



## **Difference between Team and Individual Sports with Respect to Psychological Skills, Overall Emotional Intelligence and Athletic Success Motivation in Shiraz City Athletes**

**Hadi Kajbafnezhad<sup>1</sup>, Hassan Ahadi<sup>1</sup>, Ali Reza Heidarie<sup>1</sup>, Parviz Askari<sup>1</sup>, MirSalahedin Enayati<sup>1</sup>**

<sup>1</sup>Department of Psychology, Sciences and Research Branch, Islamic Azad University, Khuzestan, Iran

---

### **ABSTRACT**

This research was conducted to compare the psychological skills, overall emotional intelligence and athletic success motivation between team and individual sports. The research sample consisted of 400 male athletes (247 individual and 153 team) that were selected via randomly multistage sampling method and subjects completed the psychological skills questionnaire Ottawa-3, Bar-On emotional intelligence inventory and perception of sport success questionnaire. Data were analyzed using mean, standard deviation and MANOVA statistical method. The finding (MANOVA) showed that there was 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.

**KEY WORDS:** Psychological skills; overall emotional intelligence; motivation of athletic success; team and individual sports.

---

### **INTRODUCTION**

Today, in the world of sport, physical exercise is not regarded as the main factor to achieve success. In addition to physical and tactical abilities and professional skills, undoubtedly the abilities and personality traits are an effective factor in athletic success, since success in sport competition is related to a range of factors. Furthermore, the competitive nature of sport and perform under stressful condition caused to each athletes experience different emotions that can impact on sport performance. The psychological characteristics (success motivation, mental skills and emotional intelligence) assume that have an influence on sport behavior and athletic performance but due to the specific nature of environment stimuli and difference stressors in each type of sport, can not assume that all sports are similar. There are also variety of factors in sport disciplines and competition in terms of the type of sports be cause athletes experience specific psychological behaviors and in consequence this experiences as a result will appear specific psychological phenomenon that recognize this the phenomenon can help coaches and sport psychologist that recognize the players who are weak in some psychological characteristics. with attention to nature and type of sports (group and individual) in the group sports like football, basketball, handball in comparison with individual sports due to nature of their sports caused to do many fouls during competition, as a result experienced negative emotion and behaviour problematic. In contrast in individual sports, athletes are depends on to their abilities. In individual sports, performance criteria is one dimensional while in group sports performance depends on the teammates performance. but in team sports, athletes are involvement with teammates and spending many mount of practicing with teammates and have more interaction another and cooperating with peers, in contrast individual sports spending many mount of time alone in practicing. In some of individual sports athlete has more time for mental skills practice and conduct in quiet environment while distract and loss of concentrate are part of the team sports. In individual sports, contest outcome is either winning or losing and there isn't tie. These factors can cause and explain, distinguish different sports in terms of psychological features that athletes use. As Taylor (1995) stated that each sport has special physical, technical characteristics which require special skills for athletes. For example in sports that explosiveness will differ greatly from those that require endurance, sports which require fine motor skills in contrast sports which require gross motor skills will influence the type of mental skills that is done (shooting in contrast power lifting), the sports that less than a minute has significantly different psychological demands than one that three hours for example, 100-meter running in contrast baseball game (see Taylor, 1999). Researchers of sport psychologists (Mahony and

---

\*Corresponding Author: Hadi Kajbafnezhad, Department of Psychology, Sciences and Research Branch, Islamic Azad University, Khuzestan, Iran. Email: hkajbaf@yahoo.com

et al, 1987) indicated that there is a difference between psychological profile athletes of team sports and individual sports. Cox & Liu (1996) found that athletes of individual sports because can not rely on the teammate have higher level of preparation. Research Gotwals and Wayment (2002) showed that type and nature sports are difference in terms of some features. Jones & Hanton (1995) stated that athletes in different sports during competition give different responses to stimulates and according to mental skills their interpretation is different from the anxiety and also believe that skills which in the open skills sports (which are preferably group) are should not necessarily be used in the closed skills sports (which are more individual). In addition to psychological skills construct, athletes for achieve to their sport goals must have been desire for motivation success. Motivation success is considered as one of the main characteristics of successful performance and lead to successful performance (Weinberg & Gould, 1995). The achievement motivation important issue in sport psychology and is related to the rate of effort and perseverance in the sport. Athletic success and cope on the difficulties require mental ability that motivates the foundation of this psychological ability. Daniel & et al (2002) concluded that athletes of team sports are win orientation than the individual athletes'. Research Wartenberg and Maccutcheon (1998) showed that male athletes of hockey sport than athletes recreational sports gained better scores in winning oriented. The competitive nature of sport and perform under stressful condition caused to each athletes experience different emotions that can impact on sport performance. Athletes for understand and recognize, how to regulate and dealing with negative emotion in certain situation needed to strategies and skills in order to control and manage their emotions. The regulation and management of emotions could related to construct of emotional intelligence, that defined as personality ability to control feeling and emotions, and a new method for improve and enhance performance although recognize, regulation, and management of emotions (Mayer, Salovey & Caruso, 2004). Emotional intelligence as a adjustment method, and mechanism that facilitate successful performance and effective goals (Mayer et al, 2005). Among relatively new construct that have been appeared in recent years in psychology field in order to improvement of emotional regulation and management of emotions, emotional intelligence has been more important. Researches demonstrate that emotional intelligence is a useful and efficacy construct for use in applied situations such as sport. As a result, sport psychologist have a desire for investigate about construct of emotional intelligence (Meyer & Fletcher, 2007; Meyer & Zizzi, 2007, & Lane et al, 2009), since is associated with athletic successful performance. In investigate lane & et al (2009) examination relationship between emotional intelligence and mental skills, result of investigate dictates that was related emotional intelligence with mental skills, those both could associate to successful performance and emotions management. On the other hand, athletes high in emotional intelligence were most likely to usage of mental skills to regulate emotions. Athletes who used of mental skills have higher emotional intelligence (Lane et al, 2009). Regarding importance of these psychological constructs in the sport behavior. Thus objective of the present study was to achieve a more detail understanding of important aspects of personality team and individual sports athletes to use coaches and who the consultant work with athletes.

## METHOD

This research is an ex post facto (casual-comparative) design, whether there is a difference between team and individual sports with respect to constructs of mental skills, overall emotional intelligence and athletic success motivation. Following ethical approval from the Physical Education Organization Shiraz city and referring to exercise sessions and explain the research objectives participants completed the psychological skills questionnaire Ottawa-3, Bar-On emotional intelligence inventory and perception of sport success questionnaire.

### Participants

Participants of this study include 400 male athletes who are member of one of the sport clubs and regularly participate in team practice at least three sessions per week and in the last year have been place on the competition conditions. Then, with multi-stage random sampling method were selected 400 athletes among different sports. 247 individual athletes including: swimming (8) combating sports Karate, Taekwondo, Judo, kickboxing (115) Track & Field (20) High Jump (1) Weightlifting (7) Gymnastics (3) Table Tennis (2) Badminton (3) Wrestling (60) Boxing (10) Shooting (10) Body Building (7) and Rock climbing (1),

and 153 athletes of team sports including: Football (20), Futsal (41), Water polo (12) Basketball (20), Volleyball (12), Hockey (15) Rugby (8) and Handball (25).

## Measures

Bar-On (1997) Emotional Intelligence Questionnaire a self-report scale to assess behaviours associated with social and emotional intelligence that consists of 90 questions and each question is rated on a 5-point Likert scale ranging from 5 (strongly agree) to 1 (strongly disagree) and some questions with negative or reverse content from 1 (strongly agree) to 5 (strongly disagree). This questionnaire has five factors that is composed of 15 components: (1) intrapersonal (emotional self-awareness, assertiveness, self-respect, self-actualization and independence) (2) interpersonal (empathy, responsibility and interpersonal relationships), (3) stress management (stress tolerance and impulse control), (4) adjustment (problem solving, realism and flexibility) (5) general moods (optimism and happiness). Bar-On Emotional Intelligence questionnaire is the first valid and free-culture questionnaire for emotional intelligence assessment. Questionnaire reliability was calculated by Cronbach alpha coefficients that average about 0.76 and for the subscales from 0.69 (social responsibility) to the coefficient 0.86 for (self-respect). By test-retest method after a month of 0.85 and after four months 0.75 was reported. Questionnaire validity through construct validity has been confirmed. In the present study the Questionnaire reliability has been calculated 0.93 by Cronbach alpha coefficient. **Ottawa-3 test** is the most comprehensive test for assessment of mental preparation that exclusively is used for athletes. The third version of this questionnaire is 48 questions, and rated on a Likert scale range of 5 degrees, from 5 (always) to 1 (never) and some questions with reverse content from 1 (always) to 5 (never). Research findings Durand – Bush & (2001) high internal consistency with alpha coefficients from 0.68 to 0.88 for this scale have been reported. In the present study the Questionnaire reliability has been calculated 0.88 by Cronbach alpha coefficient. For validity this scale was used for criterion validity, that simultaneously mental skills questionnaire and coping skills questionnaire (Smith & et al, 1995) were conducted on the subjects, and was obtained correlation coefficient ( $r=0.60$ ) that indicates criterion validity of the mental skills questionnaire to be desired aspect psychometrics.

**The Perception of success questionnaire** (Roberts, Treasure & Balague, 1998). Questions based on were feelings of success in sport and questions determine achievement motivation in sport. Questions as a criterion is used that whether the athlete to achieved success or not? (Roberts & et al, 1998) final version consisted of 12 questions and based on the Likert scale of 5 degrees, from 5 (strongly agree) to 1 (strongly disagree). Roberts, Treasure & Balague (1998) high internal consistency by Cronbach alpha coefficient 0.82 and with test-retest method ( $r=0.80$ ) was reported. Validity of this scale with using criterion validity by questionnaire Duda and Nicholls (1992) have been reported favourable. In the present study in order to criterion validity the perception of sport success questionnaire simultaneously with achievement motivation questionnaire Gill & Deater (1998) was conducted on the athletes of research sample that is obtained the correlation coefficient ( $r=0.40$ ). Also in the present study the Questionnaire reliability has been calculated ( $r=0.79$ ) by Cronbach alpha coefficient.

## Data analysis

The findings of this study in two parts are presented, descriptive findings and the findings related to the research question. Findings related to the mean, standard deviation of mental skills, motivation of athletic success, overall emotional intelligence and its components presented in the Table (1).

As in the Table (1) presents the result of compare between mean and standard deviation of mental skills two groups of subjects showed that there is a significant difference between two groups (team and individual) sports with respect to mental skills, motivation of athletic success. Scores mean of athletic success motivation team sports Athletes more than subjects of individual Sports but there isn't a significant difference between two groups (team and individual) sports with respect to emotional intelligence. Findings related to repeated measures multivariate analysis of variance presents in Table (2).

As in the Table (2) presents the result of data analysis used repeated measures multivariate analysis of variance (MANOVA) indicated that in regard to ( $F=5.72$ ;  $p<0.05$ ) there is a significant difference between mental skills team and individual sports athletes. In regard to also ( $F=8.41$ ;  $p<0.01$ ) there is between athletic success motivation team and individual sports, but in regard to ( $F=2.58$ ;  $p<0.10$ ) there isn't significant difference between overall emotional intelligence team and individual sports athletes.

Table 1: result of mean and standard deviation variable of research in two groups of subjects

variables	individual			group			total			
	Mean	SD	N	Mean	SD	N	Mean	SD	N	
	<b>Mental skills</b>	171	16.9	247	177.91	21.87	153	174	21.09	400
<b>Success motivation</b>	48.02	6.85	247	49.62	5.84	153	49	6.53	400	
<b>Emotional Intelligence</b>	326	33.58	274	331.69	35.58	153	328.2	34.43	400	
Emotional intelligence components	<b>Problem solving</b>	23.61	2.97	247	23.78	3.04	153	23.7	2.99	400
	<b>Happiness</b>	21.73	3.46	247	23.61	3.54	153	22.45	3.61	400
	<b>Independence</b>	21.19	3.87	247	21.45	4.09	153	21.3	3.59	400
	<b>Psychological pressure</b>	20.13	3.47	247	20.32	3.89	153	20.2	3.63	400
	<b>Self actualization</b>	21.87	3.68	247	22.16	3.68	153	21.98	3.68	400
	<b>Emotional self awareness</b>	21.27	3.13	247	21.00	3.25	153	21.17	3.17	400
	<b>Realist</b>	19.08	3.36	247	19.69	3.53	153	19.32	3.43	400
	<b>Interpersonal</b>	24.08	3.38	247	24.35	3.17	153	24.19	3.30	400
	<b>Optimism</b>	33.06	3.06	247	23.29	3.12	153	23.15	3.08	400
	<b>Self-respect</b>	23.34	3.44	247	23.35	3.42	153	23.34	3.43	400
	<b>Impulse control</b>	17.68	3.47	247	18.47	4.99	153	17.99	4.66	400
	<b>Flexibility</b>	19.24	3.32	247	19.54	3.12	153	19.35	3.25	400
	<b>Responsible</b>	24.97	3.35	247	25.72	3.33	153	25.26	3.36	400
	<b>empathy</b>	23.40	3.44	247	23.73	3.04	153	23.53	3.29	400
<b>Self perception</b>	19.14	3.57	247	19.28	3.33	153	19.19	3.48	400	

Table 2: Findings related to Repeated Measures Multivariate Analysis of Variance

variables	Sum of Squares	Mean Square	F	Sig
<b>Success motivation</b>	240.84	240.84	5.720	0.05
<b>Mental skills</b>	3677.45	3677.45	8.414	0.01
<b>Emotional intelligence</b>	3044.44	3044.44	2.589	0.10

## DISCUSSION AND CONCLUSION

The purpose of the present study was to Comparison between mental skills, overall emotional intelligence and athletic success motivation between team and individual sports athletes. In associate with the first question of research, result indicated that there is difference between team and individual sports in terms of mental skills. In explaining this difference, it should be noted that despite the mental skills one of important factors in the success of athletes but the pattern of this impact is not the same in athletes with different levels (beginner, amateur, sub elite, elite) and type of sport (team and individual). Overall, in the use of psychological skills to moderate stressful conditions are different. By attention to that athletes the present study were different in some of important variables such as age, sports experience, knowledge level, training level, sport complex level and team motivational climate, these factors are influence on athletes perception of mental skills. As a result, athletes shown different pattern of mental skills. also it should be noted that athletes the present study experienced and become in the face with different stresses and conditions, that in accordance with previous researches (Jones and Hanton, 1996; Taylor, 1995) based on is that, in terms of nature and type of sports seem to that between the team and individual sports there is difference in use of the mental skills. The second question of research indicated that there is a significant difference between team and individual sports in terms of athletic success motivation. In explaining this finding it should be noted that team sports athletes the present study to express that they desire for play in famous teams, and his ability to be

recognize by super league coaches. Seems to these factors caused to team sport athletes are constantly in challenge otherwise, will out of the fixing arrange of team. In general, behavioral tendencies relate to achieve motive rising in challenging situations. This result is in accordance with previous search Golby & Sheared (2004). Factors such as expectations of spectators, managers and team coaches or wages players influence on motivation of success and win- orientation in team sport athletes, it is also possible that team sport athletes had more tendency obtain credibility and social status (team sport athletes to expressed that desire play in the teams that are more famous) that can increase success motivation. These findings may be due to different attitudes and feedback of athletes in different sports about the success. In spite of these reported results, team sports athlete's win- orientation than individual sports athletes. In generally, success motivation impact of individual differences. As a result, understanding and awareness of factors that effect on the performance of athletes can help coaches in enhancement their athletes' level from beginner level to amateur level and from amateur to sub elite and elite.

In associate with the third question the result indicated that there isn't a significant difference between team and individual sports athletes in terms of overall emotional intelligence that isn't in accordance with previous researches (Saklofsak,2007) but there may be several explain for this finding in compare with pervious researches. First, previous researches have been related to compare between elite, sub elite, non elite and non-athletes .Second, subjects of pervious researches consists of were men and women and in regard to men in comparison with women are more weak in recognize and express their emotions, also men reluctance of expressing their emotional and personality characteristic. On the other hand, subjects of previous researches were selected of homogeneous groups, while subjects of the present study included athletes of different disciplines and levels. Third, apart from the type of sports (group or individual) participation in sport activities and social interactions as a strong social factor can improving social skills and social behaviors, and both sports (team and individual) because of placing in sport environment get positive feedback from the environment, as a result emotional intelligence is assumed as a positive personality trait. In general, research findings suggest that Coaches in different disciplines of sport and applied sport psychology must recognize different aspects of personality because it will help them in selecting players for the important responsibilities. Finally it is necessary to state that sample of research only included male athletes thus results should not be generalized to women's.

## REFERENCES

- Bar-On,R.(1997).Emotional quotient inventory Toronto Canada: Multi-Health system, Inc.  
Boyatzis,R.E&Sala,F.,(2004):Assessing emotional intelligence competencies. Massachusetts: The Hay Group.
- Cox,R.H,Liu,Z.,&Qiu,Y.(1996).Psychological skills of elite athletes. International Journal of sport psychology,27,123-132.
- Daniel,R.,Czech Kevin,I.,Burke,A,Burry,Joyner .,& Chavlesy,H.(2002).An exploratory investigation of optimism ,pessimism and sport orientation. International sports Journal .6,2,Academic Research Libaray.
- Duda,J.L.,&Nicholls,J.C.(1992).Dimensions of achievement motivation in schoolwork and sport. Journal of educational psychology,84,290-299.
- Durand-Bush,N.,salmela,J.H.,&Green-Demers,I.(2001). The Ottawa mental skills Assessment Tool (OMSAT-3).The sport psychologist, 15.1-19.
- Gill,D.L.,&Deeter,T.E.(1988).Development of the sport orientation questionnaire Research Quarterly for Exercise and sport,59,145-159.
- Golby,J.,& Sheared,M. (2004).Mental toughness and hardiness at different level of rugby league .Journal personality and individual differences.37,933-944.
- Gotwals,J.,& wayment.h. (2002).Evaluation strategies, self esteem and athletic performance .Journal current research in social psychology. Volume.8, number6.20,1-12.
- Jones, G., & Hanton, S. (1996). Interpretation of competitive anxiety symptoms in elite and non elite sports performance. Personality and Individual difference. 17, 657-663.
- lane,A.TheIwell,R.lowther,J. & Davenport,T.J.(2009).Emotional intelligence and psychological skills use among athletes .Social behavior and personality: an international Journal . volume37, number 2, p.p195\_201 (7).
- Mahoney, M. J., Gabriel, T. J., & Perkins, T. S. (1987). Psychological skills and exceptional athletic performance. The sport psychologist, 1, pp. 181-199.

- Meyar, B., & Fletcher, T. (2007). Emotional Intelligence :A theoretical overview and Implications for research and professional practice in sport psychology. *Journal of applied sport psychology* volume 19, Number, January 2007, pp.1-15.
- Mayer, J., Salovey, P., & Caruso, D. (2004). Emotional intelligence: Theory, finding, and implication *Psychological Inquiry* , 15, 197-215.
- Mayer, J., Salovey, P., Panter, P., Caruso, D., & Sitarenios, G. (2005). A discrepancy in analyses of the MSCEIT-resolving the mystery and understanding its implication: A reply to Gignac. *Emotion*, 5(2):236-237. DOI:10.1037/1528.5.2.236.
- Mayer, B.B., & Zizzi, S. (2007). Emotional intelligence in sport: conceptual, methodological, and applied issue
- Roberts, G. G; Tressure, D. C., & Balague, G. (1998). Achievement goals in sport: the development and validation of the perception of success Questionnaire *Journal of sports science*. 16, 337-347.
- Smith, R.E., Schutz, R.W., Smoll, F.L., & Ptacek, J.T. (1995). Development and validation of multi-dimensional measure of sport-specific psychological skills: The Athletic Coping Skills Inventory-28. *Journal of sport and Exercise Psychology*, 17, 379-398.
- Saklofske, D.H. (2007). Personality, emotional intelligence and exercise. *Journal health psychology*, 12(6):937-948. DOI:10.1177/1359105307082458.
- Taylor, J. (1995). A conceptual model of the integration of athletic needs and sport demands in the development of competitive mental preparation strategies. *The Sport Psychologist*, 9, 339-357.
- Wartenberg, L., & McCutcheon, L. (1998). Further reliability and validity of data on the sport orientation questionnaire. *JSB*. V21, N2P21.(3).
- Weinberg, R., & Gould, D. (1995). *Foundation of sport and exercise psychology* Campaigns , IL: human Kinetics Publishers.