

## Effect of Emotional Intelligence on Mental Toughness among the Student Athletes (A Case Study: Students from Islamic Azad University of Karaj)

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**Abstract:** The purpose of this research was to effect of emotional intelligence on mental toughness among the student athletes. The method of this research is descriptive-correlative and it was performed under field methods. The population includes 1500 individuals among whom 306 female and male student athletes were selected as the sample through Morgan's table and stratified random sampling methods. For the purpose of data collection, the Goleman's emotional intelligence questionnaire, the Ahwaz questionnaire of Psychological Toughness were used. The validity of these questionnaires was approved by experienced scholars and also their validities were approved through the application of Cronbach's alpha Method and the calculated values were respectively 0.82, 0.77. In addition to descriptive statistic indexes, the tests of Kolmogorov-Smirnoff, Pearson's correlation and linear regression were employed.

**Key words:** Emotional intelligence, mental toughness, defiance, control, commitment

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### INTRODUCTION

For most male and female students, attending university is accompanied with stress. New rules and educational environment, different expectations from past, start of independent life and entering maturity and formation of humane relationships are new circumstances which require adoption of new strategies. Compatibility or accommodation is a dynamic process during which the individual tries to create a balance between what he or she does or wants to do and what the environment and society demands (Bahram, 2007). One of the approaches that might be effective on accommodation is the positivist psychological (mental) approach. During the recent years, the positivist mental approach has defined its ultimate purpose as identification of structures and methods which are followed by humans' welfare and happiness. Therefore, the elements that lead to more compatibility between humans and life's threats and demands are considered as the most basic and fundamental studied structures of this approach (Samani, 2008). Luthar *et al.* (2000) and Masten (2001) believe that resiliency is one of these concepts and normal structures which are considered by positivist psychology and most researches related to resiliency are performed in the domain of transformational psychology (Luthar *et al.*, 2000). Connor

and Davidson have studied resiliency in terms of social contexts and believe that resiliency is not only stability against traumas or threatening situations, its rather individual's active participation in environment. They define resiliency as the individual's capability in establishing bio-psycho balance in dangerous situations. In addition, researchers believe that resiliency is a type of self-healing with positive emotional and cognitive consequences (Besharat *et al.*, 2008). One of the effective personal features in resiliency is the ability for establishment of self-control or self-discipline. In general, personality characteristics such as positive self, sociality, intelligence, efficiency in educational affairs, autonomy, self-esteem, good communications, problem solving skills and mental health are considered as elements effective on resiliency (Maddi *et al.*, 2005). One of the issues that are introduced in the context of effective elements on resiliency is the role of intelligence on resiliency. Some findings have revealed that intelligence is a resiliency defining element and some others have also proved the opposite of this view (Nia *et al.*, 2014). Findings of Khodajavadi and Pro indicated that emotional intelligence has a positive effect on students' resiliency (Rahman, 2008). Also, the findings by Nia *et al.* (2014) indicated that emotional intelligence is positively related to resiliency among wrestlers. In the view of Solow and Meyers,

emotional intelligence is defined as the ability for comprehension of emotions and acceptance of emotions in a way that it is compatible with cerebration and the comprehension of emotions and emotional knowledge and thoughtful adjustment of emotions in a way that the mental and emotional growths are increased (Afkhami *et al.*, 2012).

As the future maker class of the society, student athletes has an important role in advancement and progression of the society. With respect to the fact that emotional intelligence imposes positive effects on learning and educational performance, therefore investigating emotional intelligence and elements effective on it is a necessity. Also with respect to shortage of researches regarding the context of mental toughness and its relation with emotional intelligence and mental toughness, the necessity of this research was formed. Also as a result of high volume of educational content, educational stress and being far from families, the possibility of occurrence of mental issues is more frequent among students. Emotional intelligence is a structure which provides student athletes with the capability of resisting against these problems. With respect to provided content in the perspective of researchers the question comes up that what methods can be effective in reducing students' mental stresses? For this purpose, the present research was performed aimed at effect of emotional intelligence on mental toughness among the student athletes.

## MATERIALS AND METHODS

The method of this research is descriptive-correlative and the research is performed under a field method. The population of this research includes the entire male and female student athletes as 1500 individuals. Among the population, according to Morgan's table a number of 306 male and female student athletes were selected as the sample through a stratified random sampling method. For the purpose of data collection, the Goleman's questionnaire of emotional intelligence with 33 questions, the questionnaire of mental toughness by Ahwaz including 24 questions was use. The validity of questionnaires was approved by 10 expert instructors of psychology throughout the universities of Tabriz. The reliability of the questionnaires was also determined through Cronbach's alpha as 0.82, 0.77, respectively. For the purpose of data analysis the indexes of descriptive statistics such as average, standard deviation, abundance and tables. Also for testing hypotheses, the tests of Kolmogorov-Smirnoff, Pearson's correlation and linear regression were used.

## RESULTS AND DISCUSSION

In this study, through the tests of Kolmogorov-Smirnov, Pearson's correlation and linear regression the research hypotheses are exposed to test. First, before the execution of Pearson's correlation test, the Kolmogorov-Smirnoff test was executed for determining the normality of data. Results of this test indicated that the data in studied variables was normal (Table 1).

**Research hypotheses test:** With respect to the fact that significance level of all research variables is larger than 0.05, therefore the Pearson's correlation test and the test of linear regression are used for testing the research hypotheses. In Table 2, the results of linear regression test are shown.

With respect to Table 2, there is a relation between emotional intelligence and its components and resiliency and also there is a relation between toughness, emotional intelligence and also a relation between toughness and its components and resiliency under a confidence level of 0.99 and error value of <0.01. In Table 3, the results of linear regression test are shown.

With respect to the results of Table 3, with respect to the value of F and also the value of calculated t, it can be seen that the relation between the variables is linear and also with respect to calculated significance level it can be said that independent variables impose positive effects on dependent variables among the student athletes.

Results indicated that there is a significant relation between emotional intelligence and mental toughness under a confidence level of 0.99 and an error value of <0.01. On the other hand, the value of this relation is equal to 0.809 which is linear, positive and strong. It means that as the emotional intelligence increases, the level of resiliency is also increased. Results of this research indicated that there is a significant and positive relation

Table 1: Results of Kolmogorov-Smirnov test

Groups	Average	Z-value	SD	Sig.
Emotional intelligence	3.178	0.941	0.311	0.338
Mental toughness	3.580	1.248	0.376	0.089

Table 2: Results of pearson's correlation test

Independent variables	Dependent variables	R	Sig.
Emotional intelligence	Mental toughness	0.809	0.000
Self-awareness	Mental toughness	0.691	0.000
Self-control	Mental toughness	0.733	0.000
Self-motivation	Mental toughness	0.660	0.000
Empathy	Mental toughness	0.766	0.000
Social skills	Mental toughness	0.740	0.000
Emotional intelligence	Defiance	0.766	0.000
Emotional intelligence	Control	0.756	0.000
Emotional intelligence	Commitment	0.644	0.000

Table 3: Results of linear regression test

Independent variables	Dependent variables	t-values	$\beta$	R <sup>2</sup>	F-values	p-values
Emotional intelligence	Mental toughness	24.583	0.809	0.655	604.319	0.000
Self-awareness	Mental toughness	17.040	0.691	0.677	290.347	0.000
Self-control	Mental toughness	19.242	0.733	0.538	370.258	0.000
Self-motivation	Mental toughness	15.654	0.660	0.435	245.039	0.000
Empathy	Mental toughness	21.269	0.766	0.587	452.353	0.000
Social skills	Mental toughness	19.643	0.740	0.548	385.830	0.000
Emotional intelligence	Defiance	21.241	0.766	0.587	451.151	0.000
Emotional intelligence	Control	20.611	0.756	0.572	424.804	0.000
Emotional intelligence	Commitment	15.024	0.644	0.415	225.719	0.000

between Emotional Intelligence (EI) and its dimensions and mental toughness which is in compliance with previous theories and researches. Also the sub-scale of emotional intelligence has a high capacity in anticipation of mental toughness. These findings are compatible with the findings of Jokar. He had used the scale of self-evaluation of resiliency. Therefore, the results of this research can provide the contexts for intervening researches for growth of resilience among the aforementioned groups and also by the education of skills of EI and its dimensions, occurrence of behavioral issues and some psychiatric disturbances are avoidable. Therefore, the subordinate managers and authorities student athletes are recommended to seek solutions for improvement of emotional intelligence of their student athletes in order to improve their mental toughness.

Results indicated that there is a significant relation between self-awareness and mental toughness among the student athletes. Self-awareness is defined as emotional awareness, exact self-evaluation and self-confidence (Zahrakar, 2007). Results of analyses of first subsidiary hypothesis indicated that there is a relation between self-awareness and mental toughness. On the other hand, the value of this relation is equal to 0.691 which is positive linear and suitable. Results of the research by Zahrakar indicated that there exists a significant relation between self-awareness and educational performance. Therefore, with respect to the results of the research it can be concluded that increase of self-awareness in student athletes leads to increase of their mental toughness and their success is also expected to improve in this regard. Therefore, the subordinate managers and authorities student athletes are recommended to seek solutions for improvement of self-awareness of their student athletes in order to improve their mental toughness.

Results indicated that there is a significant relation between self-control and mental toughness among the student athletes. Self-control is defined as being trust worthy, seriousness and commitment and flexibility and innovation (Zahrakar, 2007). Results of analyses of second subsidiary hypothesis indicated that there is a relation between self-control and mental toughness. On the other hand, the value of this relation is equal to 0.733

which is positive linear and suitable. Therefore, the subordinate managers and authorities student athletes are recommended to seek solutions for improvement of self-control of their student athletes in order to improve their resiliency.

Results indicated that there is a significant relation between self-motivation and mental toughness among the student athletes. With respect to the results it was observed that there is a relation between self-motivation and resiliency under a confidence level of 0.99 and an error value of <0.01. On the other hand, the value of this relation is equal to 0.660 which is positive, linear and suitable. It means that as the level of self-motivation increases, the level of resiliency also increases for students. Therefore, it can be concluded that people who have high levels of self-motivation also have high levels of mental toughness. Therefore, the subordinate managers and authorities student athletes are recommended to seek solutions for improvement of self-motivation of their student athletes in order to improve their mental toughness.

Results indicated that there is a significant relation between empathy and mental toughness among the student athletes. Empathy is defined as understanding others, growing others, orientation of services, variation of influences and political awareness (Zahrakar, 2007). Results of analyses of fourth subsidiary hypothesis indicated that there is a relation between empathy and mental toughness. On the other hand, the value of this relation is equal to 0.766 which is positive linear and suitable. Therefore, the subordinate managers and authorities student athletes are recommended to seek solutions for improvement of empathy of their student athletes in order to improve their mental toughness.

Results indicated that there is a significant relation between social skills and mental toughness among the student athletes. Social skills are defined as influence, communication, conflict management, leadership, transformation catalyzer, establishment of bonding, collaboration and team working (Zahrakar, 2007). Social skills and mental toughness. On the other hand, the value of this relation is equal to 0.740 which is positive linear and suitable. Therefore, the subordinate managers and

authorities student athletes are recommended to seek solutions for improvement of social skills of their student athletes in order to improve their mental toughness.

Results indicated that there is a significant relation between defiance and emotional intelligence among the student athletes. With respect to the results, it was observed that there is a relation between defiance and emotional intelligence under a confidence level of 0.99 and an error value of  $<0.01$ . On the other hand, the value of this relation is equal to 0.766 which is positive, linear and suitable. It means that as the level of defiance increases, the level of emotional intelligence also increases for students. Therefore, it can be concluded that people who have high levels of defiance also have high levels of emotional intelligence. Therefore, the subordinate managers and authorities student athletes are recommended to seek solutions for improvement of defiance of their student athletes in order to improve their emotional intelligence.

Results indicated that there is a relation between control and emotional intelligence among the student athletes. With respect to the results of seventh subsidiary hypothesis it can be said under a confidence level of 0.99 and an error value of  $<0.01$  that there exists a significant relation between control and emotional intelligence. On the other hand, the value of this relation is equal to 0.756 which is positive, linear and suitable.

This finding is in compliance with the findings of Kamyar and Yazdi. Therefore, the subordinate managers and authorities student athletes are recommended to seek solutions for improvement of control of their student athletes in order to improve their emotional intelligence.

Results indicated that there is a relation between commitment and emotional intelligence among the student athletes. With respect to the results of eighth subsidiary hypothesis it can be said under a confidence level of 0.99 and an error value of  $<0.01$  that there exists a significant relation between commitment and emotional intelligence. On the other hand, the value of this relation is equal to 0.644 which is positive, linear and suitable. This finding is in compliance with the findings of Kamyar and Yazdi. Therefore, the subordinate managers and authorities student athletes are recommended to seek solutions for improvement of control of their student athletes in order to improve their emotional intelligence.

## CONCLUSION

Results indicated that there exists a significant relation among emotional intelligence and its dimensions and mental toughness among the student athletes ( $p = 0.01$ ).

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