describe reactions before and after test as well as GSE was used. Nine 75-minute sessions were held to educate EI to students. Control Group received no intervention having completed the course; participants in both groups answered the questionnaires. Data were analyzed using ANCOVA (one-variable) and MANCOVA (multi variables). Our findings show that emotional intelligence leads to a decrease in test anxiety and an increases self-efficacy and educational performance in test students. It means that EI can be used to decrease test anxiety as well as to increase self-efficacy and educational performance in students.

INTRODUCTION
Emotional Intelligence (EI) has an important role in formulating, expanding, and establishing effective human interactions. It is a set of non-cognitive competences, skills, and talents which improves one's ability to adjust with environments and resulted pressure. Moreover, it can lead to individual's independence.
Findings from research on EI reveal that there is a relationship between EI and psychological system of an individual, such as anxiety, depression, and psychological health. Anxiety has attracted a great deal of attraction in literature, from which Test Anxiety can be comprehended (Abolghasemi, 2002; Phihlips, 1978). Test Anxiety is known as a kind of general anxiety. It includes phenomenological. Psychological and behavioral responses related to fear of failure. It is experienced by individual in assessment situations. When anxiety exists, some of cognitive and attention processes interfere with effective performance. Another cognitive-personal factor effective on test anxiety is self-efficacy. Researchers believe that self-efficacy is a cognitive phenomenon which influence both general test anxiety and test anxiety in particular (Abolghasemi, 2002).
Educational performance is another component. It is similar to self-efficacy and related to individual successful performance (Weiner, 1985; Yazdi and Salehi, 1999). Test anxiety is one of the various obstacles in benefiting acquired information and knowledge. Test anxiety is an emotional mood or unpleasant feeling combined with physiological and behavioral problems experienced in assessments or formal exams (Dusek, 1980; Shahani, 2005). Emotional Intelligence can be developed by regular and useful educations and training. Itplays an important role in improving personal and social relationships (Eftekharsa'adi, 2010). In adolescents whose parents are away because of work or other reasons, and the possibility of occurrence of behavioral and emotional problems threats them, EI help them reassess

Research Article

feelings and emotions of theirs and those of others. It also enables them to distinguish between excitements and using them appropriately (Salovey and Mayer, 1990; Abolghasemi, 2002).

Siarochi *et al.,* (2002) showed that EI adhust the relationship between stress and psychological health variables. Individuals with high levels of EI are less stressed and show low levels of depression.

Considering the importance of adolescence period and such educational problems as test anxiety over this period, the problems students whose fathers work rotating shifts may face, as well as the importance of emotional intelligence, this paper aims to study the impact of EI on test anxiety, self-efficacy, and educational performance of students in non-public National Martyrs High Schools in Ahvaz, Iran.

MATERIALS AND METHODS
Methodology

Control group attended the same emotional intelligence course. Participants answered test anxiety and self-efficacy questionnaires before and after the test. Salvey and Mayer (Lean 2002; Efekhars'adi, 2010) technique was used for EI training course.

The course consisted of ten 75-minute sessions. Every week 22 sessions were held. Spiel Burger Test Anxiety Inventory (1980) was used to evaluate the test anxiety in our population.

Schnauzaer *et al.*'s General Self-efficacy Scale (GSE) was applied to assess self-efficacy.

Educational performance, here, refers to student's marks which are registered in report card with special multiples. It is on the basis of grade-point means for the first and second semesters.

This experimental research is a pre-test/post-test one with control group. Our population consists of all male and female high school students (1st and 2nd grades) at non-public National Martyrs High Schools in Ahvaz in school year 2013-2014. 86 students whose fathers work rotating shifts in Oil Company form our population. Students answered Speil Berger Test Anxiety (STA) questionnaire.

According to STA, 34 students with test anxietywere selected as samplepopulation.They were divided into two groups randomly: test group (n=17) and control group (n= 17). 20-item STA to describe reactions before and after test as well as GSE was used.

Student's educational performance was determined according to grade-point mean for the last 2 semesters. Cronbach alpha was 0.91.

Sherer Self-efficacy Scale was used to evaluate students' general self-efficacy. This scale was developed by Mirsamiee and Ebrahimi (2008) with 0.8 Cronbach Alpha.

After pre- and post-test on control group, intervening EI sessions were held 2 days a week (ten 75-minutes sessions in total).

"*Emotional Intelligence*" by Bradberry and Greaves and "*50 Activities for Developing Emotional Intelligence*" by Adele B. Lynn were used to EI Training course and developing tasks respectively.

Parents informed their agreement. After a week self-efficacy questionnaire was offered to students. Control group received no intervention.
Having finished the intervening EI training for test group, control group was asked to answer the questionnaires.
SPSS 18 was used to analyze the data. The significance level was set at 0.05.

RESULTS AND DISCUSSION
Findings
Descriptive findings of the study include statistical indices mean and standard deviation of test and control students scores in pre-test and post-test for all the variables. Table 1 shows the results of descriptive analyses.

Research Article

Table 1: Statistical results for three variables in test and control group for pre- and pose-test stages

Variable	stage	Statistical index group	mean	SD	no
Test anxiety	Pre-test	Test	54.47	8.33	17
		Control	50.88	6.24	17
	Post-test	Test	36.53	7.86	17
		Control	53.76	7.79	17
Self-efficacy	Pre-test	Test	55.29	9.51	17
		Control	64.12	8.20	17
	Post-test	Test	75.82	7.66	17
		Control	67.12	5.40	17
Educational performance	Pre-test	Test	16.47	2.85	17
		Control	16.49	2.20	17
	Post-test	Test	16.73	3.00	17
		Control	16.15	3.27	17

After controlling pre-test, the significance level for all the tests show that there is a significant difference with respect to at least one of the dependent variables (test anxiety, self-efficacy, and educational performance) among students of test and control group whose fathers work rotating shifts (F=21.85, P<0.001).

To find out the differences in variables in test and control groups, three one-way covariance analyses were carried out in MANCOVA context. Table 2 shows the results thereof.The difference or impact level is 0.70. It means that70% of personal differences in scores after the exam anxiety, self-efficacy, and educational performance tests arerelated to the impact of EI Training (membership in group).

Table 2: Levin test results for the assumption of equal variance for variables in test and control groups

Variable	F	First degree freedom	Second degree freedom	Significance level
Test anxiety	2.08	1	32	0.159
Self-efficacy	0.406	1	32	0.529
Educational performance	2.01	1	32	0.166

Controlling the pre-test revealed a significant difference between students in test and control groups with respect to test anxiety (F=48.14, p<0.001). Comparing the mean test anxiety between test and control students revealed that EI Training decreased the test anxiety level in test group. The difference or impact level is 0.62. In other words, 62% of personal differences in scores after the exam anxiety test are related to the impact of EI Training (membership in group).

Controlling the pre-test revealed a significant difference between students in test and control groups with respect to self-efficacy (F=20.46, p<0.001). Comparing the mean self-efficacy between test and control students revealed that EI Training increased the self-efficacy level in test group. The difference or impact level is 0.41. In other words, 41% of personal differences in scores after the self-efficacy test are related to the impact of EI Training (membership in group). Controlling the pre-test revealed a significant difference between students in test and control groups with respect to educational performance (F=5.97, p<0.021). Accordingly the hypothesis 3-1 is confirmed. Comparing the mean educational performance between test and control students revealed that EI Training increased the educational performance in test group. The difference or impact level is 0.17. In other words, 17% of personal differences in scores after the educational performance test are related to the impact of EI Training (membership in group).

Research Article

Controlling the pre-test revealed a significant difference between students in test and control groups with respect to educational performance (F=5.97, p<0.021). Accordingly the hypothesis 3-1 is confirmed. Comparing the mean educational performance between test and control students revealed that EI Training increased the educational performance in test group. The difference or impact level is 0.17. In other words, 17% of personal differences in scores after the educational performance test are related to the impact of EI Training (membership in group).

Controlling the pre-test revealed a significant difference between students in test and control groups with respect to test anxiety (F=48.14, p<0.001). Comparing the mean test anxiety between test and control students revealed that EI Training decreased the test anxiety level in test group. The difference or impact level is 0.62. In other words, 62% of personal differences in scores after the exam anxiety test are related to the impact of EI Training (membership in group). It is in consistency with findings of Abolghhasemi (2002), Zahrakar (2007), Eftekharsaad (2010), Naghdi *et al.,* (2010), Shahaniyeylagh *et al.,* (2012), Saadat *et al.,* (2014), Elyas *et al.,* (1991), Kennedy and Doepke (1999), Ciarochi *et al.,* (2002), Davis and Lysaker (2005), Lekkas *et al.,* (2007), Fathi *et al.,* (2007).

Considering the developed theories and the results of the current study, it can be concluded that EI training scan be effective in decreasing test anxiety in students. The possible explanation for our results can be as follow. Years of adolescence and youth are among the important stages of one's growth and as well as social and emotional evolution. Due to the vulnerability of adolescents, different factors and problems may cause behavioral, social, emotional, psychological, and character abnormalities. An adolescent, who has not acquired necessary skills and lacks emotional, psychological, and character balance, is not able to have psychologically healthy communications, or to express him/herin social situations. They usually avoid competing and cooperating, as well as defending their rights.

In addition, they face difficulties when making decisions and consequently suffer from frustration, depression, and anxiety. EI training for adolescent and young students can resolve some of their problems. It also helps them adjust to situations, become socialized, establish appropriate relationship with family and society and as a result decrease anxiety.

Our findings show that EI training has an impact on self-efficacy in students. Controlling the pre-test showed a significant difference between students in test and control groups with respect to self-efficacy (F=20.46, p<0.001). Accordingly EI training lead to an increase in self-efficacy in students. The difference or impact level is 0.41. In other words, 41% of personal differences in scores after the self-efficacy test are related to the impact of EI Training (membership in group). It is in consistency with Foladvand *et al.,* (2008), Beirami (2008), Saroghad *et al.,* (2010), Lent *et al.,* (2009), Putwain *et al.,* (2012), Komarraju and Nadler (2013). Considering the impact of EI training on self0efficacy in students, it is concluded that EI training improves adjustment to different situations.

Self-efficacy refers to individual's beliefs in his/her abilities to accomplish a task or deal with the responsibilities. It plays an important role in regulating one's behavior. One's belief in his/her inefficacy in a given situation creates more stress and pressure than the situation itself. People with low levels of self-efficacy are pessimistic about their own capabilities and as a result they avoid situations they evaluate to be beyond their abilities.

Our results show that emotional intelligence training elevates educational performance in test group. The difference or impact level is 0.17. In other words, 17% of personal differences in scores after the educational performance test are related to the impact of EI Training (membership in group). It is consistent with Mansoori (2001), Zare (2001), Zahrakar (20070, Shahaniyeylagh *et al.,* (2012), Saadat *et al.,* (2013), Elyas *et al.,* (1991), Drago (2004), Lekkas *et al.,* (2007), Jelad and Dahan (2010), Tomuletiu *et al.,* (2011), Nwadinigwe and Azuka-Obieke (2012). Considering the fact that EI training leads to a decrease in test anxiety and consequently increases self-efficacy in students, it improves educational performance in students.

Educational performance is based on achievement which influences the way an assignment is carried out; in addition, it reflects competency trends. Acquisitive skills or knowledge in school subjects are evaluated using tests and/or signs developed by teachers. Students'activities in school subjects such as reading,

Research Article

math and history are accompanied with scientific, industrial, and physical skills (Lashkaripoor *et al.,* 2005).

Limitations

The only measure to assess studentseducational performance was the grade-point means for the last two semesters. It may not be an extensive measure to evaluate educational performance.

As the population consists of students of non-public high schools, one cannot generalize the findings of the current study to other schools. It is suggested the same study be carried out in a larger scale considering the effective factors in creating anxiety in different grades.

REFERENCES

Abolghasemi A (2002). Studying the epidemiology of test anxiety and effectiveness of two remedial methods in decreasing test anxiety in high school students in Ahvaz. Phd thesis, Chamranuniversity, Tehran.

Beirami M (2008). Studying the effectiveness emotional intelligence on expressing oneself and psychological health in university students. *Scientific- Research Quarterly of Tabriz University* **3**(11) 25-42.

Eftekharisaadi Z (2010). Studying the impact of emotional intelligence on decreasing remonstration and increasing the personal-social adjustment in female high school students in Ahvaz. General psychology thesis, Khozestan Azad University.

Foladvand Kh, Farzad V, ShahrAzary M and Sangari A (2008). *The Impact of Social Support, Educational Stree, and Self-Efficacy on Psychological Health*. Moaser **74**(2)

Lashkaripoor K, Bakhshaee N and Soleimanii M (2005). *Studying the Relationship between Test Anxiety and Educational Performance in Junior High School Students in Ahvaz*, edited by Tabib Shargh **4** 253-259.

Lynn BA (1953). *50 Activities for Developing Emotional Intelligence,* edited by Ghanbari B, Alavi M, Garmaee A (2010). Ghods Razavi, Mashhad.

Mansori B (2001). Sharing EI test on M.A. Students in public universities of Tehran, Alame University.

Naghdi H, Adibpoor N and Noorani R (2010). *The Effectiveness of Ei Training on Remonstration in Male High School Students*, edited by Olompezeshki **14**(3).

Saadat M, Karimi P and Ghasem Zade A (2013). *The Effectiveness of Systematic Motivational Consultation in Improving Educational Achievement and Reducing Test Anxiety in Students*, Jondishapoor 4.

Sarvghad S, Rezaee A and Masoomi F (2010). The relationship between thinking styles and self-efficacy in high school students. *Woman and Society* **1**(4).

Shahaniyeylagh M, Majidi R and Haghighi J (2012). The causal the association ofgeneral intelligence and emotional intelligence with educational achievement. *Education and Learning* **4**(1).

Siarochi J (2000). *EI in Daily Life,* edited by Noori A, Neveshte, Isfahan

Zahrakar K (2007). Studying the relationship between EI components and educational performance. *Applied Psychology* **2**(5) 89-98.

Zare M (2001). Studying the contribution of emotional intelligence in educational achievement. MA thesis, Tehran psychology institute.