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A comparative study of aggression between contact game and non-contact game players of Maharashtra

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Abstract

The purpose of this study was to compare the Aggression between Contact Game and Non-Contact Game players. For the purpose of this study a total of 80 subjects (N=80) were chosen out of which 40 were from Contact Game (n=40) and 40 were from Non-Contact Game (n=40). The subjects were chosen using Quota sampling technique. Aggression was measured using Buss-Perry Aggression Questionnaire (BAQ) (1992) which consisted of twenty nine questions measuring four attributes namely physical aggression, verbal aggression, hostility, and anger. Independent sample 't' test was used to compare the Aggression between Contact Game and Non-Contact Game players. The results showed that there is a significant difference in Aggression between Contact Game and Non-Contact Game players wherein Contact game players possessed a higher level of Aggression than Non-Contact Game players. The higher level of Aggression can be attributed to the high amount of contact that occurs in contact games.

Keywords: Aggression, Physical Aggression, Verbal Aggression, Hostility, Anger, Contact Game, Non-Contact Game

1. Introduction

The relationship between aggression and sports has been a controversial subject for many years. Within sport, aggressive behavior is deliberate and controlled by the aggressor, but perception of aggressive behavior varies on the basis of the sport and of the participant. When an observer views a culturally aggressive sport, such as football or soccer, an otherwise aggressive act might not be deemed aggressive within that observed sport. The same act might be perceived aggressive in a less culturally accepted aggressive sport such as baseball or volleyball. Aggressive behavior can be legal even if it causes harm. The social environment in which the act takes place often defines the legitimacy of the aggression. Just as the serial killer can be defined as aggressive, so can a football "hit", a baseball players "at bat" at the plate, or an executive's rise to the top of his/her career. In short, definitions of aggression can vary across sport. However it is still not clear whether the aggressive individual finds sport a way to release that aggression or whether the competitive nature of sports promote aggression that can't readily be turned off when the activity is over. Aronson (1995) argues just that point; that in fact, the behaving aggressive increases the likelihood of future aggressive behavior. This would suggest aggression could transfer outside the sport arena into society.

A key comparison between sports is to distinguish between contact and non-contact sports. A contact sport athlete is an athlete that is involved in a sport that by nature, and within the rules of the sport, demands physical collisions with an opponent and is in fact a rewarded behavior. An example would be football, rugby, basketball or ice hockey. A non-contact sport athlete is that athlete involved in a sport whereby the rules more often than not forbid contact with the opponent and the offender is penalized should such contact occur. An example would be a baseball or softball.

1.1 Aggression

Sport psychology is the science of human's behavior during sport trainings and competitions, and its objective is to improve the performance of athletes in competitions. Aggression as the representation of angry and hostile behavior is a factor effective in the performance of athletes. According to Kaufman (1970), aggression is emotional anger Accompanied with physiologic arousal with the intention to injure and cause damage to the other individual. Aggression is exhibited by athletes in different forms including physical aggression, abusiveness, or even

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encroach other's rights. The results of the researches show that there are different factors including sensitivity of competition, performance of referees, provocation constituted by audience, personality traits of athletes, and gender, that are effective in aggressive behavior. The results of a research conducted by Chris confirm the effectiveness of cultural factors in aggressive behaviors of professional ice hockey athletes. Silva suggests that an aggressive act in sport is intentional and observable, committed with the intent to injure, and personal. Aggression in sport is classified into instrumental, hostile, and general aggression. Instrumental aggression is done to attain unaggressive objectives, e.g. when an athlete fouls to score a goal. In contrast, hostile aggression is carried out by an athlete who intends to injure another person. Kemler (1975) studied the effects of the different sports on the aggressive behavior of athletes. For this purpose, he conducted a study to compare two types of instrumental and reactive aggressions in contact and noncontact sports. The results of this study show that male athletes in contact sports express lower instrumental aggression, and higher reactive aggression than female athletes do in noncontact sports. The results of this research also show that competition increases aggressive behaviors in all tests. Silva (1978) argues that aggression undermines athletic performance because aggressive athlete shifts his/her focus to the aggressive target against the rival and this shift causes an interruption in the competition. The results of the studies show that aggression has negative effects on the performance of athletes, and their abilities are lost after reacting aggressively. Aggressive behavior is affected by different factors attributed to the personal differences including gender of the athletes. According to these studies, the athletes with the same or higher status than their opponent begin to exhibit aggressive behavior2. unilaterally. Aggressive athletes have not been sufficiently studied using scientific methods. Defining aggression continues to be a primary methodological problem. Research has limited an informed discussion of this subject. Research has focused too much on the negative aspects of aggression and pessimistic behavior cause that young people react often defensively, and in case no attention is paid to such a behavior, it may pose obstacle to the development of their abilities and capacities and lead to a disorder in their social understanding and socialization. Aggression in sport can be caused by a number of factors. The most identifiable reasons are the rules of the game (level of physical contact), frustration, instinct, presence, arousal, environmental cues, self-control and also the behavior of those around. Other factors in aggression include personality, media involvement, coaching, role models and the society we live in. Frustration is known to play a key role in aggression. It is the view that is innate and also something that is learned (aggression).It can occur in many different circumstances and one of those can be an athlete not achieving his or hers goal targets. Having a point disallowed or being fouled by an opponent on more than one occasion can lead to frustration. Various psychologists argue that aggression is innate and only occurs in a frustrating situation but Miller (1941) claimed to differ. He stated that it was frustration that

made aggression more likely, he also stated that for one or more reasons athletes won't show this aggression in their profession. Bredemeier (1983) defined aggressive behavior as "the intentional initiation of violent and or harmful behavior. Violent means any physical, verbal or even nonverbal offences (finger salutes), while harmful behaviors stand for any harmful intentions or actions (bad challenges or cursing). Psychologists have distinguished two types of aggression in sport, hostile and instrumental. Hostile aggression is a participants purpose to solely harm someone physically, using their fist or elbow can fall into this category and a sporting. Instrumental aggression can be used to achieve a goal, which can be to tackle harder to gain possession of the ball i.e. rugby. It is also known as channeled aggression, the ability to turn it on and off and control there temperament and it is not associated with anger. Arousal is the activation of the system, and although too much can be detrimental. Self-control can be learned to cope with aggressive feelings. An experienced athlete will show aggression but channel it into situations they know it will benefit there game and not damage their performance, but enhance it. This is solely based on skill level, where if skill level is high then well learned arousal behavior will be of benefit. Some athletes who are great examples are Roger Federer, Ronaldinho and Johnny Wilkinson (channel aggression in situations).Arousal may damage athlete's performance and lead to aggression if they can't control it. Examples of this can be found in young athletes and also athletes with low levels of skill. An athlete who has always used aggression will not change, but will adjust their game to channel it due to experiences.

2. Materials and Methods

2.1 Method

For the present study descriptive comparative method was used. It was used to assess the Aggression of Contact game and Non-Contact game players and to compare between the two groups.

2.2 Sampling Technique

For the present study the researcher used Quota sampling technique to select the sample from the population because the entire population for the study could not be identified. The Quota sampling was used so as to ensure that both individual game and team game players are included in the study.

2.3 Population

All the players that have represented the state of Maharashtra and who fall in the age group of 19 to 24 years. Who have played at least once during the last three years (2012 to 2014).

2.4 Sample

From the population 80 subjects were chosen for the present study. 40 Contact Game Players and 40 Non-Contact Game Players. The subjects were selected as given in the table below.

Table 1: Distribution of Sample

Contact Game				Non-Contact Game			
Boxing	Wrestling	Football	Hockey	Badminton	Shooting	Cricket	Volleyball
10	10	10	10	10	10	10	10

2.5 Tools used for data collection

The Buss-Perry Aggression Questionnaire was used to evaluate the Aggression of the subjects. This questionnaire is a

Free Online Resource by Buss-Perry. It is a sport specific questionnaire to evaluate overall Aggression. The Buss-Perry Aggression Questionnaire (BAQ) is one of the most widely

used aggression scales. BAQ is a self-report scale consisting of 29 items answered on a 5-point Likert type scale that was adapted from the Buss-Durkee Hostility Inventory (BDHI) (Buss and Durkee 1957). Its 4 subscales measure physical aggression, verbal aggression, hostility, and anger. The physical aggression subscale includes 9 items about physically harming others, the verbal aggression subscale includes 5 items about verbal aggression directed towards others, the anger subscale includes 7 items that measure the affective aspect of aggression, and the hostility subscale includes 8 items that assess the cognitive aspect of aggression.

2.6 Procedure

To enhance the cooperation of the subjects the researcher personally met the subjects, explained the purpose of investigation and gave a clear instruction regarding the method for answering the questions. The researcher distributed the

questionnaire booklet for marking the responses. The researcher in person in a face to face relationship administered the entire questionnaire. The subjects went through the instructions, read each statement carefully and indicated their responses. All the filled in questionnaires were collected from the subjects and scoring was done according to the scoring key. Usually an individual took 15 to 20 minutes in completing the test.

2.7 Statistical tools

To evaluate the score of Aggression descriptive statistics were used. The “independent sample t test” was applied to find out the significant differences between Contact Game and Non-Contact Game players. To test the hypotheses, the level of significance was set at 0.05.

3. Results

Table 2: Descriptive statistic of Aggression between Contact Game and Non-Contact Game Players

Group Statistics						
Type of game	N	Mean	Std. Deviation	Std. Error Mean		
Aggression	Contact	40	89.3250	6.36653	1.00664	
	Noncontact	40	83.4750	5.39700	.85334	

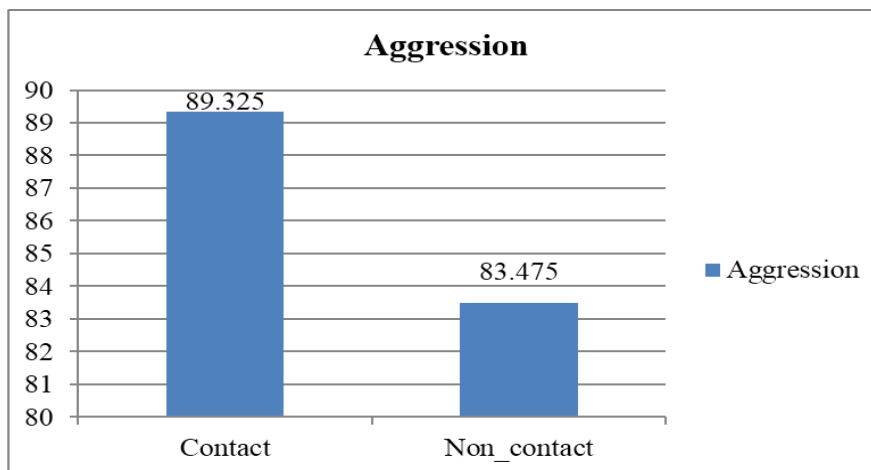


Fig 1: Graph of Mean of Aggression between Contact Game and Non-Contact Game Players.

Table 2 and Figure 1 shows the descriptive statistics of Aggression of Contact Game and Non-Contact Game players. Contact Game players and Non-Contact Game players have mean of Aggression as 89.32 and 83.47 respectively. The

standard deviation for Contact Game players is 6.36 and Non-Contact Game players is 5.39

Testing of Hypothesis

Table 3: Comparison of Aggression between Contact Game and Non-Contact Game players

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Aggression	Equal variances assumed	1.401	.240	4.433	78	.001	5.85000	1.31966	3.22276	8.47724
	Equal variances not assumed			4.433	75.964	.001	5.85000	1.31966	3.22165	8.47835

Table 3 shows the statistical analysis for Aggression using independent sample t test. Since the significant value is greater than 0.05 equal variance is assumed. The calculated t value (4.433) for df 78 shows that there is a significant difference in

Aggression between Contact Game and Noncontact Game players at 0.05 significance level (p=0.001). Hence the null hypothesis rejected and research hypothesis is accepted.

4. Discussion and Conclusion

From the findings it was observed that the Contact Game players possessed higher Aggression level, whereas non-contact Game players possessed lower level of Aggression. The difference in the aggression level between contact game players and noncontact game players is significant. The higher level of Aggression of contact game players can be attributed to the fact these players are continuously exposed to physical contact with other players from other teams or their opponents. There is a touch from the players most of the time, this touch can be interpreted in different ways by the players hence leading to an aggressive behavior. On the other hand in non-contact games there is no interaction between the opponents on the physical part and hence less chance of aggressive behavior which can be seen in the present study.

From the findings of the study we can conclude that there is a significant difference in Aggression between Contact Game and Non-Contact Game players wherein Contact game players possess a higher level of Aggression.

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