

Investigating the Relationship Between Group Emotional Intelligence with Collective Self-Efficacy and Team Work Effectiveness

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Abstract

A sport team is a social organization in which achieving the goals and executing the tasks is merely possible through participation and collective work. Team work and perceived performance capability in a team as a whole are also essential elements of a good performance.

In this descriptive - correlative study, the statistical population of the study consisted of 145 student athletes (81 males and 64 females) who participated in intercollegiate sporting events in the 2013-2014 school years playing sports such as volleyball, basketball, soccer, and handball. The statistical sample was equal to the statistical population (81 males and 64 females). Group emotional intelligence (GEI) was measured by Hemphill's (1956) GEI questionnaire with 4 subscales (intimacy, control, hedonic tone and viscosity). The questionnaire was revised by the author in 2001, and the Collective Self-Efficacy (CSE) questionnaire for sport was used to measure the CSE of student athletes. This questionnaire was developed and validated by Short et al. (2005) and it consists of 20 items. Team Work Effectiveness (TWE) questionnaire developed by Sterling and Selesnick (1998) was used to measure TWE of college student athletes.

An internal consistency estimate was computed for three instruments and the alpha value for GEI, CSE and TWE were respectively, 0.80 and 0.85, 0.79. The results of the study revealed a positive and significance relationship

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between GEI and its subscales (except group control which had a negative relationship) with CSE and team work effectiveness. No significance differences were observed between male and female athletes regarding GEI, CSE and TWE.

Keywords

Group emotional intelligence (GEI), Collective Self-Efficacy (CSE), Team Work Effectiveness (TWE), Student athletes.

1. Introduction

A sport team is a social organization in which achieving goals and executing tasks is merely possible through participation and collective work. In this regard, Bandura has expanded the theory of social learning and the concept of individual functionality to collective functionality. In his view, individuals' common beliefs regarding their collective ability in achieving the desired goals is a key element of collective functionality (Shavaran et al., 2013).

1-1 CSE

Among the team's beliefs, the CSE has the most effective and the most influential mechanism in the team's cognitive function. Therefore, this component is considered a key and important component which emphasizes the role of the team's beliefs regarding their abilities in accomplishing certain activities in a particular situation (Hosseinchari and Kiani, 2008).

Collective efficacy refers to the perceived performance capability of a social system as a whole (Bandura, 1997).

1-2 TWE

Team work is essential to a good performance from any sports team, professional or not, and is a great way to teach children, adolescent and young athletes certain life lessons, such as cooperating with others and taking responsibility for actions. Such lessons are applicable to life outside of sports and can be applied to work or school, such as when one needs to focus without interruption on the school paper that needs to be written or work with a less-than-pleasant colleague on a project (Sugarman, 2004). Team effectiveness is the capacity a team has to accomplish the goals or objectives

administered by an authorized personnel or the organization (Aube and Rousseau, 2011).

Characteristics of a group influence efficacy and effectiveness of a group. One of the characteristics whose probable effect on the team's performance has been discussed is the team's emotional intelligence (Farahi et al., 2010).

1-3 GEI

Many years ago psychologists found that in order to be successful, possessing the capabilities of strong *Intelligence Quotient* (IQ) does not suffice. Studies have shown that many people having a high intelligence quotient and cognitive intelligence could not be successful in doing their job, establishing relationships with others, and even progressing in their education. After that, scholars such as Salovey et al. (2000) paid attention to other capabilities which were more of an emotional nature than of a cognitive one. This capability, which is called emotional intelligence hereafter, refers to the learnt abilities which help us understand and control our feelings and emotions so that they work for us, not *against* us. In other words, emotional intelligence indicates that in social relations and in mental and emotional give and get trade off in particular situations, some actions are suitable and some are not. This means that a person can always keep his/her hope in different conditions, sympathize with others, listen to others, ignore small rewards for the sake of achieving bigger rewards, does not allow his/her concerns to disturb his/her mental and reasoning power, is stable when facing problems, and keeps his/her motivation in all situations. Emotional intelligence is a kind of emotional talent which determines how to use our own skills in the best way possible and helps us exploit ourselves in the right way (Vazifehdoost, 2010).

In addition, there is much evidence that emotional intelligence leads to the organization's efficacy. Druskat and Wolff (2000) state that those teams which have emotional intelligence show a commitment and creativity which is increasingly important for the teams' effectiveness and efficacy (Cherniss, 2001).

Brigatte (2002), in her study titled "the effect of GEI on team cohesiveness and effectiveness" mentioned that GEI viscosity and intimacy subscales have positive relations with these variables.

Results of a study by Cheung and Yan (2006) entitled "the relationship of efficacy beliefs and collective beliefs of teachers with educational outcomes" revealed significant relations of these variables (efficacy beliefs and collective beliefs) with motivation and school progress of students and job satisfaction of teachers. Students' interest, eagerness and hard work were also observed.

Based on the research done in various contexts, the present study sought to examine if GEI is correlated with CSE and TWE in student athletes. The unique quality of this study lies in the fact that no such study has been done among student athletes of university level in Iran. It is expected to serve as a starting point for future studies.

The results of the study provide important information with regards to GEI, CSE and TWE in student athletes.

2. Methods

2-1. Participants

Statistical population: In this descriptive-correlative study, the statistical population of the study consisted of 145 student athletes (81 males and 64 females) who participated in intercollegiate sporting events in the 2013-2014 school years in sports such as volleyball, basketball, soccer, and handball. The statistical sample was equal to the statistical population (81 male, 64 female).

2-2. Instruments

- GEI

The GEI of athletes was measured by Hemphill's (1956) GEI questionnaire. The questionnaire gave an overall GEI score, as well as 4 subscale scores (intimacy, control, hedonic tone, and viscosity). The questionnaire was revised by the author in 2001.

- CSE questionnaire for sport

This questionnaire was developed and validated by Short et al. (2005) and it consists of 20 items.

- TWE questionnaire

An 11 items scale was developed by Sterling and Selesnick (1998) to measure the TWE of college student athletes.

The alpha coefficient to measure the reliability of the instruments was

applied. The instruments were translated into Farsi, and were used in a different culture, in a different span of time.

An internal consistency estimate was computed for three instruments and the alpha values for GEI, CSE and TWE were respectively, 0.80 and 0.85, 0.79. All of these values were above the cut off of 0.70, suggested by Nunnally (1978).

3. Results

3-1. Descriptive Statistical Results

Participants in this study were 145 student athletes (81 males, 56% and 61 females, 44%), 63% of them were single and 37% married, 62.1% of them were studying at bachelor level, 13.1% were studying in associate level and 24.8 were in graduate school. The mean of students' GEI was 3.36 out of a possible maximum of 5, CSE was 4.49 out of a possible maximum of 5, and TWE was 2.35 of a possible maximum of 5 (Table 1).

Table 1: Descriptive statistics of variables in student athletes

Variables	No. (N)	X	SD	Max possible
GEI	145	3.36	0.38	5
CSE	145	4.49	1.06	5
TWE	145	2.35	0.40	5

Table 2: Correlation between GEI and its subscales with CSE and TWE

Statistical index Variable	N	Correlation (R)	P-value
GEI and CSE	145	0.536	0.001
Hedonic tone and CSE	145	0.360	0.001
Control and CSE	145	- 0.009	0.914
Cohesiveness and CSE	145	0.598	0.003
Viscosity and CSE	145	0.536	0.001

GEI and TWE	145	0.598	0.003
Hedonic tone and TWE	145	0.477	0.026
Control and TWE	145	- 0.057	0.499
Cohesiveness and TWE	145	0.524	0.001
Viscosity and TWE	145	0.507	0.043

3-2. Correlation Results (Pearson's correlation test)

As it is illustrated in Table 2, there is a positive and significant relationship between GEI and its subscales (except for the group control which had a negative relationship) with CSE and TWE.

It implies that by increasing GEI, student athletes can cooperate, get along better, make decisions by consensus and have a supportive atmosphere; these are all characteristics of TWE and CSE (Table 2).

3-3. Comparison (independent t - test) results

The results of the statistical analysis in Table 3 show no significant difference between male and female athletes regarding GEI, CSE and TWE (Table 3).

Table 3: Comparison of variables in male and female student athletes

Variables	Group	N	Mean	"t" value	d.f.	P-value
GEI	Male	81	3.37	0.431	143	0.664
	Female	64	3.35			
CSE	Male	81	4.52	0.301	143	0.761
	Female	64	4.42			
TWE	Male	81	3.32	99	143	0.550
	Female	64	3.28			

Discussion

The results of this study confirm a significant correlation between GEI and its subscales (*except control one of the subscales of GEI*) with student athletes' CSE.

- Group's desired tone as one of the components of GEI was significantly correlated with the team's CSE. This conforms to the results of Gogral and Auja's study (2011) and Naser et al.'s study (2011).

Individuals get skilled in two important and key dimensions of emotional intelligence. The first one is related to the way a person manages him/herself, which is called personal competence; the second one is social competence, which is related to the way a person manages his/her relations with him/herself and with others (Goleman,1995). Team efficacy is a multi-dimensional structure which includes both customer's features and group work ability in the future (Vazifehdooost, 2010). Based on this and considering the fact that the components of GEI are affected by individuals' emotional intelligence, teams' coaches and managers are suggested to use emotional intelligence training methods and thereby attempt to develop the group's desired tone, which has been suggested as a component affecting the team's efficacy.

Many dimensions of the team features provide the group's efficacy. In fact, in a complete model of team work, given the team's status, there are various essential and necessary conditions which help the team perform successfully and achieve the team's goal. Among these conditions, we can refer to factors including ability, motivation and team strategy (Thompson, 2000).

- Group cohesiveness – another subscale of GEI – was significantly correlated with student athletes' CSE.

Group cohesiveness or adherence is defined as the degree to which the members of a group work as a whole, which is reflected by the lack of dissension and personal conflicts among group's members and lack of service activities for the sake of proceeding solely the members' personal interests (Hemphill, 2001).

Individuals have different beliefs based on which they can control to different extents their thoughts, performances and feelings. Among personal beliefs, self-efficiency has the most effective and most influential mechanism in human's cognitive function (Hejazi et al., 2012).

Since athletes' beliefs about the necessity of group coherence for the sake of team success can affect all the aspects of their competition and endeavors for the sake of team success, team coaches and managers are suggested to devise some measures for reinforcing and increasing these beliefs in their programs. Self-efficiency as a key and important component in Bandura's theory emphasizes the role of personal beliefs about one's own abilities in accomplishing certain activities in a particular situation. He considers efficiency a form of self-efficiency and defines the sense of efficiency as one's judgments about his/her abilities and capabilities in achieving the desired goals. When people have a positive attitude towards their job, they have a high sense of efficiency, and when the work environment is stimulative for them, they show high commitment (Hejazi et al., 2012).

Individual's sense of efficiency can be influenced by the team. Since people act both individually and collectively, self-efficiency beliefs can be conceptualized at both an individual and a collective level (Hejazi et al., 2012).

In this regard, coaches are suggested that by precisely determining and analyzing tasks individually and collectively, they provide the way for creating and developing the team's coherence and consequently, the team's efficacy beliefs. In fact, it can be said that the collective efficiency beliefs of team members can be formed only by balancing between these two elements.

A significant correlation was also observed between GEI and its subscales (*except control one of the subscales of GEI*) with student athletes' TWE.

It has been found that there is much commonality between successful team work and emotional intelligence. This is supported by Yost and Tucker (2006), who promote a strong relationship between these two variables, and they contend that emotional intelligence competencies are more important than visible skills, such as technical competencies. There is more to effective team work than a keen intellect and grasp of technical knowledge. In order to promote positive, progressive and effective working environments, team members need to have a combination of technical knowledge and well-developed emotional intelligence including self-awareness, empathy and social skills. Goleman

(1995) believes that team members' emotional intelligence plays a pivotal role in determining the success and functionality of the team and the quality of the final product being developed.

It would appear that emotional intelligence skills underpin the collaboration and communication skills needed to manage conflict and keep the team focused on developing a required product.

Individuals who participate in sports have higher emotional intelligence than those who do not (Gail, 2012). In a study titled *The effect of emotional intelligence on team's coherence and performance*, Brigitte (2002) stated that influence, sympathy, and the progress tendency have a positive relationship with a team's coherence. Sympathy has a positive relationship with a team's performance, and progress tendency has a positive relationship with the subject of a team's performance.

It should be stated that emotional intelligence and its components have an acceptable relationship with psychological and physical health, and individuals with higher emotional intelligence have higher physical and mental health (Scott et al., 2002). High physical and mental health enhances self-confidence and individual self-efficacy, and consequently self-confidence and CSE. This somehow justifies the results of this study.

No significant difference was observed between these two group athletes (male and female) with regard to the studied variables. The mean of GEI and CSE in either group was high, but the mean of team work effectiveness was slightly below the medium score (2.35 out of a maximum score of 5).

- Regarding GEI, either group (male and female student athletes) had the ability in their group to generate a shared set of norms that manages the emotional process in a way that builds trust, group identity and group efficacy.

- With regard to CSE, either group (male and female student athletes) had the same beliefs and perceptions of their capabilities to complete the tasks that sport requires.

- With regard to the low score of TWE, one can argue that maybe the student athletes did not have enough commitment to their team and its goals, did not share information, knowledge, and experience openly, did not cooperate and pitch in to help, did not listen actively, and perhaps

did not treat each other in a respectful and supportive manner. All of these qualities and characteristics are required of a team player. Team work needs to be practiced more among the Iranian people in general and among this population specifically.

Implications

Our study makes two key contributions to the literature on GEI, CSE and TWE.

The first contribution of this paper is that the study is conducted among university student athletes, while the earlier studies focused on employees, managers and adults. The second contribution consists in the evaluation of the effect of physical activities and sport on these variables. Our results suggest the use of sport as a means of enhancing peoples' mental health in general and GEI, CSE and TWE specifically.

Limitations

These results are based on self-reports by student athletes from various high schools and from different fields of study and sports. Our results may also be affected by some biased attitudes that participants might take toward the variables.

Conclusion

Our study adds to the growing body of research on some aspects of GEI, CSE and TWE.

In light of our findings (a significant correlation between these variables, a high rate of GEI and CSE in student athletes and a medium rate of TWE), we hope that the use of sport and physical activities as a means of improving the studied variables in this study to be more emphasized and recommended by educational authorities, physical education teachers and sport coaches.

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