

Investigation and Comparison of Aggression in Olympic and Non-Olympic Athletes of Sport Fields

Mohammad Hassan Boostani^{1*}, Mohammad Ali Boostani², Ali Mohammad Rezaei³, Mohammad Ali Kohanpour⁴

^{1,2} Islamic Azad University, Arsanjan Branch - Young Researchers Club, Iran

³ Department of psychology, faculty of psychology, Islamic Azad University, Arsanjan Branch, Fars, Iran

⁴ Department of Exercise Physiology, faculty of physical education and sports sciences, Islamic Azad University, Central Tehran Branch, Tehran, Iran

[Corresponding author: Email: boostani_mh@yahoo.com](mailto:boostani_mh@yahoo.com)

Abstract: Many of sport psychological researchers consider aggression and violence as a serious problem in sport especially contact fields that follow annually a lot of privation and harms for athletes and responsables. In the some direction this research do with the aim of investigation of aggression situation in Olympic athletes of contactable sport fields and non-Olympic, compare these fields with each other and compare with non-athletes. 96 number of elite athletes of different sport fields, taekwondo, judo, wrestling, boxing (as an athlete's of Olympic sport fields), karate, wu shu, kickboxing and kung fu (as an athlete's of non-Olympic sport fields) with having at least international place in his field, along with 96 non-athletes take part in this research. Findings of research shows significant difference in different components of aggression among research groups ($p < 0.001$). Significant difference was seen among Olympic athletes in contactable sport fields and non-Olympic and also non-athletes, generally from an aggression point, and aggression components. Research Findings of research shows that Olympic athletes in sport fields has less aggression from non-Olympic athletes in sport fields, that this important shows great effects of Olympic movement purposes in sports and moral, mental and psychological characteristics of elite athletes of Olympic sport fields. Just as important purposes of Olympic movement, is promoting and developing moral and physical characteristics of individuals and education of youth through sport, according to results of this research and same researches find that Olympic games is something higher than holding a number of competitions every four years in part of a world. In fact, in depth of it, hidden moral, basic aims and education of Olympic movement and philosophy in international level.

[Boostani MH, Boostani MA, Rezaei AM, Kohanpour MA. **Investigation and Comparison of Aggression in Olympic and Non-Olympic Athletes of Sport Fields.** *J Am Sci* 2012;8(10):171-174]. (ISSN: 1545-1003). <http://www.jofamericanscience.org>. 25

Keywords: Aggression; Olympic games; Olympic movement; Sport psychology; Violence

1. Introduction

Sport as a behavior, is part of life and for some of people is all the life. Sport as a behavior, has psychological dimensions and what is important is that, sometimes this behavior affect personality and nature of one person so far as existing characteristics, from the person to society and even go far from the boarders of one culture and one country; Sport has a closer connection with excitations and several psychological characteristics of a person and all the individuals proceed to a sport, especially professional and championship sport, they have to confront with a phenomenon that named "aggression" (Arvin; Rezaei 2008). Rarely can find a subject that considerable as much as aggression and violence.

Aggression in sport defines as a behavior against to standards legal of that sport for an attempt to injure to opponent, staff judgment, teammate or spectators like verbal or physical. Many of sport psychological researchers consider aggression and violence as a serious problem in sport especially contact fields that follow annually a lot of privation and harms for athletes and responsables (Rezaei ; Hosseini 2008).

All of those that somehow dealing with sport, whether as an spectators, in coach place or an athlete, have to face with a phenomenon that named aggression. Upper levels of excitations and severe arousal that sometimes leading to quarrel and regrettable abnormality, observe repeatedly, by all three groups that remind before especially by athletes. It is likely this phenomenon in the course of hypersensitive sport competitions, transmit from athletes to spectator and or from coach to other two groups and obtained unpleasant consequences (Boostani ; Boostani 2010).

As far as the martial arts are concerned, few studies about involvement in the martial arts and aggression are carried out. Interest in such studies, particularly karate, grew in 1970s and 1980s by publishing works about masters of the martial arts' characters (Duthie et al. 1978; Kroll ; Carlson 1967; Kroll ; Crenshaw 1970). These researches focused on properties such as control and vulnerability in karate (Madden 1990), self-esteem (Richman ; Rehberg 1986), and anxiety (Layton 2000, Williama ; Elliott 1999).

Results of few researches on aggression and tendency to the martial arts are contradictory. While researchers such as Fuller (1988) showed that athletes of the martial arts are more aggressive than non-athletes, other researchers – e.g., Szabo; Parkin (2001) - showed lower aggression level among athletes of the martial arts.

In their research on athletes of different sportive fields, Maxwell (2004) concluded that aggressive behavior had a significant difference among the athletes. Also, there was a significant relationship among the athletes' aggression and type of sport.

In their study, Rezaei et al. (2008) concluded that there is not a significant difference among athletes in fields if karate, boxing, Wushu, and Taekwondo, but the difference between athletes and non-athletes is significant.

Many of accomplished researches support this hypothesis that athletes especially athletes of contactable fields in comparison to non-athletes, more are involved in aggressive behaviors. In the some direction this research do with the aim of investigation of aggression situation in Olympic athletes of contactable sport fields and non-Olympic, compare these fields with each other and compare with non-athletes.

2. Methods

96 number of elite athletes of different sport fields, taekwondo, judo, wrestling, boxing (as an athletes of Olympic sport fields), karate, wu shu, kickboxing and kung fu (as an athletes of non-Olympic sport fields) with having at least international place in his field, along with 96 non-athletes take part in this research.

All of subjects complete Buss and Perry aggression questionnaires. This questionnaire evaluate four behavioral factor, anger, physical aggression, verbal aggression and hostility.

Validity of original questionnaires form out by makers of this questionnaires which in this order was reported physical aggression, verbal aggression, anger and hostility 80% , 76% , 72% and 72%.

After classification of questionnaires with the use for analysis of data use analysis of variance (ANOVA), Tukey test, multiple logistic regression analysis and T- test.

3. Results

After gathering information, obtained results with the use of analysis of variance test (ANOVA) analyzed that results brought in table 1.

Findings of research shows significant difference in different components of aggression among research groups ($p < 0.001$). As cleared in the table

groups were different from each other in all of behavioral factors. Tukey test shows that kickboxing, kung fu athletes and non-athletes in anger, physical aggression, verbal aggression, hostility factors and total higher grades.

4. Discussions

Research Findings of research shows that Olympic athletes in sport fields has less aggression from non-Olympic athletes in sport fields, that this important shows great effects of Olympic movement purposes in sports and moral, mental and psychological characteristics of elite athletes of Olympic sport fields. Just as important purposes of Olympic movement, is promoting and developing moral and physical characteristics of individuals and education of youth through sport, according to results of this research and same researches find that Olympic games is something higher than holding a number of competitions every four years in part of a world. In fact, in depth of it, hidden moral, basic aims and education of Olympic movement and philosophy in international level.

Also this theory that contact sport fields athletes with regard to non-athletes having more aggression didn't approved by the results of this research. In contrary, it seems to sport activities cause emptying energy and excitation among individuals and can cause decreasing excessively aggressive behaviors especially in out of sport environments. Results of this study showed a significant difference between athletes of the martial arts and non-athletes in terms of the number and mean of their scores on the aggression scale. This result contrasts the finding of Chandler et al. (1999) and Cellini (1983). In their studies, these researchers demonstrated higher levels of aggression among athletes. They had synthesized, unlike non-athletes, athletes totally got higher scores in aggression and aggression items.

Result of the present study is not in line with Fullers' (1988) findings. He had shown that in comparison with non-athletes, athletes had higher levels of aggression. On the other hand, the results are consistent with findings of some researchers such as Szabo ; Parkin (2001). In their studies, they had also shown lower levels of aggression among athletes of the martial arts in comparison with the non-athletes.

People in any society have particular behavioral models in sport and physical activities. Physical activities in form of sport follow culture. As it was stated by Seville Statement of Violence (1986), aggression follows cultural factors considerably.

Table 1. Statistical criteria of research variables in different groups

Variables	Sport fields	Index	Mean	Standard deviation	Number of subjects	Degree of freedom	P-value
Anger	Olympic athletes	Taekwondo	9.5	2.1	15	8, 183	0.001
		Judo	7.7	1.3	10		
		Wrestling	10.2	3.2	11		
		Boxing	11.3	1.8	8		
	Non-Olympic athletes	Karate	11.6	3.5	22		
		Wu shu	13.1	2.2	12		
		Kickboxing	20.4	1.8	8		
		Kung fu	21.2	3.9	10		
Non-athletes	21.8	5.1	96				
Physical aggression	Olympic athletes	Taekwondo	17.2	1.4	15	8, 183	0.001
		Judo	14.9	1.7	10		
		Wrestling	14.2	2.5	11		
		Boxing	15.3	2.1	8		
	Non-Olympic athletes	Karate	20.8	1.7	22		
		Wu shu	21.3	1.6	12		
		Kickboxing	24.9	2.2	8		
		Kung fu	26.5	2.4	10		
Non-athletes	23.7	4.3	96				
Verbal aggression	Olympic athletes	Taekwondo	11.2	2.3	15	8, 183	0.001
		Judo	10.9	2.1	10		
		Wrestling	12.1	1.9	11		
		Boxing	12.9	2.2	8		
	Non-Olympic athletes	Karate	13.1	1.4	22		
		Wu shu	13.3	3.5	12		
		Kickboxing	18.9	2.8	8		
		Kung fu	19.2	3.7	10		
Non-athletes	19.9	4.3	96				
Hostility	Olympic athletes	Taekwondo	9.5	1.2	15	8, 183	0.001
		Judo	8.8	1.9	10		
		Wrestling	10.2	1.4	11		
		Boxing	11.3	3.7	8		
	Non-Olympic athletes	Karate	10.1	2.1	22		
		Wu shu	13.4	2.6	12		
		Kickboxing	16.9	4.3	8		
		Kung fu	17.3	5.9	10		
Non-athletes	16.4	4.6	96				
Total	Olympic athletes	Taekwondo	47.4	7.1	15	8, 183	0.001
		Judo	42.3	6.9	10		
		Wrestling	46.7	9.2	11		
		Boxing	50.8	9.8	8		
	Non-Olympic athletes	Karate	55.6	8.7	22		
		Wu shu	61.3	9.9	12		
		Kickboxing	81.1	11.1	8		
		Kung fu	84.2	15.9	10		
Non-athletes	81.8	18.3	96				

Bandura (1973) synthesizes that culture of a society can increase the number of aggressive people of a society by giving value to aggressive behaviors and offering successful aggressive models and giving

assurance that aggressive behaviors have rewarding results, the converse is also true. That is, culture of a society can minimize the aggression level as well as the numbers of aggressive people.

Anyway, results of this research and the same researches show that sport activities mainly has a positive effect of behavioral factors like aggression and is able to balance be habitual characteristics of individuals. Also, in some of sport fields that athletes have higher grades, should seek a cause in culture and special education of that field and moral, mental and cultural environment between athletes and coaches of that sport field.

5. Conclusion

Based on the results of the present study, seemingly, it is most likely that there is a relationship between personality and becoming aggressive in sport matches. Identifying this relationship can be effective in athletic success and function. Yet, more researches should be carried out within this area. Accordingly, it is suggested that similar studies be conducted on other Olympic and non-Olympic fields as well as on female athletes more extensively.

Corresponding Author:

Mohammad Hassan Boostani

Department of Physical Education and Sport Sciences

Islamic Azad University, Arsanjan Branch - Young Researchers Club, Iran

E-mail: boostani_mh@yahoo.com

References

1. Arvin, H., and A.M. Rezaei., 2008: Investigation and comparing aggression in athletes. *11th Asian Federation of Sport Medicine Congress, Tehran, Iran.*
2. Bandura, A., 1973: Aggression: A social learning analysis. *Englewood cliffs, NJ: Prentice Hall.*
3. Boostani, M.H., and M.A. Boostani., 2010: Aggression in martial arts. *7th International Congress of Physical Education and Sport Sciences, Tehran, Iran.*
4. Cellini, M.R., 1983: Cognitive and personality trait differences of youthful offenders by property violent impulsive and violent premeditated offense grouping. (Doctoral dissertation, Southern Illinois University at Carbondale, 1982). *Dissertation Abstracts International*, **43**: 22-80.
5. Chandler, S.B., D.J. Johnson., and P.S. Carroll., 1999: Abusive, behavior of college athletes. *College Student Journal*, **33** (4).
6. Duthie, R.b., L. Hope., and D.G. Barker., 1978: Selected personality traits of martial artists as measured by the adjective checklist, *Perceptual and Motor Skills*, **47**: 71-76.
7. Fuller, J.R., 1988: Martial arts and psychology health. *British Journal of medicine psychology*, **61**(4): 317-328.
8. Kroll, W., and B.R. Carlson., 1967: Discriminate function and hierarchical grouping analysis of karate participants' personality profiles, *Research Quarterly for Exercise and Sport*, **38**: 405-411.
9. Kroll, W., and W. Crenshaw., 1970: Multivariate personality profile analysis of four athletic groups. In; *Contemporary psychology of sport: Proceeding of the second International Congress of Sport Psychology*. ED: Kenyon G. Chicago, IL: *Chicago Athletic Institute*, 97-106
10. Layton, C., 2000: Scores on trait and state anxiety of female karateka before the commencement of shotokan karate training, *Perceptual and Motor Skills*, **91**, 102.
11. Madden, M.E., 1990: Attributions of control and vulnerability at the beginning and end of a karate course, *Perceptual and Motor Skills*, **70**: 787-794.
12. Maxwell, J.P., 2004: Anger rumination: an antecedent of athletes aggression, *Journal Psychology of Sport and Exercise*, **5**: 276-289.
13. Rezaei, A.M., and E. Hosseini., 2008: Investigation and comparison of aggression in male martial art athletes and non-athletes, *11th Asian Federation of Sport Medicine Congress, Tehran, Iran.*
14. Richman, C.L., and H. Rehberg., 1986: The development of self-esteem through the martial arts, *International Journal of Sport Psychology*, **17**: 234-39.
15. Seville Statement on Violence., 1986: http://www.unesco.org/human_rights/hrfv.htm
16. Szabo, A., and A.M. Parkin., 2001: The psychological impact of training deprivation in martial arts, *Psychology of sport and exercise*, **2** (3), 187-199.
17. Williama, A.M., and D. Elliott., 1999: Anxiety, expertise, and visual search strategy in karate, *Journal Psychology of Sport and Exercise*, **21**: 362-75.

8/10/2012