

Study of Emotional Intelligence among Players of Individual, Dual and Team Sports

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Abstract: The objective of the study was to compare the individual sports, dual sports and team sports on Emotional Intelligence. **Methodology:** For the purpose of the study, 26 players playing individual sport (national level swimmers, weight lifters, badminton players, tennis players, table tennis players, middle distance runners and cyclists), 18 players playing Dual sports (national level Triathletes) and 27 players playing Team sports (All India University Level Volley Ball, Basket Ball, Football, Hockey and Cricket players) male athletes were selected. The age of the athletes were ranging from 18 to 29 year of age. For the assessment of the data on Emotional Intelligence Scale for Sport Persons (EISS) 2005 by Rajitha Menon A. & Dr. Jayashree Acharya (Sports Authority of India Bangalore) was used to assess the Emotional Intelligence level of the athletes. Descriptive statistics was used to find out the mental toughness level of the selected athletes and to examine the significance differences among the athletes of different sports on mental toughness One Way ANOVA was used and the hypothesis was tested at .05 levels of significance. **Results:** The mean and standard deviation of the factors of Emotional Intelligence Scale for student without sports, physical education and students with sports are Self Awareness (22.96 ± 3.30), (24.67 ± 2.33) and (22.85 ± 3.86), Self Regulation (18.92 ± 3.50), (22.33 ± 4.30) and (22.04 ± 4.86), Motivation (19.50 ± 4.37), (24.33 ± 3.18) and (22.56 ± 3.98), Empathy (22.58 ± 4.08), (21.44 ± 4.36) and (22.81 ± 3.78), Social Skill (19.96 ± 3.74), (23.94 ± 3.39) and (21.22 ± 4.02) and Total Emotional Intelligence Score (103.92 ± 12.43), (116.72 ± 10.42) and (111.48 ± 13.16) respectively. To compare the Emotional Intelligence of the selected sports athletes, the one way analysis of variance was applied. The ANOVA result shows that the p-value of the factors of the Emotional Intelligence of the selected athletes is less than 0.05 and hence the F - value is significant at 5 % level. In order to determine which groups differs significantly, the post hoc mean comparison was obtained by applying LSD Test. The Post hoc Comparison of Means was applying by using LSD Test and the results shows that there exists a significant difference in the factors of Emotional Intelligence in between Individual and Dual ($p = .011$) and Individual and Team ($p = .010$) in Self Regulation, Individual and Dual ($p = .000$) and Individual and Team ($p = .006$) in Motivation, Individual and Dual ($p = .001$) and Dual and Team ($p = .020$) in Social Skill and Individual and Dual ($p = .001$) and Individual and Team ($p = .028$) in Total Emotional Intelligence Score respectively as their obtained "p-values" were less than 0.05 ($p < .05$). This implies that in spite of similarities in nature of events there exist differences, or there are special requirements for participation in these sports. The existence of similarities in between these groups is prevalent in Individual and Dual ($p = .099$) Individual and Team ($p = .905$) and Dual and Team ($p = .077$) in self awareness, Dual and Team ($p = .820$) in self regulation, Dual and Team ($p = .144$) in motivation, Individual and Dual ($p = .364$) Individual and Team ($p = .831$) and Dual and Team ($p = .269$) in empathy, Individual and Team ($p = .227$) in social skill and Dual and Team ($p = .164$) in Total Emotional Intelligence Score respectively as their obtained "p-values" were greater than .05 ($p > .05$). **Conclusion:** Additional research is needed to find out the real reason of similarities and difference exists in the present study to fulfill the gap between theoretical research and practice is to be bridged.

Keywords: Emotional Intelligence, Self Awareness, Self Regulation, Motivation, Empathy, Social Skill, Total Emotional Intelligence Score, individual sports, team sports, dual sports

1. Introduction

Sport psychology is defined as the application of the knowledge and scientific methods of psychology to the study of people in sport & exercise settings. The word psychology refers to the study of human behavior, and sport psychology denotes a sub category of psychology that deals with the behavior of athletes and teams engaged in competitive sports. Performance in sport is no longer dependent on physiological well-being of the athlete. It is well established by now that there are numerous psychological factors which effect and improve the physical performance. The psychological factors are individual differences among the athletes, personality, intelligence, attitude of the player, motivation, aggression, arousal and activation, anxiety, attention and concentration, mental imagery and group dynamics. These factors are effective to player's physical performance (Gawali & Pekhale, 2012). Over the past five years, sport psychology researchers and practitioners have become increasingly vocal in their suggestions that emotional intelligence (EI) may be an important construct in the sport domain. Initial research in sport has been valuable for gaining preliminary insights, but

use of disparate theoretical frameworks and assessment techniques confuses rather than clarifies potential links between emotional intelligence and sport. Specifically, the use of different definitions, conceptualizations, and assessment inventories may yield different emotional intelligence profiles of the same individual or team (Meyer & Fletcher, 2007). Stay motivated and setting a strong goals and targets is necessary for all the athletes and are contributing for prediction of performance for athletes (Wielinga et al., 2011). An exercise program stressing the components of muscular endurance and muscular strength increases self-concept. Physical exercise has been linked to good mental health and positive self-concepts (James, 1982). Most of the coaches trained their athletes through vigorous and various training methods for success but mental skill is also an important aspect to develop confidence, positive thought, motivated and focused which help to achieve the target goals (Friel, 2009). Austin et al. (2012) state that if the body is strong but the mind is weak, all physical gains are lost. Ruggedness, courage, intelligence, exuberance, buoyancies, emotional adjustment, optimism, conscientiousness, alertness, loyalty and respect for authority are Characteristics of the great athletes. Successful

athletes did indeed possess more positive mental health characteristics and fewer negative mental health characteristics than the general population. Successful athletes were above the waterline (population norm) on vigor, but below the surface on the more negative moods of tension, depression, anger, fatigue and confusion (Gill, 1986). Perfectionist personal standards develop the goals setting and also help athletes to achieve their best possible performance (Stoerber et al., 2009). Javeed (2012) in his study stated that female players have significantly high spiritual health than the male players. 2. Male players have significantly high emotional intelligence than the female players. And sportsmen have significantly high emotional intelligence than the non-sportsmen (Javeed). Femininity and intelligence were significantly lower for all athletic groups when compared with the nonathletic group. Hypochondriasis was significantly higher for all athletic groups, except swimmers, when compared with the nonathletic group (Slusher, 1964). The creativity and emotional intelligence of basketball and volleyball player's students were no significant difference (Ruikar & Wankhade, 2013). Sports persons report higher mental health indexed in shape of life e.g. positive self evaluation perception of reality integration of personality autonomy group oriented attitude environmental competence overall than their non-Sports persons counterparts (Singh & Tiwari). On the factor intelligence, university players were found better than the college players in Basketball (Mariappan & Alexander, 2014). The athlete's participants with the lowest Emotional Intelligence (EI) scores reported greater intensity of precompetitive cognitive anxiety than those with the highest Emotional Intelligence (EI) scores (Lu et al., 2010). The emotional intelligence can enhance leadership performance, team cohesion, and coping with pressure (Bal

et al., 2011). Likewise to be perfect in the sport one should have to be very good in psychological aspect as well as physically. The mental skills training approaches need to be evaluated if the gap between theoretical research and practice is to be bridged (Crust, 2008). So the researcher is very interested to know the present emotional intelligence level of the National Individual, Dual and Team sports and to compare whether the selected sports have similar EI level or not and then to know which sport is having better Emotional Intelligence level.

2. Methodology

For the purpose of the study 26 Individual sport (national level swimmer, weight lifter, badminton player, tennis player, table tennis player, middle distance runners and cycling), 18 Dual sports (national level Triathletes) and 27 Team sports (All India University Level Volley Ball, Basket Ball, Football, Hockey and Cricket players) male athletes were selected. The age of the athletes were ranging from 18 to 29 year of age. For the assessment of the data on Emotional Intelligence Scale for Sport Persons (EISS) 2005 by Rajitha Menon A. & Dr. Jayashree Acharya (Sports Authority of India Bangalore) was used to assess the Emotional Intelligence level of the athletes. Descriptive statistics was used to find out the mental toughness level of the selected athletes and to examine the significance differences among the athletes of different sports on mental toughness One Way ANOVA was used and the hypothesis was tested at .05 levels of significance.

3. Results

Table 1: Descriptive Statistics of selected athletes on various factors of Emotional Intelligence Scale

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
						Lower Bound	Upper Bound		
Self Awareness	Individual Sport	26	22.96	3.30	.65	21.63	24.30	16	28
	Dual Sport	18	24.67	2.33	.55	23.51	25.82	21	28
	Team Sport	27	22.85	3.86	.74	21.32	24.38	12	28
	Total	71	23.35	3.37	.40	22.55	24.15	12	28
Self Regulation	Individual Sport	26	18.92	3.50	.69	17.51	20.34	12	24
	Dual Sport	18	22.33	4.30	1.01	20.20	24.47	12	28
	Team Sport	27	22.04	4.86	.94	20.11	23.96	10	28
	Total	71	20.97	4.48	.53	19.91	22.03	10	28
Motivation	Individual Sport	26	19.50	4.37	.86	17.73	21.27	11	27
	Dual Sport	18	24.33	3.18	.75	22.75	25.92	18	28
	Team Sport	27	22.56	3.98	.77	20.98	24.13	13	28
	Total	71	21.89	4.36	.52	20.86	22.92	11	28
Empathy	Individual Sport	26	22.58	4.08	.80	20.93	24.23	14	29
	Dual Sport	18	21.44	4.36	1.03	19.28	23.61	10	27
	Team Sport	27	22.81	3.78	.73	21.32	24.31	14	28
	Total	71	22.38	4.02	.48	21.43	23.33	10	29
Social Skill	Individual Sport	26	19.96	3.74	.73	18.45	21.47	13	27
	Dual Sport	18	23.94	3.39	.80	22.26	25.63	16	28
	Team Sport	27	21.22	4.02	.77	19.63	22.81	14	28
	Total	71	21.45	4.03	.48	20.50	22.40	13	28
Total Emotional Intelligence Score	Individual Sport	26	103.92	12.43	2.44	98.90	108.94	83	131
	Dual Sport	18	116.72	10.42	2.46	111.54	121.90	98	132
	Team Sport	27	111.48	13.16	2.53	106.27	116.69	78	138
	Total	71	110.04	13.12	1.56	106.94	113.15	78	138

The mean and standard deviation of the factors of Emotional Intelligence Scale for student without sports, physical education and students with sports are **Self Awareness** (22.96 ± 3.30), (24.67 ± 2.33) and (22.85 ± 3.86), **Self Regulation** (18.92 ± 3.50), (22.33 ± 4.30) and (22.04 ± 4.86), **Motivation** (19.50 ± 4.37), (24.33 ± 3.18) and (22.56 ± 3.98), **Empathy** (22.58 ± 4.08), (21.44 ± 4.36) and (22.81 ± 3.78), **Social Skill** (19.96 ± 3.74), (23.94 ± 3.39) and (21.22 ± 4.02) and **Total Emotional Intelligence Score** (103.92 ± 12.43), (116.72 ± 10.42) and (111.48 ± 13.16) respectively.

To compare the Emotional Intelligence of the selected sports athletes, the one way analysis of variance was applied and data pertaining to these have been presented in table 2.

Table 2: Comparison of selected athletes by applying one way analysis of variance

	df	Mean Square	Sum of Squares	F	Sig.
Self Awareness	2	20.914	41.828	1.890	.159
Self Regulation	2	86.567	173.135	4.767	.012*
Motivation	2	133.966	267.932	8.568	.000*
Empathy	2	10.934	21.868	.669	.515
Social Skill	2	85.502	171.005	6.028	.004*
Total Emotional Intelligence Score	2	916.338	1832.675	6.103	.004*

* The mean difference is significant at the 0.05 level.

The ANOVA result shows that the p-value of the factors of the Emotional Intelligence of the selected athletes is less than 0.05 and hence the F - value is significant at 5 % level.

In order to determine which groups differs significantly, the post hoc mean comparison was obtained by applying LSD Test.

Table 3: Post hoc Comparison of Means by using LSD Test

Dependent Variable	(I) groups	(J) groups	Mean Difference (I-J)	Std. Error	Sig.
Self Awareness	Individual Sport	Dual Sport	-1.71	1.02	0.099
		Team Sport	0.11	0.91	0.905
	Dual Sport	Team Sport	1.81	1.01	0.077
Self Regulation	Individual Sport	Dual Sport	-3.41	1.31	.011*
		Team Sport	-3.11	1.17	.010*
	Dual Sport	Team Sport	0.3	1.3	0.82
Motivation	Individual Sport	Dual Sport	-4.83	1.21	.000*
		Team Sport	-3.06	1.09	.006*
	Dual Sport	Team Sport	1.78	1.2	0.144
Empathy	Individual Sport	Dual Sport	1.13	1.24	0.364
		Team Sport	-0.24	1.11	0.831
	Dual Sport	Team Sport	-1.37	1.23	0.269
Social Skill	Individual Sport	Dual Sport	-3.98	1.15	.001*
		Team Sport	-1.26	1.03	0.227
	Dual Sport	Team Sport	2.72	1.15	.020*
Total Emotional Intelligence Score	Individual Sport	Dual Sport	-12.8	3.76	.001*
		Team Sport	-7.56	3.37	.028*
	Dual Sport	Team Sport	5.24	3.73	0.164

* The mean difference is significant at the 0.05 level.

The Post hoc Comparison of Means was applying by using LSD Test and the results shows that there exists a significant difference in the factors of Emotional Intelligence in between Individual and Dual ($p = .011$) and Individual and Team ($p = .010$) in Self Regulation, Individual and Dual ($p = .000$) and Individual and Team ($p = .006$) in Motivation, Individual and Dual ($p = .001$) and Dual and Team ($p = .020$) in Social Skill and Individual and Dual ($p = .001$) and Individual and Team ($p = .028$) in Total Emotional Intelligence Score respectively as their obtained "p-values" were less than 0.05 ($p < .05$). This implies that in spite of similarities in nature of events there exist differences, or

there are special requirements for participation in these sports. The existence of similarities in between these groups is prevalent in Individual and Dual ($p = .099$) Individual and Team ($p = .905$) and Dual and Team ($p = .077$) in self awareness, Dual and Team ($p = .820$) in self regulation, Dual and Team ($p = .144$) in motivation, Individual and Dual ($p = .364$) Individual and Team ($p = .831$) and Dual and Team ($p = .269$) in empathy, Individual and Team ($p = .227$) in social skill and Dual and Team ($p = .164$) in Total Emotional Intelligence Score respectively as their obtained "p-values" were greater than .05 ($p > .05$).

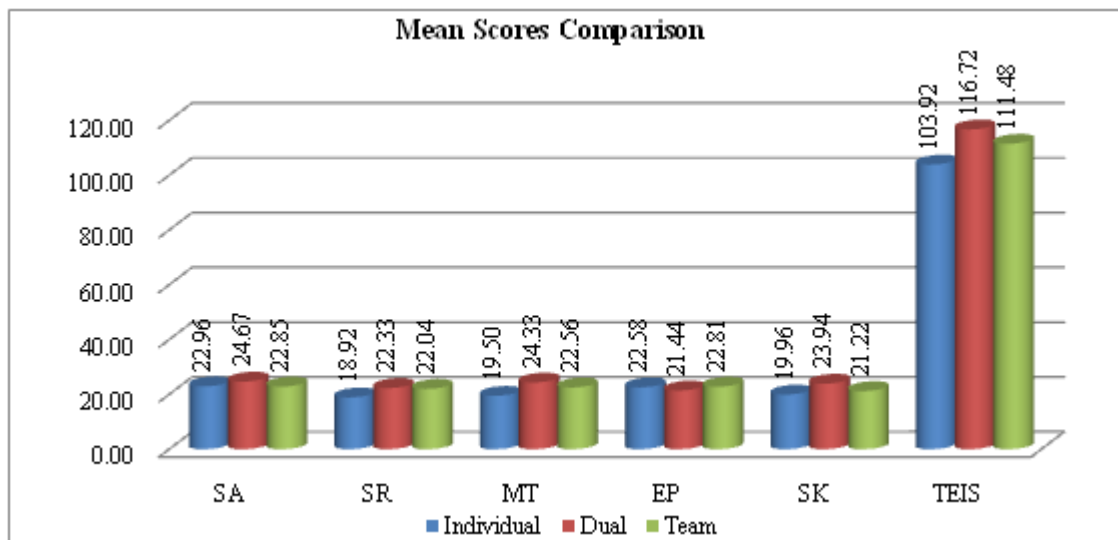
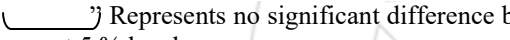


Figure 1: Comparison of mean scores of the various factors of Emotional Intelligence in pie diagram chart

Self Awareness (SA), Self Regulation (SR), Motivation (MT), Empathy (EP), Social Skill (SK), Total Emotional Intelligence Score (TEIS).

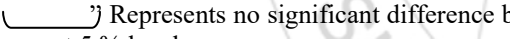
Mean of the groups with graphics on Self Awareness

Individual Sports	Dual Sports	Team Sports
22.96	24.67	22.85

“” Represents no significant difference between the means at 5 % level.

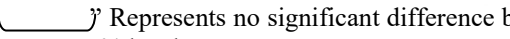
Mean of the groups with graphics on Self Regulation

Individual Sports	Dual Sports	Team Sports
18.92	22.33	22.04

“” Represents no significant difference between the means at 5 % level.

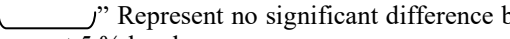
Mean of the groups with graphics on Motivation

Individual Sports	Dual Sports	Team Sports
19.50	24.33	22.56

“” Represents no significant difference between the means at 5 % level.

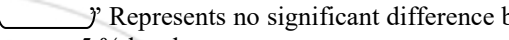
Mean of the groups with graphics on Empathy

Individual Sports	Dual Sports	Team Sports
22.528	21.44	22.81

“” Represent no significant difference between the means at 5 % level.

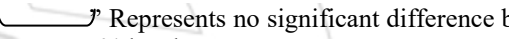
Mean of the groups with graphics on Social Skill

Individual Sports	Dual Sports	Team Sports
19.96	23.94	21.22

“” Represents no significant difference between the means at 5 % level.

Mean of the groups with graphics on Social Skill

Individual Sports	Dual Sports	Team Sports
103.92	116.72	111.48

“” Represents no significant difference between the means at 5 % level.

4. Findings and Discussion

Femininity and intelligence were significantly lower for all athletic groups when compared with the nonathletic group. Hypochondriasis was significantly higher for all athletic groups, except swimmers, when compared with the nonathletic group (Slusher, 1964). Team emotional intelligence was positively associated with the sports performance of the cricket teams. And further, Team emotional intelligence was shown to be a significant predictor of sports performance, with 61% of the variation in the log points explained. This finding suggests that emotional intelligence may contribute to the success of teams participating in complex sports like cricket (Crombie et al., 2009). O'Connor & Webb (1976) studied stated that the significant differences were found to exist between groups (basketball, gymnastics, tennis, swimming and non sport athlete) on the factors of intelligence, radicalism, self-sufficiency and control. The present study also shows that the significant difference exists in the factors of Emotional Intelligence in between Individual & Dual and Individual & Team in Self Regulation, Individual & Dual and Individual & Team in Motivation, Individual & Dual and Dual & Team in Social Skill and Individual & Dual and Individual & Team in Total Emotional Intelligence Score. There is no valid evidence that participation in sport causes any verifiable socialization effects (Stevenson, 1975). And there was a significant difference between the two groups (individual and team sports) in terms of psychological skills and motivation of athletic success but there wasn't a significant difference between the two groups (individual and team sports) with respect to overall emotional

intelligence (Kajbafnezhad et al., 2011). The existence of similarities in between these groups is prevalent in Individual & Dual, Individual & Team, and Dual & Team in self awareness, Dual & Team in self regulation, Dual & Team in motivation, Individual & Dual, Individual & Team and Dual & Team in empathy, Individual & Team in social skill and Dual & Team in Total Emotional Intelligence Score respectively. There is lack of critical literature to bring any conclusion to support the similarities exists between the groups in various factors of emotional intelligence. But being nature of athletes are competitive and to participate in the competition or championship they have to be very fit in mentally as well as physically so this might bring the similarities exists between the groups. Still the further research is highly needed to find out the real causes of similarities and differences between the groups of sports.

5. Conclusion

The present study shows that the significant difference exists in the factors of Emotional Intelligence in between Individual & Dual and Individual & Team in Self Regulation, Individual & Dual and Individual & Team in Motivation, Individual & Dual and Dual & Team in Social Skill and Individual & Dual and Individual & Team in Total Emotional Intelligence Score. The existence of similarities in between these groups is prevalent in Individual & Dual, Individual & Team, and Dual & Team in self awareness, Dual & Team in self regulation, Dual & Team in motivation, Individual & Dual, Individual & Team and Dual & Team in empathy, Individual & Team in social skill and Dual & Team in Total Emotional Intelligence Score respectively. Additional research is needed to find out the real reason of similarities and difference exists in the present study. The efficacy of proposed methods of enhancing emotional intelligence such as environmental manipulations, and mental skills training approaches need to be evaluated if the gap between theoretical research and practice is to be bridged.

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