

EFFECT OF EMOTIONAL INTELLIGENCE IN SPORTS

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ABSTRACT

The effect of Emotional Intelligence and its six components- Self-awareness, Self-management, Internality, Motivation, Empathy and Social skills was studied on performance in team and individual sportspersons. It was found that emotional intelligence varied significantly in high and low achievers as well as in team and individual players, the interactive effect was also found to be significant. In the dimensions of motivation, internality, self-management and self-awareness the difference in team and individual players was not found to be significant while on the basis of level of achievement the two groups differed in all the five dimensions except social skills, this shows high emotional intelligence in sportspersons is resulting in high performance and success.

Keywords: Emotional Intelligence, Team and Individual sportspersons, High and Low achievers, Sports

INTRODUCTION : Effect of Emotional Intelligence on performance in Team and Individual Sports Conquest in the field of sports holds a unique place in the order of human values. Modern day sports are very demanding, it requires for the participants to perform to the very best of their abilities and beyond. Performance is the product of biological, psychological, sociological and physical makeup of an individual. To achieve success in games and sports not only physiological preparation but mastery in psychological skills is also required. Certain psychological

characteristics and personality features facilitate sporting activities and acquiring certain psychological proficiency and skills may in turn enhance desirable outcome. Past researches have indicated that athletes of team and individual sports differ on a number of personality characteristics Behzadi et al. (2012); Jalili, Hosseini, Jalili and Salehian (2011); Kumar and Prabhakaran (2011). The same has been confirmed on women athletes, the ones who competed in individual sports were higher on personality factors of dominance, adventure, sensitivity, introversion, and self sufficiency while lower on factor of sophistication when compared to those women athletes who competed in team sports Peterson et al. (1967).

Many studies have taken place in India also for example Shukla et al. (1997) tried to explore the difference between elite and nonelite players on their personality. The study was based on a sample of 240 Ranji Trophy cricket players of 15 teams. The study results support the earlier findings that the elite athletes differed significantly between a successful and unsuccessful athlete on psychological factors and personality traits (Cratty, 1983, Mahoney & Avenier 1977, Kamalesh, 1989)

Bhushan and Aggarwal (1978) conducted a study on the personality characteristics of high and low achieving Indian Sports Personnel and found 'that the out-standing athletes are consistently higher on Cattle's second order extraversion; that is, out-standing sportsmen and sportswomen are more impulsive, optimistic, aggressive and are able to keep their feelings under control.

Mayer and Salovey (1997) defined EI as: the ability to perceive accurately, appraise and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth.

Taghizadeh and Shojaie, (2012) analyzed the relation between emotional intelligence and team cohesion among elite and amateur table tennis players, 47 elite and 44 amateur players. He found there was not a significant relation between emotional intelligence and team cohesion and its

subscales in amateur players ($P>0.05$); however, there was a significant relation between EI and group cohesion in elite athletes ($P\leq 0.05$).

Crombie (2009) studied how emotional intelligence (EI) – might influence sporting success. According to him success on the sporting field is as much about being sensitive to fellow teammates' needs as it is about physical preparedness. He concluded that EI was particularly important in team sports like cricket that impose high emotional demands, and where team mates have to spend a lot of time with each other. He observed that each team's success can be predicted by the total of the EI present in the members of each team.

Some studies have also found that there wasn't a significant difference between the two groups (individual and team sports) with respect to overall emotional intelligence. Kajbafnezhad, Ahadi, Heidarie, Askari, Enayati (2011). After analysing above literature a need was felt for a large scale study in India on how EI is influencing the level of achievement in individual and team sports, hence this study was conducted.

METHOD:

Participants

675 sportspersons (male and female) of age group 19-28 years from the department of physical education of various colleges and of University of Rajasthan were first contacted. They were made to fill a demographic questionnaire containing questions regarding their personal profile and related to their sports performance. This information was cross checked and verified with the help of their coaches. The final sample for the study consisted 300 sportspersons, comprised of 150 individual sportspersons and 150 team sportspersons, each group consisting of equal number of high and low achievers. The criterion for classification on the basis of performance was the results of the last three events the sportspersons participated in. If the sportsperson or his or her team had finished among the top three in any two of them, he/she was considered to be a high performer while if the sportsperson or his or her team had finished among the bottom 3 in any

two of them or not finished in top 3 in any of them then he/she was considered to be a low performer.

Materials and Procedure

Emotional Intelligence Test by Surabhi Purohit (1999) with 48 items indicator of Emotional Intelligence among sportspersons.

The test measures in six dimensions

1. Self-awareness
2. Self-management
3. Internality
4. Motivation
5. Empathy
6. Social skills

PROCEDURE:

Participants were asked to fill the battery of questionnaires and to record the first response coming to their mind without pondering over for much time. They were well assured of anonymity to ensure that they do not camouflage real feelings due to fear of identification and give honest responses. Ratings (responses) from the instrument were transferred to the Scoring Sheet, making sure that the original responses of the starred items (*) were reversed (0 becomes 3, 1 becomes 2, 2 becomes 1 and 3 becomes 0). Scores on each row were added. It ranged from 0 to 24. The total score of emotional Intelligence ranged from 0 to 144.

The data was first represented graphically then 2 X 2 ANNOVA was applied with help of SPSS software to find out significance of differences and the interaction of level of performance and type of sport on Emotional Intelligence (along with its dimensions),

RESULTS:

- High achievers and low achievers differed significantly ($F = 62.7832$ $p = .05$) on the variable of Emotional Intelligence. The mean of High achievers was 97.43 while that of low achievers came out to be 83.13, showing High achievers have more Emotional Intelligence than low achievers. Individual sports participants and team sports participants differed significantly ($F = 5.240436$, $p = .05$) on the variable of emotional intelligence. The mean of Individual sports participants was 81.88 while that of team sports participants came out to be 92.35, showing team sports participants have more emotional intelligence than Individual sport participants. There is significant ($F = 13.46967$, $p = .05$) interaction effect of level of performance (high/low) and type of sport (team/ individual) on emotional intelligence.(see Table 1a and 1b)
- High achievers and low achievers differed significantly ($F = 3.456507$, $p = .05$) on the dimension of Emotional Intelligence, self awareness. The mean of High achievers was 16.28 while that of low achievers came out to be 15.39, showing High achievers were more self aware than low achievers. Individual sports participants and team sports participants differed insignificantly ($F = 0.727099$, $p = .05$) on the dimension of emotional intelligence self awareness. The mean of Individual sports participants was 15.63 while that of team sports participants came out to be 16.04, showing team sports participants have more self awareness than Individual sport participants. There is insignificant ($F = 0.015828$, $p = .05$) interaction effect of level of performance (high/low) and type of sport (team/individual) on self awareness. .(see Table 2a and 2b)
- High achievers and low achievers differed significantly ($F = 5.779397$, $p = .05$) on dimension of Emotional Intelligence, self management. The mean of High achievers was 15.90 while that of low achievers came out to be

15.03, showing High achievers have more self management than low achievers. Individual sports participants and team sports participants differed insignificantly ($F= 0.463642$, $p= .05$) on the dimension of emotional intelligence self management The mean of Individual sports participants was 15.44 while that of team sports participants came out to be 15.48, showing team sports participants have more self management than Individual sport participants. There is insignificant ($F = 0.004828$, $p = .05$) interaction effect of level of performance (high/low) and type of sport (team/individual) on self management. .(see Table 3a and 3b)

- High achievers and low achievers differed significantly ($F = 83.03346$, $p = .05$) on dimension of Emotional Intelligence, internality. The mean of High achievers was 15.84 while that of low achievers came out to be 11.57, showing High achievers are more internal than low achievers. Individual sports participants and team sports participants differed insignificantly ($F= 0.751964$, $p= .05$) on the dimension of emotional intelligence, internality The mean of Individual sports participants was 13.91 while that of team sports participants came out to be 13.51 showing individual sports participants have more internality than team sport participants. There is significant ($F = 7.842771$, $p = .05$) interaction effect of level of performance (high/low) and type of sport (team/ individual) on internality. .(see Table 4a and 4b)
- High achievers and low achievers differed significantly ($F = 183.3222$, $p = .05$) on dimension of Emotional Intelligence, motivation. The mean of High achievers was 18.68 while that of low achievers came out to be 12.21, showing High achievers have more motivation than low achievers. Individual sports participants and team sports participants differed insignificantly ($F= 0.546171$, $p= .05$) on the dimension of emotional intelligence motivation. The mean of Individual sports participants was 15.27 while that of team sports

participants came out to be 15.62, showing team sports participants have more motivation than Individual sport participants. There is insignificant ($F = 2.062771$, $p = .05$) interaction effect of level of performance (high/low) and type of sport (team/individual) on motivation. .(see Table 5a and 5b)

- High achievers and low achievers differed significantly ($F = 6.924851$, $p = .05$) on dimension of Emotional Intelligence, empathy. The mean of High achievers was 15.52 while that of low achievers came out to be 14.34, showing High achievers have more empathy than low achievers. Individual sports participants and team sports participants differed significantly ($F = 12.17291$, $p = .05$) on the dimension of emotional intelligence, empathy. The mean of Individual sports participants was 14.15 while that of team sports participants came out to be 15.72, showing team sports participants have more empathy than Individual sport participants. There is significant ($F = 56.84742$, $p = .05$) interaction effect of level of performance (high/low) and type of sport (team/individual) on empathy. .(see Table 6a and 6b)
- High achievers and low achievers differed insignificantly ($F = 0.520051$, $p = .05$) on dimension of Emotional Intelligence, social skills. The mean of High achievers was 15.16 while that of low achievers came out to be 14.13, showing High achievers have more social skills than low achievers. Individual sports participants and team sports participants differed significantly ($F = 16.54263$, $p = .05$) on the dimension of emotional intelligence, social skills. The mean of Individual sports participants was 13.80 while that of team sports participants came out to be 15.49, showing team sports participants have more social skills than Individual sport participants. There is significant ($F = 72.90373$, $p = .05$) interaction effect of level of performance (high/low) and type of sport (team/ individual) on social skills.(see Table 7a and 7b)

DISCUSSION:

Previous researches have found that emotional regulation can lead to optimal performance states (e.g. Totterdell & Leach, 2001), hence providing ground to explore effectiveness of Emotional Intelligence to the study and practice of Sport Psychology (Meyer & Fletcher, 2007). Emotions and emotional intelligence play an important part in the development and performance of athletes and teams (Meyer, Fletcher, Kilty, & Richburg, 2003; Meyer & Zizzi, 2007; Zizzi, et al., 2003; Thelwell, Lane, Weston, & Greenlees, 2008). Botterill & Brown, 2002; Jones, 2002; Vallerand & Blanchard, 2000).

This study focused on specifically studying the effect of emotional intelligence and its components on performance in both individual and team sports.

The results showed that on the dimension of Self Awareness team and individual sportspersons did not differ significantly but significant difference was found between high and low achievers the result of interaction between the two groups was also nonsignificant. The results are in consistency with previous studies as in case of self-awareness component of Emotional Intelligence. Results indicated modest support for the link between emotional skills (i.e., emotional awareness, control and utilisation) and athletic performance.

This implies that self-awareness is a mediating factor in the success of a sportsperson. Self-awareness is the quality with which all individuals have positive yet realistic views of themselves and their situations. Self-aware people trust their own abilities have a general sense of control in their lives and believe that, within reason, they will be able to do what they wish, plan, this self-belief becomes crucial in determining how much they strive towards their goals.

On the dimension of Internality team and individual sportspersons did not differ significantly but significant difference was found between high and low achievers, the result of interaction between the two groups was found to be significant.

It has been established earlier, found that high achieving athletes learn strategies intended to control emotions through experience, associating success with specific emotional states experienced during performance Hanin (2003).

Chiung-Huang Li, Likang Chi, Chun Chieh Kao et al.(2011) have shown a positive relation between motivation and high performance in athletes, our results also support the same as significant difference was found between high and low achievers on the dimension of Motivation although team and individual sportspersons did not differ significantly but the result of interaction between the two groups was significant.

The team and individual sportspersons differ significantly on the dimension of Empathy and significant difference was also found between high and low achievers, the result of interaction between the two groups was also seen to be significant. Rapisarda (2002) has argued that the degree of emotional competence in members of a team determines whether there is cohesiveness in members which results in high performance. He examined the relationship between the average score of team members on thirteen emotional intelligence (Emotional Intelligence) competencies and ratings of team cohesiveness and performance Results showed Emotional Intelligence competencies of influence, empathy, and achievement orientation were positively related to student and faculty ratings of team cohesiveness. The present study confirms the phenomenon in Indian context too.

On the dimension of Social Skills team and individual sportspersons did differ significantly and insignificant difference was found between high and low achievers although the difference between two is in favor of high achievers and on this variable the result of interaction between the two groups was significant. Given the nature of team sport it is quite reasonable for high achievers to have high social skills and empathy. Zizzi (2003), Vasilik (2009) Shaun (2006), have shown that these skills are important to develop effective communication skills with team mates. Team Sportspersons high on this dimension will have a greater control on their behaviour with team mates, they are assertive but do not exert undue influence on others.

The most important thing as Narimani (2009) has also pointed out is that the sports community has yet to utilize the potential effectiveness of emotional intelligence. . Crombie (2011) has established that Emotional Intelligence is not improved by conventional training but can be enhanced by specific Emotional Intelligence training

If the team players are provided due training modules regarding improvement of such skills then it will definitely result in better sporting experience and success as well.

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Table-1(a)

Means of Emotional Intelligence Response of Various Groups

	B1	B2	Total
A1	102.81	81.88	92.35
A2	92.05	84.37	81.88
	97.43	83.13	90.28

Table-1(b)

2X2 Analysis of Variance of Emotional Intelligence responses of total sample

Source of Variation	Sum of Squares	Df	Mean Square	F	Sig.
Between (A) Team & Individual	1281.333	1	1281.333	5.240436*	Sig
Between (B) High & Low	15351.05	1	15351.05	62.7832*	Sig
2-way Interaction A X B	3293.453	1	3293.453	13.46967*	Sig.
Residual	72374.64	296	244.5089		
Total	92300.48	299	308.6973		

*P < .05

Table-2(a)

Means of Responses of Various Groups on Self-awareness

	B1	B2	Total
A1	16.45	15.63	16.04
A2	16.10	15.16	15.63
	16.28	15.39	15.84

Table-2(b)

2X2 Analysis of Variance of Self –awareness responses of total sample

Source of Variation	Sum of Squares	Df	Mean Square	F	Sig.
Between Type of sport (A)	12.40333	1	12.40333	0.727099	N.S.
Between Level of Performance (B)	58.96333	1	58.96333	3.456507*	Sig.
2-way Interaction (A) X (B)	0.27	1	0.27	0.015828	N.S.
Residual	5049.36	296	17.05865		
Total	5120.997	299	17.12708		

*P < .05

Table-3(a)

Means of Responses of Various Groups on (E2) Self -Management

	B1	B2	Total
A1	15.76	15.21	15.48
A2	16.04	14.85	15.44
	15.90	15.03	15.46

Table-3(b)

2X2 Analysis of Variance of Self-management responses of total sample

Source of Variation	Sum of Squares	Df	Mean Square	F	Sig.
Between (A) Team & Individual	8.003333	1	8.003333	0.463642	N.S.
Between (B) High & Low	99.76333	1	99.76333	5.779397*	Sig
2-way Interaction A X B	0.083333	1	0.083333	0.004828	N.S.
Residual	5109.52	296	17.26189		
Total	5217.37	299	17.4494		

*P < .05

Table-4(a)

Double Blind Peer-Reviewed Refereed Indexed On-Line International Journal

167

Means of Internality (E3) Response of Various Groups

	B1	B2	Total
A1	14.98	12.03	13.51
A2	16.71	11.12	13.91
	15.84	11.57	13.71

Table-4(b)

2X2 Analysis of Variance of Internality responses of total sample

Source of Variation	Sum of Squares	Df	Mean Square	F	Sig.
Between (A) Team & Individual	12.40333	1	12.40333	0.751964	N.S.
Between (B) High & Low	1369.603	1	1369.603	83.03346*	Sig
2-way Interaction A X B	129.3633	1	129.3633	7.842771*	Sig.
Residual	4882.4	296	16.49459		
Total	6393.77	299	21.38385		

*P < .05

Table-5(a)

Means of Responses on Motivation (E4) of Various Groups

	B1	B2	Total
A1	19.20	12.04	15.62
A2	18.16	12.37	15.27
	18.68	12.21	15.44

Table-5(b)

2X2 Analysis of Variance of Motivation responses of total sample

Source of Variation	Sum of Squares	Df	Mean Square	F	Sig.
Between (A) Team & Individual	9.363333	1	9.363333	0.546171	N.S
Between (B) High & Low	3142.803	1	3142.803	183.3222*	Sig
2-way Interaction A X B	35.36333	1	35.36333	2.062771	N.S.
Residual	5074.507	296	17.1436		
Total	8262.037	299	27.63223		

*P < .05

Table-6(a)

Means of Empathy (E5) Response of Various Groups

	B1	B2	Total
A1	18.01	13.43	15.720
A2	13.04	15.25	14.15
	15.52	14.34	14.93 (300)

Table-6(b)

2X2 Analysis of Variance of Empathy responses of total sample

Source of Variation	Sum of Squares	Df	Mean Square	F	Sig.
Between (A) Team & Individual	185.6533	1	185.6533	12.17291*	Sig.
Between (B) High & Low	105.6133	1	105.6133	6.924851*	Sig.
2-way Interaction A X B	867	1	867	56.84742*	Sig.
Residual	4514.4	296	15.25135		
Total	5672.667	299	18.97213		

*P < .05

Table-7(a)

Means of Social skills (E6) Response of Various Groups

	B1	B2	Total
A1	18.33	12.65	15.49
A2I	12.00	15.61	13.80
	15.16	14.13	14.65

Table-7(b)

2X2 Analysis of Variance of Social skills responses of total sample

Source of Variation	Sum of Squares	Df	Mean Square	F	Sig.
Between (A) Team & Individual	265.08	1	265.08	16.54263*	Sig.
Between (B) High & Low	8.333333	1	8.333333	0.520051	N.S.
2-way Interaction A X B	1168.213	1	1168.213	72.90373*	Sig.
Residual	4743.12	296	16.02405		
Total	6184.747	299	20.68477		

*P < .05