

## **Aggression of Indian Female Field Hockey Players at Different Levels of Competitions**

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**Abstract:** *This study conceptualized to compare the aggression of Indian female field hockey players at three different levels of competitions. To work on the purpose of the study 150 female Indian field hockey players played at different levels of competitions were selected. The age of the participants ranged from 16 to 27 years. For the purpose of the present study three strata (levels) were made, inter-collegiate, north-zone intervarsity, and all India intervarsity hockey players. Stratified random sampling technique (proportionate) was done and 50 participants were selected for each stratum. Aggression of the subjects was measured by using sports aggression test inventory constructed and standardized by Kumar and Shukla (1984). One Way Analysis of Variance (ANOVA) was used to find out the significant difference among inter-collegiate, north-zone intervarsity and all India intervarsity level female field hockey players. To know more about the pattern of differences existing within a set of population means, Post-hoc test were used. The significance was tested at 0.05 level. Results of the study showed that significant difference exists among inter-collegiate, north-zone intervarsity and all India intervarsity level female field hockey players on aggression. Thus it can be concluded that aggression as one of the most important psychological component that influence the performance of the female field hockey players.*

**Keywords:** *Aggression, field hockey, female, inter-collegiate, north-zone intervarsity, all India intervarsity.*

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### **1. INTRODUCTION**

Aggression defined as the energetic assault on animate or inanimate objects for a purpose. The nature of aggression in sports should be considered the degree of ambiguity regarding aggression in the sports. Aggression is always associated by some negative emotional state. The emotion which is called as anger is usually aroused by some provocation (Alderman, 1974).

Sports psychologists distinguished two types of aggression in sport, first one is hostile and second one is instrumental (Grange, & Kerr, 2010). In hostile aggression a participants purposely try to harm his/her opponent physically. Instrumental aggression is used to achieve certain goals, it can be to tackle harder to gain possession of the ball in hokcey (Jones, Bray, & Olivier, 2005). It is also known as channeled aggression, this is because an individual has the ability to turn it on and off and control there temperament and this is not associated with anger (Berkowitz, 1962; Katko, Meyer, Mihura, & Bombel, 2010).

Psychologist, physical educators, and others have analysed the aggression behaviour of athletes and sports spectators in order to better understand the effect of such activity upon participants. Some instinctive theorists believe that participation in sport provides a socially acceptable outlet for aggression without the accompanying feeling of guilt. If an athlete has a high drive to aggression, especially in conclusion sports such as football and hockey and in pugilist sport such as boxing & judo. Some have hypothesized of aggression that an athlete may escape the guilt feelings that result from violent expressions of aggression, providing that the athlete plays by the rules (Rani, & Mathana, 2010).

A number of reasons have been proposed to explain the reason athlete engage in retaliatory aggression in sport. Aggression that transcend hard play the spirit and meaning of the rules. These reasons include those that coincide with the various theories of aggression that have been discussed as well as various operational and situational variables (Kumar, Kumar, & Maurya, 2010).

Most psychologist have viewed aggressive behaviour. Hostile aggression which is projected to harm opponent or instrumental aggression, which is directed at achieving a goal (Razeena, 2004). Social leaning viewpoint (Bandura, Ross, & Ross, 1961) states that the actual performance of aggressive act is dependent upon the person's evaluation of reinforcement that will be presented on the bases of the responses which may be making to a given situation. Aggression as a burning issue in sports has become as integral part of contemporary sport society. Trainer and coaches have become aware to a players ability to withstand and reply to bullying. It is accepted that players progress primarily because of their ability to contest. Toughness and willingness to contest have become essential in establishing a positive identity. Sardar and Das, (2010) states that such attitudes suggest a high degree of aggressiveness in sport. Empirical research has identified tough mindedness and aggressiveness as a personality trait which coincide positively with athletic ability and success (Salam, & Sardar, 2010; Rascle, Traclet, Souchon, Coulomb, & Petrucci, 2010). Psychologists have performed thousands of studies concerning problems related to aggression, but issues related to aggression to sports have rarely been studied on an empirical basis. Kumar and Chandrappa (2011) state that athletes are aggressive because of vicarious and operant reinforcements. They see other players regarded in terms of cheers and high monetary prizes and salaries for being aggressive and violent and they follow suit. Mudimela (2010) found champion athletes to be significantly distinguished than other athletes as the former manifested high aggression. Sidhu, Singh, and Singh, (2011) indicated that aggression has been found to be significantly associated with success in athletic skill. Gazar, and Raziak, (2010) found that the gold medallist wretsler were more aggressive than the non medallist wretsler. Mishra (2001) found high achieving fefefemale athletes are more aggressive as compared to low achievers. Mishra (2010) found sprinters possessing high aggressive tendencies performed better in competitive sports than the kho-kho players possessing low aggressive tendencies.

In India hockey is played by all levels of competition, the purpose of this study is to know, at different level of participation how a player changes his aggressive behaviour. Then we can only guide and suggest our coaches and players about the need and importance of the aggression in hockey.

## **2. METHODS AND MATERIALS**

### **2.1. Participants**

The study was conducted on 150 female field hockey players who played at different levels of competitions in India. The age of the subjects ranged from 16 to 27 years, and they don't have any injuries reported within last six months on the date of data collection. The samples were collected randomly from different competitions in different time. For the purpose of the study three competitions level were made, first one was inter-collegiate (those players were selected who were not playing north-zone intervarsity and all India intervarsity), second one was north-zone intervarsity (those players who were not playing all India intervarsity) and last one was all India intervarsity hockey players. Stratified random sampling technique (proportionate) was done and 50 participants were selected for each stratum.

### **2.2. Tools**

Sports aggression inventory constructed and standardized by Kumar and Shukla (1984) was used to assess the aggression of the selected subjects.

### **2.3. Procedure of Data Collection**

The investigator initially contacted to organizing authorities of different tournaments and received permission to collect the data. The managers and coaches of the respective teams were contacted personally and were explained the purpose and significance of the study and request to permit their respective team members to take as subjects for this study. Convenient meeting dates, time and place arranged with teams managers, coaches and captains. Before filling the questionnaire instructions printed on the questionnaire were explained verbally so that the subjects do not hesitate to give their honest, personal and frank response in the correct manner. Before the filling actual questionnaires, each participant completed a background information such as age, participation in game, and level of participation. The questionnaires were responded in a quiet, comfortable, and familiar environment at the participant's living rooms and grounds.

### **2.4. Statistical Analysis**

In order to find-out significant difference among inter-collegiate, north-zone intervarsity and all India intervarsity level female field hockey players on aggression ANOVA was used. To know more about

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the pattern of differences existing within a set of population means, Least Significant Difference (LSD) Post-hoc test were used. The significance was tested at 0.05 level. All the statistical procedure was performed with the help of SPSS (V.19).

### 3. RESULTS

**Table1.** ANOVA summary on aggression among inter-collegiate, north-zone intervarsity and all India intervarsity level female hockey players

Source of Variance	df	SS	MSS	F
Between Groups	2	102.17	51.08	7.01*
Within Groups	147	1070.83	7.29	
Total	149	1073.01		

\*Significant. Tab.  $F_{.05}(2, 147) = 2.08$

As documented in the above table 1 that computed value of F (7.01) is more than the tabulated value of F (2.08), hence there is a significant difference exists among inter-collegiate, north-zone intervarsity and all India intervarsity level female hockey players on aggression. Further to analyze which level of players had better aggression, Least Significant Difference (LSD) a Post-hoc test was performed and its result is presented in the following table 2.

**Table2.** LSD among inter-collegiate, north-zone intervarsity and all India intervarsity level female hockey players on Aggression

Mean Value			MD	Sig.
AllIndiaIntervarsity	North-zone Inter-varsity	Inter Collegiate		
13.30	11.58		1.72*	0.000
13.30		11.52	1.78*	0.001
	11.58	11.52	0.06	0.762

\*Significant at .05 level

Pair wise mean comparison is presented in the table 2, and it is revealed that there is significant difference between All India intervarsity and north-zone intervarsity (MD = 1.72); All India intervarsity and Inter-collegiate (MD = 1.78); whereas no significant difference was documented between north-zone intervarsity and inter-collegiate (MD = 0.06) level female hockey players.

### 4. DISCUSSION

The purpose of the study was to determine the significant difference among inter-collegiate, north-zone intervarsity and all India intervarsity level female field hockey players on aggression. The results of the study revealed that there was significant difference among inter-collegiate, north-zone intervarsity and all India intervarsity level female hockey players on aggression. When mean-wise comparison done it was found that significant difference exist between All India intervarsity and north-zone intervarsity; All India intervarsity and Inter-collegiate; whereas no significant difference was documented between north-zone intervarsity and inter-collegiate level female hockey players. This result documented that as level of competition increases simultaneously aggression level of the players also increases. The findings of this study are supported by the findings of Peter (2014) and Kumar (2013). Mudimela, (2010) also reported same type of results in his study he studied the impact of level of participation on aggression and performance among soccer players. Ali, Hussain, & Rahaman, (2010) also found same sort of results when they compare aggression of Manipuri hockey players. Barimani, Sina, Niaz-Azari, & Makerani, (2009) reported that average amount of aggression was lower among the athlete students than non-athlete, but there were no significant deference. Gazar, & Raziak, (2010) in their study found there were positive correlation between the number of years of practice and sport aggression for male wrestlers, also there were statistical significant differences between ranking of advanced wrestlers and ranking of less advanced wrestlers in sport aggression for wrestlers of less advanced.

### 5. CONCLUSIONS

On the basis of the analysis of the data and obtained results it was found that there was important change in players participating in different competition level in their sports aggression. The findings of the study revealed that there was significant difference among inter-collegiate, north-zone

intervarsity and all India intervarsity level female hockey players on aggression. It was concluded that all India inter-varsity players had higher level of aggression and inter collegiate players had lower level of aggression among the groups. One of the main recommendations of the research is the need to focus on the psychological preparation for female hockey players, as well as the need for a sport psychologist to work with national teams.

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