



EFFECT OF GENDER ON AGGRESSION IN SPORTS PERSON

Vandana Singh

Counselor, Muzaffarnagar (UP) India

Abstract

Purpose: The purpose of the study was to investigate the effect of gender on aggression in sportsperson. **Materials & Methods:** For the purpose of the study a sample of 200 male and 200 female players belongs to selected eight games were drawn at the venue of North Zone/ North-East zone/All India Inter university tournaments for the session 2008-09/2009-10 from the randomly selected participating university teams. Sport Aggression Inventory constructed and standardized by Anand Kumar and Prem Shankar Shukla, was used and administered to the player after the competition. The response sheets were scored as per instructions and raw data were quantified and statistically processed. **Results:** On the basis of summary of 2x8 factorial ANOVA performed on the scores of participants on the measures of sports aggression, it is clear that the effect of gender was significant ($p < .05$) and in the case of sports group the effect of sports was also significant at .05 level of significance. Now as far as interaction (gender x sports) is concern the effect of interaction was significant. **Discussion:** It has been observed in the present study that females were more aggressive than males. Aggressive behavior is often dependent on the situational settings. The different sports with their peculiar or specific milieus have different releasing capacity for aggression. The physical contact games are likely to provide more aggressive responses than non-contact sports. **Conclusion:** Male and female sportspersons indicated difference on Sports aggression, females being higher on sports aggression than males. Among different sports groups Kho-Kho players scored highest scores and the Table Tennis players scored lowest.

Keywords: Aggression, Sports Aggression, Gender,



Scholarly Research Journal's is licensed Based on a work at www.srjis.com

INTRODUCTION

Psychology as a behavioral science has made its contribution for improving sports performance. It has help's coaches to coach more effectively and athletes to perform more proficiently. This psychological aspect of sports is gaining much attention among sports administrators. A rapidly growing area of interest in sports psychology concerns the use of stress management procedures such as bio-feedback and relaxation training to athletes improves performance by reducing aggression.

In sports, aggression is a trait that can have many negative as well as positive effects on performance. Aggression is defined as "behavior directed towards the goal of injuring any other person who is motivated to escape in such a manner" (**Baron & Richardson, 1994**)

Aggression is an act of intentionally harming or injuring a fellow human being. Within some sports, such as rugby and football, aggression is seen as a good trait, but if the definition suggests intentionally hurting someone, then why should it be seen as a good trait for athletes?

According to **Roberts & Spink (1986)** aggression has long been a part of the sporty domain. Outside, of wartime sport is perhaps the only setting in which acts of interpersonal aggression are not only tolerated but enthusiastically applauded by large segment of society. Sports would serve as a suitable vehicle for example where as war would not. In fact Lorenz advocates that sport ought to be substitute for war. In other words, because all competitive sports situation hold some degree of hostility between opponent's participants in them allows aggression to be dissipated in an acceptable manner.

Most aggression in sport results from frustration. This frustration is the result of various motives being thwarted or blocked. Those motives, which are predominant and which usually generate aggression when thwarted, revolve award achievement dominance, power, reorganization and prestige and excellence. If a body places high incentive value on one or a combination of this motive incentive system and is blocked from attaining or satisfying them he becomes frustrated **Alderman (1974)**.

In sport, aggression has been defined into two categories: hostile aggression and instrumental aggression (**Silva, 1983**). Hostile aggression is when the main aim is to cause harm or injury to your opponent. Instrumental aggression is when the main aim is achieve a goal by using aggression. For example a rugby player using aggression to tackle his opponent to win the ball. The player is not using his aggression to hurt the opponent but rather to win the ball back.

It can be seen that aggression comes from a variety of sources and it is important to understand where these sources stem from. Sport stressors allow us to understand what causes an athlete to become frustrated which can lead to aggression and a decline in performance.

In a player's career they will come across a number of high-pressured situations where they will have to deal with many stressors. These can range from personal stressors such as worry and anxiety, to situational stressors such as team-related problems.

However, the aggression and sport are interrelated and opinions differ greatly regarding links that may exist between them. Some believe that sport can enable people to break free, for others, it is simply a manifestation of hidden aggression. In contrast, sport which is seen as a place of learning of aggressive behavior is one of the major contributors to the current violence.

Indeed, sport teaches the player not only to act these within the limits of a set of rules, but also a way to make him or her develop strategies to circumvent regulations, which no doubt contribute to the development of a certain permissiveness towards these regulations and some tolerance of the violation of the rules and aggression.

Keeping all the views in the mind regarding aggression the present study was carried out to investigate the effect of gender on aggression in sportsperson.

MATERIALS AND METHODS

Sample

A sample of 200 male and 200 female players belongs to selected eight games were drawn at the venue of North Zone/ North-East zone/All India Inter university tournaments for the session 2008-09/2009-10 from the different participating teams. There were 25 participants in each case with a total of 400 participants. The eight sports types included are handball, kho – kho, volleyball, hockey, badminton, table tennis, track and field and softball. They were university level players of different universities who were participated in the North zone/North-East zone/ All India Inter University Tournaments in the year 2008-09 /2009-10.

Tools

Sport Aggression Inventory constructed and standardized by **Anand Kumar and Prem Shankar Shukla (1988)**, was selected for this study. This inventory consists of 25 items, in which 13 items are keyed "YES" and rest of 12 is keyed "NO". The statement which are keyed "YES" are 1,4,5,6,9, 12,14,16,18,21,22,24, and 25 and the statements which are keyed "NO" are 2,3,7,8,10,11, 13,15,17,19,20, and 23.

Procedure

The data for the present study were collected from the North zone/ North- East zone/ All India Inter University Tournaments during the years 2008-09 /2009-10 as indicated below in Table 1:

Table 1 Detailed Account of Data Collection

Game/Sport	Venue	Period	
Softball (M)	Gurunanak Dev	17/02/2010	–
	University, Amritsar	23/02/2010	
Handball (M)	Panjabi University,	05/01/2010	–
	Patiala	09/01/2010	
Volleyball (M)	C.S.J.M. University,	23/10/2009	–
	Kanpur	27/10/2009	
Hockey (M)	Gurukul Kangri	10/12/2008	–
	University, Haridwar	16/12/2008	
Badminton (M)	Aligarh Muslim	17/11/2009	–
	University, Aligarh	21/11/2009	
Kho-Kho (M)	Birla Institute of	11/01/2009	–
	Technology, Ranchi	15/01/2009	
Track & field (M)	University of Madras	27/12/2009	–
	Chennai	31/12/2009	
Table Tennis (W)	University of Jammu	03/11/2008	–
		06/11/2008	
Softball (W)	Gurunanak Dev	17/02/2010	–
	University, Amritsar	23/02/2010	
Handball (W)	Panjabi University,	05/01/2010	–
	Patiala	07/01/2010	
Volleyball (W)	Rohailkhand	07/11/2008	–
	University, Bareilly	12/11/2008	
Hockey (W)	University of Jammu	01/12/2009	–
		07/12/2009	
Badminton (W)	Aligarh Muslim	17/11/2009	–
	University, Aligarh	21/11/2009	

Kho-Kho (W)	Gurunanak	Dev	13/02/2009	–
	University, Amritsar		17/02/2009	
Track & Field (W)	University of Madras,		27/12/2009	–
	Chennai		31/12/2009	
Table Tennis (W)	University of Jammu		03/11/2008	–
			06/11/2008	

The data were collected from the above mentioned venues with the assistance from Research Scholars, Coaches, and Post-graduate students. All those who assisted in the collection of data were oriented with the procedures of administering the questionnaires in order to ensure maximum expertise.

To ensure maximum cooperation from the subjects, the investigator had a meeting with each randomly selected university team in the presence of their respective coaches, where the subjects were oriented and explained regarding the purpose and procedure of the questionnaires. All the subjects voluntarily agreed to extend full cooperation and the coaches of the respective teams ensured that the subjects will be made available for data collection as and when required.

Sports Aggression Questionnaire was distributed to the athlete after the respected competition. The directions were read by the investigator at a dictation speed to make the subjects understand about what they are exactly required to do. After making sure that the subjects had clearly understand the procedure to fill-up the questionnaire, they were asked to record the answers for all questions.

When participants filled all the measure, the response sheets were collected back. It was checked carefully that subject has given all the responses. At the end of the administration subjects were thanked for their co-operation.

The scoring of the inventories was done according to the specifications given in respective manuals.

RESULTS

The performance on the measure of sports aggression by gender and type of sports is shown in Table 2.

Table 2 Mean and Standard Deviation of Sports Aggression by Gender and Types of Sports

Games	Male		Female	
	Mean	S.D.	Mean	S.D.
Handball	11.28	3.15	13.32	2.48
Kho-Kho	14.80	3.39	14.00	3.46
Volleyball	11.76	2.77	14.72	3.08
Hockey	12.12	2.03	14.12	2.94
Badminton	10.48	2.77	9.60	3.01
Table Tennis	10.40	2.00	9.20	3.12
Track & Field	13.44	3.6	13.40	4.17
Softball	12.24	2.95	14.52	3.56

Two way analysis of variance employed to investigate differences among different sports groups and between males and females on Sports Aggression are presented in Table- 3.

Table 3 Summary of 2x8 Factorial ANOVA on the score on Measure of Sports Aggression

Source of Variance	Df	MS	F
Gender	1	44.89	4.45*
Sports	7	142.25	14.09*
Interaction (Gender x Sports)	7	32.69	3.24*
Error	384	10.09	

* = $p < .05$

Table 3 shows the summary of 2x8 factorial ANOVA performed on the scores of participants on the measures of sports aggression. It is clear that the effect of gender was significant ($p < .05$). The female scored high ($M = 12.74$) than male ($M = 12.06$) because obtained 'F' is greater than Tabulated 'F'. In the case of sports group the effect of sports was also significant at .05 level of significance because F-ratio among sports groups indicated a value of 14.09 which was greater than the tabulated F-value of 2.12. Now regarding the interaction (gender x sports) the calculated 'F' was greater than tabulated F. Hence the effect of interaction was significant. To find out which of the variables differs significantly the pair

wise comparison analysis shall be done for Gender, Sports and Interaction separately by using Least Significance Difference (LSD) test.

Gender Analysis:

To find out which of the gender group differed significantly on sports aggression the Least Significant Difference (LSD) test was applied. Mean values of all sports groups when both sexes are combined are shown in Table-4

Table 4 MEANS, MEAN DIFFERENCE AND CRITICAL DIFFERENCE OF MALE AND FEMALE PLAYERS ON SPORTS AGGRESSION

(All Sports group combined)

Gender	Mean	Mean Difference	Critical Difference
Male	12.06	0.68*	0.62
Female	12.74		

The above table indicates that the means of male and female sportspersons on sports aggression was 12.06 and 12.74 respectively. The mean difference between the males and females was 0.68 which was greater than the critical difference value 0.62, It is clear that the effect of gender was significant ($p < .05$). The female scored high ($M = 12.74$) than male ($M = 12.06$) on sports aggression when all sports groups are combined. The differences are shown graphically in Figure- 1.

Sports Analysis:

To find out which of the paired sports groups differed significantly in sports aggression, the Least Significance Difference (LSD) Test was applied. The results pertaining to it are presented in Table 5.

**Table 5 ORDERED PAIRED MEANS AND SIGNIFICANCE OF DIFFERENCE
BETWEEN MEAN OF DIFFERENT SPORTS GROUPS ON SPORTS AGGRESSION
(Both Sexes Combined)**

H.B.	K.K	V.B.	Hock.	Bad.	T.T	T & F	S.B	Mean Diff.	Critical Diff.
11.80	14.40							2.60*	1.25
11.80		13.24						1.44*	1.25
11.80			13.12					1.32*	1.25
11.80				10.04				1.76*	1.25
11.80					9.80			2.00*	1.25
11.80						13.42		1.62*	1.25
11.80							13.38	1.58*	1.25
	14.40	13.24						1.16	1.25
	14.40		13.12					1.28*	1.25
	14.40			10.04				4.36*	1.25
	14.40				9.80			4.60*	1.25
	14.40					13.42		0.98	1.25
	14.40						13.38	1.02	1.25
		13.24	13.12					0.12	1.25
		13.24		10.04				3.20*	1.25
		13.24			9.80			3.44*	1.25
		13.24				13.42		0.18	1.25
		13.24					13.38	0.14	1.25
			13.12	10.04				3.08*	1.25
			13.12		9.80			3.32*	1.25
			13.12			13.42		0.30	1.25
			13.12				13.38	0.26	1.25
				10.04	9.80			0.24	1.25
				10.04		13.42		3.38*	1.25
				10.04			13.38	3.34*	1.25
					9.80	13.42		3.62*	1.25
					9.80		13.38	3.58*	1.25
						13.42	13.38	0.04	1.25

➤ H.B. – Handball, K.K. – Kho – Kho, V.B. – Volleyball, Hock. – Hockey, Bad. – Badminton, T.T., - Table Tennis, T & F – Track and Field, S.B. -Softball.

Table 5 showed that the mean differences in sports aggression between handball and kho-kho (MD) = 2.60); handball and volleyball (MD = 1.44); handball and hockey (MD = 1.32); handball and badminton (MD = 1.76); handball and table tennis (MD = 2.00); handball and track & field (MD = 1.62); handball and softball (MD = 1.58); kho-kho and hockey (MD = 1.28); kho-kho and badminton (MD = 4.36); kho-kho and table tennis (MD = 4.60); volleyball and badminton (MD = 3.20); volleyball and table tennis (MD = 3.44); hockey and badminton (MD = 3.08); hockey and table tennis (MD = 3.32); badminton and track and field (MD = 3.38); and badminton and softball (MD = 3.34); table tennis and track & field (MD = 3.62) and table tennis and softball (MD = 3.58); were significant as the mean difference values were greater than the critical difference value of 1.25 required for significance at 5 % level when both sexes are combined.

Mean comparison showed that - Handball has greater aggression than Badminton & Table Tennis and lower than Kho – Kho, Volleyball, Hockey, track & Field & Softball. - Kho – Kho had greater aggression than Hockey, Badminton and Table Tennis. – Volleyball had more aggression than Badminton and Table Tennis. – Hockey had greater aggression than Badminton and Table Tennis. – Track & Field had more aggression than Badminton and Table Tennis and – Softball had greater aggression than Badminton & Table Tennis.

The mean difference between all the other paired groups showed values lesser, thus indicating no significant differences were found between these sports groups on sports aggression. Among the eight sports groups the highest paired mean value was observed for the kho-kho group (14.40) and the lowest paired mean was observed for the table tennis group (9.80). Mean values of all groups when sexes are combined are shown in Figure- 2.

Interaction Analysis:

In the connection of the main effects of all variables interactional effects are also observed which are presented in the Table 6, 7 and 8 respectively.

Table 6 MEAN VALUES OF SPORTS AGGRESSION FOR DIFFERENT SEXES IN EACH SPORTS GROUP

Name of Games	Male	Female	Mean Difference	CD at 5 % level
Handball	11.28	13.32	1.04	1.76
Kho-Kho	14.80	14.00	0.80	1.76
Volleyball	11.76	14.72	2.96*	1.76
Hockey	12.12	14.12	2.00*	1.76
Badminton	10.48	9.60	0.88	1.76
Table Tennis	10.40	9.20	1.20	1.76
Track & Field	13.44	13.40	0.04	1.76
Softball	12.24	14.52	2.28*	1.76

Above table shows that there was no difference between the mean of sports aggression in male and female for handball, kho-kho, badminton, table tennis and track & field groups where as difference was significant in volleyball, hockey and softball groups at 5 % level. Further it was concluded that the sports aggression was higher in female players for volleyball, hockey and softball players in comparison to male players.

Table 7 MEAN VALUES OF SPORTS AGGRESSION FOR DIFFERENT SPORTS IN MALES

K.K.	T & F	S.B.	Hock	V.B.	H.B.	Bad	T.T.	Mean Diff.	Critical Diff.
14.80	13.44							1.36	1.76
14.80		12.24						2.50*	1.76
14.80			12.12					2.68*	1.76
14.80				11.76				3.04*	1.76
14.80					11.28			3.52*	1.76
14.80						10.48		4.38*	1.76
14.80							10.40	4.40*	1.76
	13.44	12.24						1.20	1.76
	13.44		12.12					1.32	1.76
	13.44			11.76				1.68	1.76
	13.44				11.28			2.16*	1.76
	13.44					10.48		2.96*	1.76
	13.44						10.40	3.04*	1.76
		12.24	12.12					0.12	1.76
		12.24		11.76				0.48	1.76

		12.24			11.28			0.96	1.76
		12.24				10.48		1.76	1.76
		12.24					10.40	1.84*	1.76
			12.12	11.76				0.36	1.76
			12.12		11.28			0.84	1.76
			12.12			10.48		1.64	1.76
			12.12				10.40	1.72	1.76
				11.76	11.28			0.48	1.76
				11.76		10.48		1.28	1.76
				11.76			10.40	1.36	1.76
					11.28	10.48		0.80	1.76
					11.28		10.40	0.85	1.76
						10.48	10.40	0.05	1.76

- H.B. – Handball, K.K. – Kho – Kho, V.B. – Volleyball, Hock. – Hockey, Bad. – Badminton, T.T., - Table Tennis, T & F – Track and Field, S.B. -Softball.

It can be seen from above table that in male section the mean difference value of sports aggression between kho-kho and softball (MD = 2.56); kho-kho and hockey (MD = 2.68); kho-kho and volleyball (3.04); kho-kho and handball (MD = 3.52); kho-kho and badminton (MD = 4.38); kho-kho and table tennis (MD = 4.40); track & field and handball (MD = 2.16); track & field and badminton (MD = 2.96); track & field and table tennis (MD = 3.04) and softball and Table Tennis (1.84); were significant as the mean difference values were greater than the critical difference value of 1.76 required for significant. Mean comparison showed that – Kho – Kho had more aggression than Softball, Hockey, Volleyball, Handball, Badminton & Table Tennis. – Track and field had greater aggression than Handball, Badminton & Table Tennis. – Softball had more aggression than Table Tennis.

The mean difference between all the other paired groups showed values lesser than the critical difference value at 1.76 required for significant, thus indicates no significant difference were found between these sports groups. Among the eight sports groups the highest paired mean value was observed for the kho-kho group (14.80) and the table tennis group (10.40). The above table represented graphically in Figures- 2.

Table 8 MEAN VALUES OF SPORTS AGGRESSION FOR DIFFERENT SPORTS IN FEMALES

V.B.	S.B.	Hock	K.K.	T & F	H.B.	Bad	T.T.	Mean Diff.	Critical Diff.
14.72	14.52							0.20	1.76
14.72		14.12						0.60	1.76
14.72			14.00					0.72	1.76
14.72				13.40				1.32	1.76
14.72					12.32			2.40*	1.76
14.72						9.60		5.12*	1.76
14.72							9.20	5.52*	1.76
	14.52	14.12						0.40	1.76
	14.52		14.00					0.52	1.76
	14.52			13.40				1.12	1.76
	14.52				12.32			2.20*	1.76
	14.52					9.60		4.92*	1.76
	14.52						9.20	5.32*	1.76
		14.12	14.00					0.12	1.76
		14.12		13.40				0.72	1.76
		14.12			12.32			1.80*	1.76
		14.12				9.60		4.52*	1.76
		14.12					9.20	4.92*	1.76
			14.00	13.40				0.60	1.76
			14.00		12.32			1.68	1.76
			14.00			9.60		2.72*	1.76
			14.00				9.20	3.12*	1.76
				13.40	12.32			1.08	1.76
				13.40		9.60		3.80*	1.76
				13.40			9.20	4.20*	1.76
					12.32	9.60		2.72*	1.76
					12.32		9.20	3.12*	1.76
						9.60	9.20	0.40	1.76

➤ H.B. – Handball, K.K. – Kho – Kho, V.B. – Volleyball, Hock. – Hockey, Bad. – Badminton, T.T., - Table Tennis, T & F – Track and Field, S.B. -Softball.

The mean difference of female in sports aggression between volleyball and handball (MD = 2.40); volleyball and badminton (MD = 5.12); volleyball and Table Tennis (MD 5.52); Softball and Handball (MD = 2.20); Softball and Badminton (MD = 4.92); Softball and T.T (MD = 5.32); Hockey and Handball (MD = 1.80); Hockey and Badminton (MD = 4.52); Hockey and Table Tennis (MD = 4.92); Kho-Kho and Badminton (MD = 2.72); Kho-Kho and Table Tennis (MD = 3.12); Track & Field and Badminton (MD = 3.80). Track and Table Tennis (MD= 4.20) Handball and Badminton (MD = 2.72) and Handball and T.T. (MD = 3.12) were significant as the mean difference values were greater than critical difference of 1.76 required for significance. Comparison of means showed that Volleyball had greater

aggression than Handball, Badminton and Table Tennis. – Softball had more aggression than Handball, Badminton & Table Tennis. – Hockey had more aggression than Handball, Badminton & Table Tennis. – Kho – Kho had greater aggression than Badminton & Table Tennis. – Track and Field had more aggression than Badminton & Table Tennis. – Handball had more aggression than Badminton & Table Tennis.

The mean difference between the other entire paired groups showed value lesser than the critical difference value of 1.76 required for significant. Hence it indicates that there was no significant differences were found between these sports groups. Among the eight sports groups the highest paired mean value was the Volleyball (14.72) lowest paired mean was observed for the Table Tennis group (9.20).

DISCUSSION

The purpose of this study was to investigate the effect of gender on aggression in sportsperson. On the basis of obtained results, it has been observed that findings of the study in relation to sports aggression indicate significant differences among males and females, and also among the different selected sports groups. The obtained F-value for gender was 4.45 which was greater than the required F-value of 3.86. The gender difference in Sports Aggression Inventory revealed that females scored higher in the Sports Aggression Inventory than the males. Though it is felt that biological factors have some influence on behavior, it is widely acknowledged that the biological factors are not absolute determinants. It has been observed that the behaviors' of female and males overlap considerably. Since females are more competitive, about 40 percent of females are more aggression than the average male.

In consensus to the above opinion, it has been observed in the present study that females were more aggressive than males. Aggressive behavior or aggressive tendency is often dependent on the situational settings. The different sports and games, with their peculiar or specific milieus have different releasing capacity for aggression. The physical contact games are likely to provide more aggressive responses than non-contact sports. Similar differences in aggression has been observed in the present study, with games like Kho-Kho, handball, Volleyball, Softball and Hockey, differing significantly from badminton, and Table Tennis etc.

CONCLUSIONS

Within the limitations of the study, the following conclusions were derived.

1. Male and female Sportspersons indicated difference on Sports aggression, females being higher on sports aggression than males.
2. Among different sports groups Kho - Kho players scored highest scores and the Table Tennis players scored lowest with respect to aggression.

REFERENCES

- Akert RM, Aronson E, Wilson TD (2010).** *Social Psychology (7th Ed.). Upper Saddle River, NJ: Prentice Hall, 2010.*
- Alderman, Richard B., (1974),** *Psychological Behavior in Sports, London: Thomson Learning Publishing Company.*
- Allawy, M.H. (1981).** *Differences in athletic aggression among Egyptian female athletes. Medicine and Sport, 75,63-66.*
- Almeida D, Martins RM, Cabral Centurion JC, Rodrigo N. (2015).** *Behavioural, hormonal and neurobiological mechanisms of aggressive behaviour in human and nonhuman primates. Physiology & Behavior.; 143:121-35.*
- Bandura, A. (1973).** *Aggression: a social learning analysis. New Jersey: Prentice-Hall, Inc.*
- Baron, R.A. & Richardson, D.R. (1994).** *Human Aggression. 2nd ed. New York: Plenum.*
- Berkowitz, L. (1965).** *The concept of aggressive drive: Some additional considerations. In L. Berkowitz (Ed.), Advances in experimental social psychology (pp.301-329). NewYork: Academic Press.*
- Bredemeier, B.J. (1975).** *The assessment of reactive and instrumental athletic aggression. In D.M. Landers (Ed.), Psychology of sport and motor behavior II (pp.71-84). Penn State HPER Series No. 10. The Pennsylvania State University.*
- Buss, A.H., & Durkee, A. (1957).** *An inventory for assessing different kinds of hostility. Journal of Consulting Psychology, 4,343-349.*
- Buss, A.H. (1961).** *Psychology of aggression. NewYork: John Wiley and Sons, Inc*
- Cratty, Bryant J., (1968),** *Psychology and Physical Activity, Englewood cliffs, N.J. Prentice Hall Inc.*
- Guivernau M, Duda JL. (2002).** *Moral atmosphere and athletic aggressive tendencies in young soccer players. Journal of Moral Education. 31(1):67-85.*
- Husman B, Silva J. (1984).** *Aggression: definitional considerations. In: Silva JM, Weinberg RS, editors. Psychological Foundations of Sport. Champaign, IL: Human Kinetics, 1984, 246-260.*
- Kharkan M, Andam R, Mehdizadeh R. (2013).** *The comparison of athletic aggression girl and boy athlete students. Int J Sport Stud. 3(6):594-598.*

- Liewellyn, Jack H. and Blucker, Judy A., (1982),** *Psychology of Coaching Theory and Application*, Delhi: Surjeet Publication.
- Robets, G. C. and Spink, Kenvins,(1986),** *Learning Experience in Sports Psychology*, Champaign Illinois: Human Kinetics Publisher Inc.
- Silva, J.M. (1983).** *The perceived legitimacy of rule violating behavior in sport. Journal of Sport Psychology*, 5,438-448.
- Srivastva, A.K. and Shukla, P.S. (1988).** *Manual for Sports Aggression Inventory*, Kumar Publication, Varansi, 1988.
- Tenenbaum, G., Stewart, E., Singer, R.N., Duda, J. (1996).** *Aggression and Violence in Sport: An ISSP position stand, International Journal of Sport Psychology.* 27:229- 236.
- Thirer, J. (1993).** *Aggression. In R.N. Singer, M. Murphey, & L.K. Tennant (Eds.), Handbook of research on sport psychology (pp. 365-378). New York: MacMillian Publishing Company*
- Tucker, L. W., & Parks, J.B. (2001).** *Effects of gender and sport type on intercollegiate athlete's perceptions of the legitimacy of aggressive behaviors in sport. Sociology of Sport Journal*, 18(4),A0'i-A\2,.
- Wall, B.R., & Gruber, J.J. (1986).** *Relevancy of athletic aggression inventory for use in women's intercollegiate basketball: A pilot investigation. International Journal of Sport Psychology*, 77,23-33.
- Widemeyer, W.N. (1984).** *Aggression - performance relationships in sport. In J.M. Silva and R.S. Weinberg (Eds.), Psychological foundations of sport (pp. 274-286). Champaign, IL: Human Kinetics Publishers, Inc.s*