

Gender Differences and Aggression: A Comparative study of College and University Sport Players

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Abstract

A comparative research was conducted to find out gender differences in aggression among sports players. The sample consisted of hundred (N=100) participants from Peshawar. Buss & Perry Aggression Questionnaire (AQ) was used for the present research to assess the level of aggression among the sports players. It was hypothesized that male sports players will score high on aggression scale as compare to females sports players. The results show a significant difference among male and female sports players ($t=7.929$, $p<.01$). The result supports the hypothesis.

Keywords: Aggression, Gender, Sports Players

Introduction

An extensive study has been done to find out the linkage between sports and aggression but still there's an incomplete understanding of their relationship. It was assumed by many psychologists during the first half of the 20th century that by taking part in sports allow individuals to vent their aggressive tendencies. This assumption has been made on the basis of the view that aggression is an internal drive which is based on an instinct or/and frustration. Researchers are interested in the field of Psychology of Sports and Exercise. Therefore, many studies have been conducted in this area. Many sport and exercise psychologists view physical activity as a tool for health, human potential and social change. The first publication on aggressive athlete appeared in 1974. The term "aggressive athlete" has a long history (Lefebvre & Passer, 1974). Many psychologists have shown their interest in sport- related aggression. The curiosity is still there, that is why many researches have been working in this area.

One of the studies was conducted on athletic aggression in which it was predicted that level of masculinity could influence sport-related aggressive and violent behaviors in adolescents (Weinstein, Smith, & Wiesensthal, 1995). Findings of the study showed that hockey players were violent because of their adherence to beliefs about accurate masculine behavior. Violent and non-violent behaviors among 300 male athletes was

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studied by Guilbert (2006). The athletes for the data selected were from table tennis, basketball, swimming, karate and shooting sports. They were from across national and regional/local competitive levels. The finding of the study revealed that 77% of the athletes reported that in sports violent behavior does occur. The breakdown of percentage showed psychological aggression 27.7%, verbal aggression 26.3%, physical aggression 19% and cheating 4%.

Maxwell (2004) examined the relationship between aggression and sports type. Sample included 305 male and female athletes from different team and non-team. Anger Rumination Scale was used to assess anger. It was revealed from the result that there was no significant difference between gender, sport type or competitive level whereas, the scores of provocation and anger rumination were correlated significantly. A study was conducted to find out the link between gender, sports involvement and aggression. Sample included 76 athletes and 448 non-athletes. A different kind of hostility was assessed by using the Italian translated inventory for assessing different kinds of Hostility (Buss & Durkee, 1957). Even though, there was a size difference between the group, male and female athletes were more aggressive than their counterparts in general population. Result also showed that female scored high on verbal aggression and irritability whereas, male scored high on measures of indirect aggression within the athlete group. If females play multiple sports as compare to single sport, they will show more aggression. This finding is revealed from the investigation of Stephen in 2004.

Actual aggressive behavior was evaluated by researchers through examining the entire BAAGI instrument (rather than short form). 19 male hockey players' observed aggressive behavior was compared with BAAGI instrumental aggression scores by averaging the total number of points of penalty per game in a season. The findings of the study illustrated a significant positive link between perceived aggression and observed aggression despite of location or performance, with observed aggression significantly increasing over the course of the season. However, the players' perception of themselves was less aggressive as compared to observed aggression (Worrell & Harris, 1986). The

behavior which is not recognized as legal in the range of rules set officially related with conduct, directed towards an opponent, official, team-mate or spectator who has a motivation to avoid such act is called an aggression in sports. The definition predicts potential and intentional behavior which reflects instrumental and hostile aggression (Husman & Silva, 1984).

Researches have been conducted to find out the relationship of aggression with situational factors such as game location (Keltikangas-Jarvinen & Kelnonen, 1988; Lefebvre & Passer, 1974), competition level (Butt & Cox, 1992; Coulomb & Pfister, 1998), frequency of competition (Widmeyer & McGuire, 1997), home team advantage (McGuire, Courneya, & Widmeyer, 1992; Varca, 1980) and opposition aggression (Harrell, 1980; Russell, 1974). Numbers of researches have been conducted to find out correlation between aggression and performance. The researchers focused on the sport of ice hockey (e.g. McCarthy & Kelly, 1978; Russell, 1974). A positive correlation was found by these studies between the use of aggressive behavior and success. Other researchers have found that individual's performance can only be decreased by aggression.

Anger target/domain in 43 high-level karate athletes was investigated by Ruiz and Hanin (2004a). The study found Kumite competitors (one who fight against a real opponent) reported the direction of anger towards others (e.g., opponent and referee) or towards themselves. Whereas, Kata competitors (one who fight with an imaginary opponent) usually direct their aggression towards themselves. Athletes have lower levels of aggression than non-athletes (Morgan & Costill, 1996). A research study found that college athletes are more aggressive than non-athletes (Fletcher & Dowel, 1971). A significant difference was found in the level of aggression among athletes and non-athletes (Filho et.al., 2005). Aggression among women athletes and non-athletes was also studied by the researchers as well who found that athletic women have higher level of aggression than non-athletic women. Athletes of martial arts show more aggressive

behavior than non-athletes (Fuller.,1988). The study conducted by Masoudnia in 2007 found lower level of aggression in the athletes of martial arts than non-athletes.

For several reasons football players often behave aggressively during competition and outside of competition. This study was conducted on Australian football players. Qualitative approach was used to observe sanctioned aggression, power, thrill and anger among players. The findings of the research indicate that for gaining competitive advantage and excitement athletes behave aggressively outside of sanctioned aggression which otherwise they will not be able to in a non-contact event (Grange and Kerr, 2010).

- What is the research question?
- What is the aim of this research? The author (s) does not mention.
- Important to mention in the introduction what kind of sports do the authors research on.

Hypotheses

- Male sports players will score high on aggression as compare to female sports players.
- University sports players will be more aggressive as compared to college sports players.

Method

Sample

For the present study hundred (N=100) students from different colleges, universities and institutes were selected through purposive sampling technique. The age range of the participants was 19 to 30 years with the mean age of 24.5. Students playing different sports (e.g., football, cricket, hockey, volley ball) at college and university level were included in the sample. Only those students were part of the sample who were playing in a college or university team. Those students who were below 19 and above 30 years were excluded from the sample.

Instruments

Demographical information Sheet and Buss & Perry Aggression Questionnaire (AQ) was used for the present research. Demographical information sheet was used to get information from the participants which included age, gender, college player/university player.

Buss and Perry (1992) developed the Aggression Questionnaire (AQ) as an updated version of an earlier scale, the Hostility Inventory (Buss & Durkee, 1957). The version of the AQ used in this study was a self-reported measure that consisted of 29 items and four subscales: physical aggression (9 items), verbal aggression (5 items), anger (7 items), and hostility (8 items). Subjects were asked to rate their response to each item of the AQ on a 5-point scale that ranged from 1 (Extremely uncharacteristic of me) to 5 (Extremely characteristic of me). Its four scales were reported to have alpha coefficients of 0.72 to 0.85, indicating adequate internal consistency, and test-retest coefficients of 0.72 to 0.80, showing acceptable reliability.

AQ has a large cross-cultural validation. Originally developed for its application in the Anglo-Saxon culture, it has been applied by researchers of very different countries and translated into several languages, including Dutch (Meesters et al. 1996), Slovak (Lovas & Trenkova 1996), and Spanish and Japanese (Andreu et al. 1998; Ramírez et al. 2001).

Procedure

This Comparative study was conducted to study the level of depression among sports players of college and university. Beside this gender differences in aggression among sports players is also studied. Participants were approached in their colleges and university. Data was gathered from the players involved in different games like cricket, football, hockey and volleyball etc. After taking consent and giving instructions. Demographic information sheet was given to the participants and then the aggression questionnaire was distributed to be filled by them. After completion they were thanked for their cooperation.

Results

Table-1

Alpha Reliability of Buss and Perry Aggression Questionnaire (AQ)(N=100)

Scale	No. of Items	Alpha
Impact of Event Scale (IES)	29	.84

Table 1 shows the alpha reliability of Buss and Perry Aggression Questionnaire (AQ) scale. Results shows that all scale are internally consistent and can be used for present sample.

Table - 2

Means, standard deviations and t-value of the aggression scores of the male and female sport players on Aggression Questionnaire (AQ)scale (N=100)

Scale	Male (n=100)		Female (n=100)		t	p	95% CI		Cohen's
	M	S.D	M	S.D			LL	UL	
Stress	22.80	2.33	19.14	2.27	-7.92	0.001	-4.57	-2.74	1.59

df = 98 *p* < .001

Table 2 shows the mean, SD and t values of male and female sport players on aggression scale. Result shows that there is a highly significance difference at ($p < .001$, $t = -4.57$) which means that males score high on aggression scale as compared to females.

Table - 3

Means, standard deviations and t-value of the aggression scores of the College and University sport players on Aggression Questionnaire (AQ) scale (N=100)

Scale	College (n=100)		University (n=100)		t	p	95% CI		Cohen's d
	M	S.D	M	S.D			LL	UL	
Stress	20.28	2.98	21.66	2.75	-2.40	0.01	-2.25	-0.23	0.48
<i>df = 98 p<.01</i>									

Table 3 shows the mean, SD and t values of college and university sport players on aggression scale. Result shows that there is a highly significance difference at ($p<.01$, $t=-2.40$) which means that university sport players score high on aggression scale as compared to college sport players.

Discussion

The present study was conducted to assess the level of aggression among sports players. It was hypothesized that male sport players will score high on aggression scale as compare to female sport players. Results showed that male sports players are more aggressive than female sports players. It is often disputed that there is a gender difference in aggression. Men seem to be more likely to express physical aggression. The sex drive of male is at the root of most conflict in the world taking football violence to world wars, scientists have claimed” (Von Radowitz, 2012).

Previous studies indicated that when it comes to contact sports, males have a higher aggression level. An expressive social representation of aggression (as a loss of self-control) is holed by women whereas men tend to hold an instrumental representation (as a means of imposing control over others) (Astin, Redston & Campbell, 2003). Burton,

Hafetz & Henninger (2007), in one of the studies found that higher physical aggression was reported by males than females.

Another study (Burns, 2010), showed that there is a significant difference in male participants in their experiences of trait anger. Team cohesion is another factor that can also influence aggression as participants unite together against the opposing team; violence towards one team member can result in multiple members becoming involved. Women are less physically aggressive than men and when compare to male athletes, female athletes are less supporter of aggressive behavior. Attitude of top-level American university athletes towards aggression was assessed. Total 162 participants were selected for the study. It was found that overall, women had negative attitude towards the role of aggression in sport (Tucker & Parks ,2001) Keeler (2007), has explored in his study that there is more aggression in contact athletes outside of competition. Gender differences were also studied, and it was found that females behaved less aggressively than males. The above-mentioned study supports our result as well that male sports players are more aggressive than female sports players.

The study also found that University sports players are more aggressive than college sports players. Study conducted by Smith and Stewart (2003) assessed undergraduates male for attitudes to rape and hostility. Higher scores were found in hostility to women. The study found no support for rape as compared to the students who were not part of the sport. Aggression among athletes in judo, taekwondo, volleyball indoor soccer was compared among student athletes at the University of Tiran. Total sample was 90 subjects with the age range of 19-23 years. All of them were male students. The results show no significant difference in aggression among students in these games. It is clear that the trend of violent behavior is not only linked with sport (Rezaa, 2012). Whether participation in sports functioned as a protective factor for at-risk adolescents in Scotland was studied by Burton& Marshall (2005). Findings of the study revealed that men were more rule-breaking and aggressive as compared to women. Moreover, a positive correlation was found between sport involvement and aggressive behavior. The studies

mentioned about are in line with our result that university sports players are more aggressive than college sports players.

Aggression level among semi- contact games sportsperson was studied by Kumar in 2015. 200 players were selected from Haryana state who participated in different semi-contact games like Basketball, Kho-Kho, Football and Handball at national and inter university level. Female players have less aggressive tendency as compared to male sportspersons of semi-contact games. Moreover, players of Handball, Kho-Kho and Football games scored low on aggression as compared to Basketball players.

A sample of college athletes was taken to find out the level of aggression among athletes who play contact sports and those who play non-contact sports. Findings of the study revealed a significant difference among athletes of contact sports and non-contact sports. Contact sports athletes showed higher level of aggression as compared to non-contact athletes in different games on different categories of aggression e.g., emotional, physical and competitive. Football was found to be most aggressive sport on all three levels, whereas, golf was the least one. In emotional aggression, Tennis scored high in non-contact sport. Soccer also scored lower in non-contact sport in competitive aggression (Safraoui, 2014).

Researches are conducted on college and university students but comparison between college and university sports players on aggression is limited. However, researchers have studied young population and examined the level of aggression among high school and college athletes. The researches leave out comparison between college and university sports players which is being achieved by this present study.

A similar study, such as by Meysam Rahimizadeh, Batoul Arabnarmi, Mehran Mizany, Mehdi Shahbazi, and Zahra Kaviri bidgoli in *Social and Behavioral Sciences* 30 (2011) 2264 – 2267 reveals similar result. This research needs to be more comprehensive in the literature review.

Limitations

Data for the present study is small therefore it's recommended for future researchers to have an increased number of data. College and University students were the sample for this study; it is suggested to include students playing sports at school level also. Aggression level was seen among Sports players only, it is suggested to do comparison among sports players and athletes on aggression in further studies. In this study aggression was analyzed as a whole so it is also suggested to work on the subscales of aggression separately in future.

This research would be more interested if the author (s) do not only stop at the gender differences on sport and does not go further to examine the connection with other variable, such as sport as a moral education (agent of moral change, to teach people to behave less aggressive; or sport as a mean to reduce the frustration-aggressive behavior.

References

- Andreu, J.M., Fujihara ,T., Ramírez, J.M., (1998). *Cultural and sex differences in aggression: a comparison between Japanese and Spanish students*. Paper presented at the 12th World Meeting of ISRA, July 12-17, Ramapo College, NJ.
- Astin, S., Redston, P., and Campbell, A. (2003). Sex differences in social representations of aggression: Men justify, women excuse? *Aggressive Behavior*. Volume 29, Issue 2, pages 128–133.
- Burns, D. (2010). The experience and expression on anger and aggression in dating relationships for male college athletes in contact and non-contact sports. *The sciences and engineering*. Vol 71(2-b) pp. 1390.
- Burton, J. M., & Marshall, L. A. (2005). Protective factors for youth considered at risk of criminal behaviour: Does participation in extracurricular activities help? *Criminal Behaviour and Mental Health*, 15, 46–64.
- Burton, L., Hafetz, J., and Henninger, D. (2007). Gender differences in relational and physical aggression. *Social Behavior and Personality: An International Journal*, 35(1) pp. 41-50(10).

- Buss, A. H., & Durkee, A. (1957). An inventory for assessing different kinds of hostility. *Journal of Consulting Psychology*, 21(4), 343–349.
- Butt, D. S., & Cox, D. N. (1992). Motivational patterns in Davis Cup, University and recreational tennis players. *International Journal of Sport Psychology*, 23, 1–13.
- Filho, M.G.B.; L.C.S. Riberio& F.G. Garcia (2005). Comparison of personality characteristics between high-level Brazilian athletes and nonathletes. *Revista Brasileira de Medicina do Esporte (English version)*, 11(2): 114-118.
- Fletcher, R., & L. Dowell (1971).Selected personality of high-school athletes and non-athletes. *Journal of Psychology*, 77:39-41.
- Fuller, J.R. (1988). Martial arts and psychological health. *British Journal of Medical Psychology*, 61(4): 317-328.
- Grange, P., Kerr, J. (2010). Physical aggression in Australian football: a qualitative study of elite athletes. *Psychology of Sport and Exercise*, 11: 36-43.
- Guilbert, S. (2006) Violence in Sports and Among Sportsmen: A Single or Two-Track Issue?, *Aggressive Behavior*, 32: 231-240 44
- Harrell, W. A. (1980). Aggression by high school basketball players: An observational study of the effects of opponent aggression and frustration-inducing factors. *International Journal of Sport Psychology*, 11, 290–298.
- Husman, B. F., & Silva, J. M. (1984). Aggression in sport: Definitional and theoretical considerations. In J. M. Silva, & R. S. Weinberg (Eds.), *Psychological foundations of sport* (pp. 246–260). Champaign, IL: Human Kinetics.
- Keeler, L. (2007). The differences in sport aggression, life aggression, and life assertion among adult male and female collision, contact, and non-contact sport athletes. *Journal of Sport Behavior*, 30 (1): 57-76.
- Keltikangas-Jarvinen, L., & Kelnonen, M. (1988). Aggression, self-confidence and cardiovascular reactions in competitive performance in adolescent boys. *Aggressive Behavior*, 14, 245–254.
- Kumar, M. (2015). A comparative study of aggressive among the sports person of different semi - content games. *International Journal of Science and Research*, 6(1).
- Lefebvre, L. M., & Passer, M. W. (1974). The effects of game location and importance on aggression in team sport. *International Journal of Sport Psychology*, 5, 102–110.

- Lefebvre, L. M., & Passer, M. W. (1974). The effects of game location and importance on aggression in team sport. *International Journal of Sport Psychology*, 5, 102–110.
- Lovas, L., Trenkova, S. (1996). Aggression and perception of an incident. *Studia Psychologica*, 38, 265-270.
- Masoudnia, I. (2007). The effect of aggression on marital sports participation. *Journal of Olympic*. No 3:pp 55-66.
- Maxwell, J.P. (2004) Anger Rumination, an Antecedent of Athlete Aggression?, *Psychology of Sport and Exercise* 5 : 279-289
- McCarthy, J. F., & Kelly, B. R. (1978). Aggressive behavior and its effect on performance over time in ice hockey athletes: An archival study. *International Journal of Sport Psychology*, 9, 90–96.
- McGuire, E. J., Courneya, K. S., & Widmeyer, W. N. (1992). Aggression as a potential mediator of the home advantage in professional ice hockey. *Journal of Sport and Exercise Psychology*, 14, 148–158.
- Meesters, C., Muris, P., Bosma, H., Schouten, E., & Beuving, S. (1996). Psychometric evaluation of the Dutch version of the Aggression Questionnaire. *Behavior Research and Therapy*, 34,839–843.
- Morgan, W.P., & D,L. Costill. (1996). Selected psychological characteristics and health behaviors of aging marathon runners: longitudinal study. *International Journal of Sports Medicine*, 17: 305-12.
- Ramirez, J.M., Fujihara, T. and Van Goozen, S.H. (2001). Cultural and Gender Differences in Anger and Aggression: A Comparison Between Japanese, Dutch and Spanish Students. *Journal of Social Psychology*, 141, pp. 119-121.
- Rezaa, B.A. (2012). Comparing the incidence of aggression among student athletes in various sports disciplines at the University of Tiran. *Journal of Social and Behavioral Sciences*, 47, 1869-1873.
- Ruiz, M. C., & Hanin, Y. L. (2004a). Idiosyncratic description of anger states in skilled Spanish karate athletes: an application of the IZOF model. *Revista de Psicología del Deporte*, 13, 75e93.
- Russell, G. W. (1974). Machiavellianism, locus of control, aggression, performance and precautionary behavior in ice hockey. *Human Relations*, 27, 825–837.
- Safraoui, R.S. (2014). *Physical, emotional, and competitive aggression tendencies in contact and non-contact collegiate athletes*. Bachelor of Science University of

South Florida Tampa, FL 2012 Submitted to the Faculty of the Graduate School of Eastern Kentucky University in partial fulfillment of the requirements for the degree of Master of Science.

- Smith,D., & Stewart, S. (2003). Sexual aggression and sports participation. *Journal of Sport Behaviour* 26, 384–395.
- Stephens, D. (2004). Moral atmosphere and aggression in collegiate intramural sport. *International Sports Journal* 8 (1): 65-74.
- Tucker, L. W., & Parks, J. B. (2001). Effects of gender and sport type on intercollegiate athletes' perceptions of the legitimacy of aggressive behaviors in sport. *Sociology of Sport Journal* 18, 403–413.
- Varca, P. E. (1980). An analysis of home and away game performance of male college basketball teams. *Journal of Sport Psychology*, 2, 245–257.
- Von Radowitz (2012). Men mostly to blame for wars. *Metro herald*, p1.
- Weinstein, M. D., Smith, M. D., & Wiesensthal, D. L. (1995). Masculinity and hockey violence. *Sex Roles*, 33(11–12), 831–847.
- Widmeyer, W. N., & McGuire, E. J. (1997). Frequency of competition and aggression in professional ice hockey. *International Journal of Sport Psychology*, 28, 57–66
- Worrell, G. L., & Harris, D. V. (1986). The relationship of perceived and observed aggression of ice hockey players. *International Journal of Sport Psychology*, 17, 34–40