

# **AGGRESSIVENESS AND SPORTS PERFORMANCE: AN ENQUIRY INTO THE NATURE, DISPLAY AND EFFECTS OF SPORTS AGGRESSIVENESS IN TERMS OF GENDER**

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**Abstract:** Throughout the history of sports, there were many incidents of athletes, either individually or in groups, being aggressive towards their opponents in matches. Similarly, both coaches and spectators also became violent on several occasions. Hence, it is interesting to look into the diverse aspects of aggressiveness. The present paper is trying to understand the gender differences in the nature, display and effects of sports aggressiveness in multiplayer games, especially basketball. As for aggressiveness increases along with the degree of body contact in the field, basketball was selected as a representative of multiplayer-contact games. The paper briefly describes the origin and growth of basketball in general as well as in India. A detailed review of the literature is the next. Using Sports Aggression Inventory, the researcher collected data from one hundred male and female players throughout India. Descriptive statistics like mean and standard deviation were used to know the nature of the data. The Levene's Test for Equality of Variances is used to find out the significance of the difference that exists among gender in aggressiveness. The findings were elaborately discussed with the help of extensive literature. A detailed bibliography is given at the end.

**Keywords:** Aggressiveness, Basketball, Aggression, Sports Aggression Inventory, Contact Games, Levene's Test for Equality of Variances, Multiplayer Games.

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**Introduction:** As the largest entertainment industry of the modern world, sports is expected to ensure maximum value of leisure by imparting all those elements of amusement, which is necessary for attracting fans, sponsorship, channel ratings and sales of tickets and merchandise. Without creating a spirited response within the spectator, neither players nor matches attract admirers for long. Compare to any other sporting skill, it is the aggressiveness of the player and the game that appeal to a maximum number of people. But at the same time, aggressiveness always leads to unhealthy outcomes from a player, either during or after a match. Similarly, spectators also get motivated with the aggressiveness created within the match and carry it to engage in direct confrontation with others. Hence, players were always advised and trained to regulate their aggression to permissible levels in order to reduce violence related to sports. As marketisation of sports determines the shape and trends of sporting practices these days, aggressiveness in sports became one of the determinant factors of the popularity of a player as well as the game (Jewell, 2012).

Researchers presented contradicting observations about the impact of aggressiveness on sports performance (Ruiz & Hanin, 2011; Robazza & Bortoli, 2007). Several coaches believe that if used properly, the aggressiveness of players is useful to enhance their performance as well as to realize a particular goal (Lane, Beedie, Devonport, & Stanley, 2011; Ruiz & Hanin, 2011). However, aggressiveness is not a legitimate sports strategy even though it is appreciated and propagated, especially in those contact games like football or rugby. Aggressiveness is even considered as an equivalent of unsportsmanlike behaviour in sports (Pelegrin, Serpa, & Rosado, 2013). Sports training often incorporates techniques to control aggression for producing elite performance. Aggression in sports, in general, is to harm physically or mentally the athletic performance of the opponent player. That means, in a sense, aggressiveness is not restricted to sports like the world outside of it. It is legitimate and permitted (informally) in some sports like martial arts, rugby and football. Combat sports like boxing, wrestling or

judo are characterized by aggressiveness, and they often produce violent physical collisions (Kerr, 2005). But it is definitely possible to produce elite sports performance without any physical, verbal or gestural aggressiveness; so that assertiveness must be distinguished from aggressiveness based on the intention of the player (Krishnaveni & Shahin, 2014). Assertiveness is the use of any sporting strategy for establishing dominance on the opponent player or players without any aggressive move. In sports, performance enhancement is more dependent on managing the athlete's emotion along with his athletic ability, teamwork and strategy both in individual and team games (Wagstaff & Weston, 2014; Lane, Beedie, Jones, Uphill, & Davenport, 2012; Woodcock, Cumming, Duda, & Sharp, 2012; Hanin, 2010).

**Background of the Study:** Scholars observed several reasons for a player to become aggressive in a match. A frustrating situation like losing the match is one of the most cited reasons in the literature. There are even observations that some sports are culturally more aggressive (say football) and less aggressive (say volleyball) which reasons any aggressive act within that sport (Trivedi & Pinto, 2015). Combat games are definitely more prone to aggressiveness. Contact games are more aggressive than non-contact games. Multiplayer games are more vulnerable to aggressiveness than single-player ones. Professional matches show more aggressiveness than amateur matches. Age and experience of the player also influence aggressiveness. Cultural factors are also observed as influencing aggressiveness in sports matches (Gee & Leith, 2007). The personal behaviour of the player definitely determines the degree of aggressiveness in a player. Sometimes coaches and team administration encourage players to act aggressively as a game strategy. So that all researchers, without failing, observed that almost all athletes experience aggressiveness in general during competitions (Sofia & Cruz, 2016).

Aggression is divided into several sub-categories according to the perspectives on their intention (Wlazło, Szuszkiewicz, & Wlazło, 2007). Hostile aggression is the one that intends to cause suffering and pain on the opponent, whereas instrumental aggression uses aggression to bring advantage or to win the match (Wann, 2005). This kind of aggression is also called 'channelled aggression' (Trivedi & Pinto, 2015). Reactive aggression has frustration or anger besides the intention to harm the opponent (Bredemeier, 1985). One of the most reported challenges by researchers is the difficulty in distinguishing one kind of aggression from another, as well as the complexity in predicting when one kind of aggression transforms into another. This is becoming more inconvenient in those games where prospects of aggressiveness are high, like basketball or ice hockey.

Basketball has five players on each side. As a contact sport, basketball generates considerable aggression during the match. A contact sport is one in which players of opponent teams are expected to do body contact with each other as a part of the nature of the sport. Basketball was invented in 1891 by James Naismith in the United States of America, and it became one of the most popular sports nowadays. There will be five players in each team. India is one of the first countries to incorporate basketball into its sports culture. The first Indian National Championship of basketball was held in 1934 in New Delhi. The highest governing body of the game in the country is the Basketball Federation of India, which was established in 1950. The game is growing popular throughout the country, with considerable patronage from government and private agencies. Both men and women of all ages play basketball here. Due to the large-scale existence of the game, there were many reports of violence during the match in the newspapers. Most of this violence was initiated by players on the court itself during the competition. Considering the wide presence of such petty tricks to temporarily overpower an opponent in a match, an investigation is relevant to explore the presence of such habits among young players in India. The present paper is an attempt in that direction specifically by looking into the gender distinction among aggressiveness.

**Statement of the Problem:** It is observed that aggression as a psychological response is difficult to define (Kerr, 2005). This is due to the mutually contradicting nature of the character, way of expression and effects of aggression at different times. Scholars identified aggression as both negative and positive, directed or uncertain, calculated or rampant and intended or felt (Renfrew, 1997). Apparently, it is a behavioural aspect that is present in every individual at different levels. Considering the wide scope of the variable with regard to the reasons, nature and magnitude of impacts and ways of expression of

aggression, defining it is like “entering a ‘semantic jungle’” (Bandura, 1973). So that the researcher approaches aggression in sports as the behavioural act in physical, verbal or gestural forms intended to harm physically or mentally the athletic performance of the opponent player due to anger, fear or for other personal objectives. The truth is that a big number of players, coaches and fans accept the application of violence or aggressiveness is imperative in winning any match (Messner, 1990); hence, sports markets aggressively reward aggression (Stephens, 1998). Scoring and becoming victorious in a match is outweighing all socially desirable moral values (Coulomb-Cabagno & Rasclé, 2006). Similarly, male players were observed as regarding aggressiveness either as normal or as a reflection of sport competence (Bredemeier, 1985). However, females do not differ considerably (Messner, 1990; Silva, 1983). So that the present paper will attempt to examine the gender distinction in the features of aggressiveness among Indian basketball players.

**Objectives and Research Questions:** The present paper is an attempt to identify the position and relevance of aggressiveness in sports. The research objective is to quantitatively examine the nature, display and effects of sports aggressiveness in basketball in terms of gender. The research questions of the present paper are given below.

1. Do the nature, display and effects of sports aggressiveness in basketball differ according to gender or not?

On the basis of the given objective, it is hypothesized that there will be significant differences in aggressiveness among athletes belonging to different gender in basketball.

**Review of Literature:** Aggressiveness in sports has attracted researchers since the beginning of the last century. They studied the aggressiveness of players, coaches, fans (Wann, 2005) and parents of children (Wann, 2005) involved in sport in a sporting environment. However, it is continuing as an unfinished area of sports psychology. It starts from the definition of aggression itself. There were many attempts to define aggressiveness in sports from the beginning. The earlier definitions, as well as interpretations of aggressiveness in sports, were based on mainstream psychological theories. According to the reactive theory which argues that aggressiveness is depending on the various barriers and their degree of influence in restricting an individual from realizing his objectives (Geen, 2001). But the social learning theory put forward by Bandura argued that aggressiveness was acquired through direct learning or observation (Geen, 2001). The frustration-aggression hypothesis argues that aggressive sports behaviour is caused by frustration grown after losing the match (Bird & Cripe, 1986). Based on these theoretical approaches, scholars attempted to define aggression in diverse ways. Aggression was defined by greatly addressing aggressive behaviour (Terry & Jackson, 1985; Buss, 1961), the magnitude of effect (Geen, Human Aggression, 1990; Husman & Silva, 1984; Kaufmann, 1970), and motivation (Leunes, 2008; Geen, 2001). But considering their limitations to address the distinct features of sports, many better definitions were created later (Kerr, 2005; Russell, 1993). When sports started to be considered as the continuation of contemporary society, with full of its various institutions like social or economic, the perspectives on aggression were also deconstructed. At present, aggression in sports is viewed from a social psychological standpoint (Russell, 2008).

Similarly, scholars attempted to approach the aggressiveness of players from various angles. For instance, they studied the aggressiveness of players based on reasons (Singh, 2017), gender (Coulomb-Cabagno & Rasclé, 2006; Owens, Shute, & Slee, 2000; Razia, 1996), competitive level (Sofia & Cruz, 2017; Coulomb-Cabagno & Rasclé, 2006), aggression level (Safraoui, 2012), experience of players (Coulomb & Pfister, 1998), type of sport (Maxwell, Visek, & Moores, 2009; Coulomb-Cabagno & Rasclé, 2006), and performance (Sofia & Cruz, 2017; Carron, Colman, Wheeler, & Stevens, 2002; Kimble, Russo, Bergman, & Galindo, 2010). Adding to that, scholars tried to compare aggressiveness between different games like contact and non-contact games (Trivedi & Pinto, 2015; Singh, Bhowmik, & Singh, 2013; Safraoui, 2012), team and individual games (Sofia & Cruz, 2017; Razia, 1996). Taking each individually, there is a large number of literature on each sport worldwide. For example, there were investigations on the aggressiveness based on football (Coulomb & Pfister, 1998), basketball (Singh, 2017), volleyball (Singh, 2017; Kumar & Yadav, 2014), hockey (Hasan, Khan, & Singh, 2015), cricket (Khan, 2015; Kumar & Yadav,

2014), athletics (Tomar & Singh, 2012; Kimble, Russo, Bergman, & Galindo, 2010) and others. In order to collect information on aggressiveness on these games, scholars developed several proved tools like the Buss-Perry Aggression Questionnaire, Competitive Anger and Aggressiveness Scale (Maxwell & Moores, 2007), Aggressive Behaviour Scale (Sofia & Cruz, 2017), Questionnaire of Unsportsmanlike and Aggressive Attitudes Drawn-up Ad-Hoc (Pelegrin, Serpa, & Rosado, 2013).

**Research Methodology:** Fifty each male and female athletes were selected for collecting data on the topic at hand. These athletes represented their universities in the All India Intersarsity Basketball Tournament. Five each male and female players were interviewed from each university. The data were collected from them in the years 2015-16 and 2016-17. The game selected for the study was basketball only. The age of the players ranged between 17 and 25, and the average age of the subjects was 20 years. The testing variable for the study was aggression only. The sports Aggression Inventory constructed by Anand Kumar Srivastava and Prem Shankar Shukla (Srivastva & Shukla, 1988) was used to measure the aggression level of players. The inventory consists of twenty-five items. The maximum and minimum score for each item is one and zero respectively. Scores obtained for each statement are added up for the total score on aggression by each subject. A score range more than 13 is considered as 'high aggression', less than 12 as 'low aggression' and the 12-13 range as average aggression. Along with the inventory, all subjects were asked about the nature, circumstances, way of expression and the aftereffects of both showing and receiving of aggressiveness during the time of competition.

Data from those subjects who belong outside of the state of Kerala were collected by assigned individuals. The writer identified experienced people in data collection within physical education. The responses of the Inventory were written down by the subjects themselves and the data collectors ensured all directions given in the inventory were strictly followed. The responses for those questions related to nature, display and effects of aggressiveness were noted down by the data collector only. The objectives of the test were explained to all subjects in the beginning, and they were asked to respond to each of the statements as truthfully as possible. As soon as they complete the test, the responsible data collector gathered the datasheet. The athletes were assured of the confidentiality of their responses. In order to address the hypothesis, the data collected from respondents were analysed with descriptive statistical tools of mean and standard deviation. To determine whether the difference in mean values of aggressiveness between gender, the t-test is used. The calculated p-value less than 0.05 is considered to be significant. The statistical analyses were carried out with the help of SPSS 16.0 for Windows.

**Analysis and Findings:** As the research objective refers to both the extent of gender differences as well as the nature of gender differences in aggressiveness, the earlier problem is addressed first. Here, descriptive statistics like mean and standard deviation are calculated to know the general nature of the collected data, and the results are given below.

**Table 1:** Mean and Standard Deviation of Aggression in terms of Gender

Gender	N	Mean	Std. Deviation	Std. Error Mean
Male	50	13.22	5.285	0.747
Female	50	13.02	3.706	0.524

**Source:** Calculated Figures

According to the table, both males and females have significant aggressiveness as a score of 13 and above is representing 'higher aggression' in Sports Aggression Inventory. Here males have more mean value, which means that their aggressiveness is higher than females in basketball. Similarly, the results show that the aggression score of males has a higher tendency to deviate from the average score compared to females. In order to find out the significant difference that exists between the aggression of score of male and female basketball players, the independent samples t-test, i.e., Levene's Test for Equality of Variances is calculated below.

**Table 2:** Levene's Test for Equality of Variances of Aggression in terms of Gender

	Mean Difference	Df	Sig. (2-tailed)	F	t	Sig.
Equal variances assumed	0.200	98	0.827	6.846	0.219	0.010
Equal variances not assumed		87.807	0.827			

**Source:** Calculated Figures

In the table, 'F' is the test statistic of Levene's test and 'Sig.' is the p-value corresponding to this test statistic. From the table, the mean value difference between male and female players is 0.200 and the t-value is 0.219. The 'p' value of the test is 0.010 which is less than the threshold value of 0.05 level; so that the sample groups do not have equal variance. That means, according to the above calculation, it is found that there is a significant difference exists between genders in aggression.

Almost all respondents agree that they showed as well as received aggressiveness in court. Most of them intentionally performed aggressiveness while playing either as an individual trick or as a part of a team strategy. Regardless of winning or losing the match, players used verbal expressions of aggressiveness as a way of performance. As a contact game, basketball often provides much scope for physical aggression. Players often used gestures also to distract opponents. However, they used aggressiveness more while in a losing situation. Respondents agree that they do more aggressive performance while playing in professional tournaments. Those professional matches that happen at local levels produce more aggressive performance because strict rules are often diluted there for entertainment value. Senior players produce more aggressiveness than juniors. They agree that coaches encourage them to show such tactics but with sufficient instructions. Aggressiveness is often used as a strategy to win the match; so that usually 'power forward' and 'small forward' are instructed to be more aggressive. From the field experience, the researcher felt that some players are behaviorally more aggressive than others, irrespective of their position in the court. However, players are not seriously discouraged from showing aggressiveness on the court. It is also observed that male players produce aggressive moves in a gradual manner whereas females show them spontaneously.

Aggressiveness is displayed in the forms of gestures, words or physical moves in basketball. Respondents agreed that facial and finger expressions of aggressiveness are a common thing in the court. On one or other occasions, all players showed such gestures to the opponents. Verbal aggressiveness in the form of sudden shouting, abusive words or provoking comments is repeatedly used in matches. Physical aggressiveness is more or less permitted until someone is getting injured. Chances of physical aggression are very high in basketball, but there are strict rules to deal with them. Compared to female players, the male is showing more physical aggressiveness, particularly in professional matches. Female players use more verbal aggressiveness. Players use moving hands and the ball itself for creating physical aggressiveness on the opponents, but such moves are often justified as an art of playing the game. Without a serious physical injury, it is difficult to prove physical aggressiveness. Similarly, it is difficult to establish the origin of aggressive verbal expression when spectators are equally charged. Without proper recording facilities, it is not easy to accuse anyone of making an aggressive gesture. Pressure tactics are highly required in order to prove the display of aggressive performance of a player or a team in basketball.

The researcher was particularly interested in knowing whether producing an aggressive move contributes to the enhancement of the performance of that player or not. All respondents agreed that such performance-enhancing capability of aggressiveness is almost zero. Aggressiveness is intended to have an effect on the opponent only. It is possible to argue that one player can perform better when the opponent got distracted due to an aggressive move by the earlier one. It indicates that a player feels better off after making an aggressive move in a match. Anyway, the above statement is incidentally supported by respondents when quizzed further. It is important to point out that respondents are not able to specify whether their aggressive act is instrumental or not. However, respondents equally agree

that winning a match by such treacherous tricks is not a commendable one. On the other side, all of them were recipients of aggressiveness by the opponents in several matches; hence, they were aware of the effects of aggression on performance. They all got distracted by noticing the gestural and verbal tactics of aggression. The time taken for focusing back on the game depends on the intensity of the aggression. Players are often advised to deliberately discard any such adverse comments or gestures from opponent players. However, addressing physical aggressiveness is not that easy. Physical injuries often disrupt the focus of players on the courts. So that they are expected to physically train to the maximum to reduce the impact of injuries if it happens. Besides, they are expected to be aware of the general playing strategy of the opponents in order to deal with any such adverse physical moves as much as possible. Playing with a team spirit also helps to address such tricks to an extent. In case of injuries, it is possible that players will receive a 'foul call' by the referee and be restricted from continuing in the match as well as in subsequent matches.

**Discussion of Hypotheses:** The above analysis of sports aggressiveness showed notable variation in terms of gender. Within gender, the males scored higher than females. Hence, as there is considerable gender disparity on sports aggressiveness in the analysis; the hypothesis that there will be significant differences in aggressiveness among athletes belonging to different gender is accepted. So that, the study disagrees with the earlier finding that women are more aggressive in sports (Razia, 1996) and joins other studies where men are found to be more aggressive (Pelegrin, Serpa, & Rosado, 2013; Coulomb-Cabagno & Rasclé, 2006). The use of more verbal aggressiveness by women and physical aggressiveness by men is observed earlier too (Pelegrin, Serpa, & Rosado, 2013; Owens, Shute, & Slee, 2000). Though it is argued that biological factors of gender have a vital influence on the aggressive behaviour of individuals, it is widely acknowledged that the biological factors are not absolute determinants of their external expression and the behaviour of males and females overlap often (Razia, 1996). Like earlier scholars, the present researcher also found it challenging to define aggressiveness in sports (Sofia & Cruz, 2017; Trivedi & Pinto, 2015). The study found that players in a contact game like basketball are very aggressive irrespective of gender, which is agreeing with Safraoui (Safraoui, 2012) and thereby supports the earlier finding that contact game players possess a higher aggression level (Trivedi & Pinto, 2015). However, the finding of the study that aggressiveness does not contribute to athletic performance is in line with what was observed by Silva and others (Pelegrin, Serpa, & Rosado, 2013; Silva, 1978). Similarly, Wann also observed the psychological restoration of players after an act of aggressiveness (Wann, 2005) as in the present paper. Along with that, the observation made by the researcher that aggression is the output of behavioural characteristics is presented by earlier scholars too (Kavussanu & Ntoumanis, 2003).

**Limitations of the Study:** Even though the paper is attempting to describe the gender aspects of aggressiveness in sports, it is not extensively discussing about the reasons and relevance of such gender differences. Similarly, a detailed description of gender-specific characteristics of aggressiveness is not addressed here. Another limitation is with the data. Basketball does not represent all kinds of sports like combat games, multi-player non-contact games and single-player games. The relationship between the duration of a match, the number of players in the match and the influence of other factors like geographical location of the court, the response of spectators, media or health conditions were not addressed in the paper. The study gave less importance to identify the kind of aggressiveness that the respondents usually produce in a match. The differences in the degree of aggressiveness in different games are also not dealt with here.

**Conclusion:** Aggressiveness is part of matches where traditional rivalries are fighting with each other. It is the spirit of aggressiveness that adds intensity to such matches, and in turn, they attract more viewership. These 'derby games' are essentially ensuring the thriving of the sports economy too. As sport is the 'reformed' form of primitive war, the elements of aggression are rewarded in sports. But it became more or less a social problem. However, all training packages and sports rules clearly stand against aggressiveness beyond a level. This indicates that aggressiveness is considered as a less desirable skill in sports. Aggressiveness is definitely different from assertiveness or competitiveness which leads to elite athletic performance when the earlier one does only the opposite. It is relevant to point out that

aggressiveness in players is getting more and more encouraged as part of the commercialization of sports, and as a continuation, even those players in non-contact games are gradually becoming more hostile towards opponents these days. It is sad to realize that aggressiveness is informally accepted as an ingredient to give more entertainment value to sports competitions nowadays.

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