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## Temporal patterning of aggression among university level basketball players

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### Abstract

For above purpose sample comprised of 24 AIU Level players from two universities of Punjab namely and Guru Nanak Dev University, Punjab (12) was taken with purposive sampling technique. The age range was between 18-28 years. Aggression scale by Dr. R.L. Bhardwaj, (2008) and Self efficacy Scale by Dr. (Mrs.) G.P. Mathur and Dr. (Mrs.) Rajkumari Bhatnagar, (2012) were used to collect the data 4 Days, 2 Days, 1 Day, 2 Hours prior to competition. The data was analyzed by One way ANOVA (F ratio), to assess the significant differences between group means. F value thus obtained was tested for significance at 0.05 level of significance. It was found that level of aggression of basketball players is increased gradually prior to the competition. On the basis of results it is suggested that due consideration should be given on Self efficacy and aggression of players prior to competition as it leads them to success.

**Keywords:** Temporal patterning, aggression among, basketball players

### Introduction

With the improvement in sports participation of sports in the recent years, the performance standard has also increased, which led to the sports scientists to think on the various possible ways to further improve the performance. The way of animosity in high aggression games obliges that there is an outlet for the disappointments of players. Somebody needs to "establish a meaningful boundary" in respect to what is satisfactory to the extent animosity without disregarding it and giving it a chance to rot inside individuals until they find themselves able to discover an outlet for it. Particular parts of the impacts of aggression in game can be seen by viewing ice hockey and watching how animosity is acknowledged and approved inside the limitations the game. Ice hockey endeavors to keep up a harmony between the forceful way of the game and the thoughtfulness of the individuals who play it.

It is perceived that a certain level of aggression is important to play the diversion. Likewise with any round of this nature, heads and players are confronted with the issue of keeping aggression levels at or under an adequate standard. Aggression has long been a piece of the game space as of late, in any case, brutality in game, both on and off the field, has come seen as a social issue. For example, commissions have been named in Canada, England and Australia to examine savagery in the athletic setting (National Committee on Violence, Pipe,). In the United States, Canada, Germany, England and Australia, court cases have been heard concerning the game related victimized people or culprits of forceful acts.

### Statement of the Problem

The purpose of the study was to find out the rate of changes in self-efficacy and aggression of All India University level basketball players. So to fulfill this purpose study stated as Temporal Patterning of Self Efficacy and Aggression among University Level Basketball Players.

### Objectives of the study

- To ascertain the temporal patterning of aggression among university level basketball players prior to competition.

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**Hypotheses**

- A significant difference would exist in temporal patterning of aggression at different time durations prior to competition

**Delimitation**

1. The study was delimited to university level male basketball players.
2. The study was also delimited to the following day as well as timing, to see the temporal patterning of aggression:-
  - A. 4 Days prior to competition,
  - B. 2 Days prior to competition,
  - C. 1 Day prior to competition, and
  - D. 2 Hours prior to competition

**Design of the study**

A descriptive method was adopted for carrying out the current research work. Total sample comprised of 24 AIU Level players from two universities of Punjab namely, Panjabi University Patiala, Punjab (12), and Guru Nanak Dev

University, Punjab (12). The age range was between 18-28 years. Sample was selected with purposive sampling technique.

**Tools**

**Aggression:** Aggression scale by Dr. R.L. Bhardwaj, (2008).

**Analysis of data**

The data consist of aggression have been analyzed by One way ANOVA (F ratio), to assess the significant differences between group means. F value thus obtained was tested for significance at 0.05 level of significance through SPSS package (over.16).

**Findings**

Findings of the study on aggression among basketball players at different time durations prior to competition have been presented below.

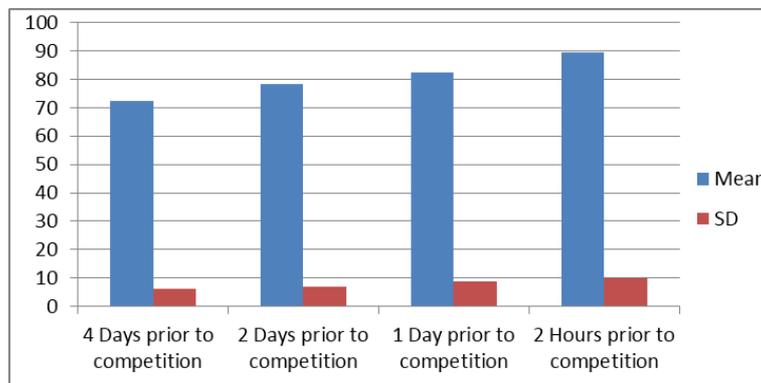
**Table 1:** Mean and Standard Deviation of Aggression at Different Time Durations Prior to Competition among Basketball Players

	4 Days prior to competition	2 Days prior to competition	1 Day prior to competition	2 Hours prior to competition
Mean	72.54	78.16	82.54	89.58
SD	6.26	6.97	8.91	10.08

Table. 1 shows the mean and standard deviation of basketball players at different time durations prior to the competition in respect to aggression. Highest mean value 89.58 observed at 2 hours prior to the competition and lowest value 72.54 at 4

days prior to the competition.

It is evident from table 2 that there is gradual increase in the level of aggression as the player’s approaches close to the competition.



**Graph 1:** Means of aggression scores of basketball players at different time durations prior to competition.

**Table 2:** Differences of means in Aggression at Different Time Duration Prior to the Competition of Basketball Players

4 days prior to the competition	2 days prior to the competition	1 days prior to the competition	2 hours prior to the competition	Mean difference
72.54	78.16			3.62
72.54		82.54		10
72.54			89.58	17.04
	78.16	82.54		4.38
	78.16		89.58	11.42
		82.54	89.58	7.46

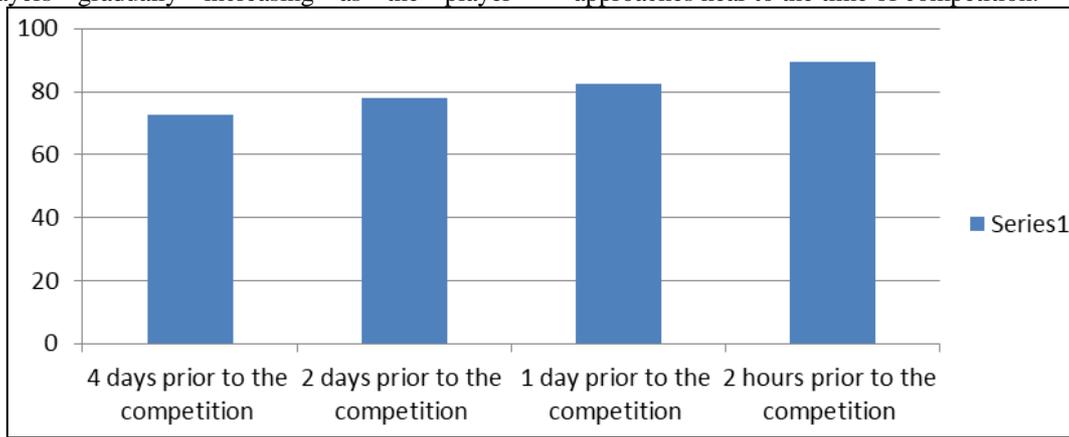
Table. 2 revealed that there is significant difference between the paired means of aggression of basketball players, at four days prior to the competition and two days prior to the competition (3.62) and one day prior to the competition and two hours prior to the competition (7.46).

The highest aggression was observed two hours prior to the competition (89.58), where the lowest aggression was observed four days prior to the competition (72.54).

The highest significant paired mean difference was recorded between the performance of aggression at four days prior to the competition and two hours prior to the competition (17.04).The lowest significant paired mean difference was recorded between the performance of aggression at four days prior to the competition and two days prior to the competition (3.81).

It can be seen from the table 2 that aggression level of the

basketball players gradually increasing as the player approaches near to the time of competition.



**Graph 2:** Mean difference of aggression of basketball players at different time durations prior to competition

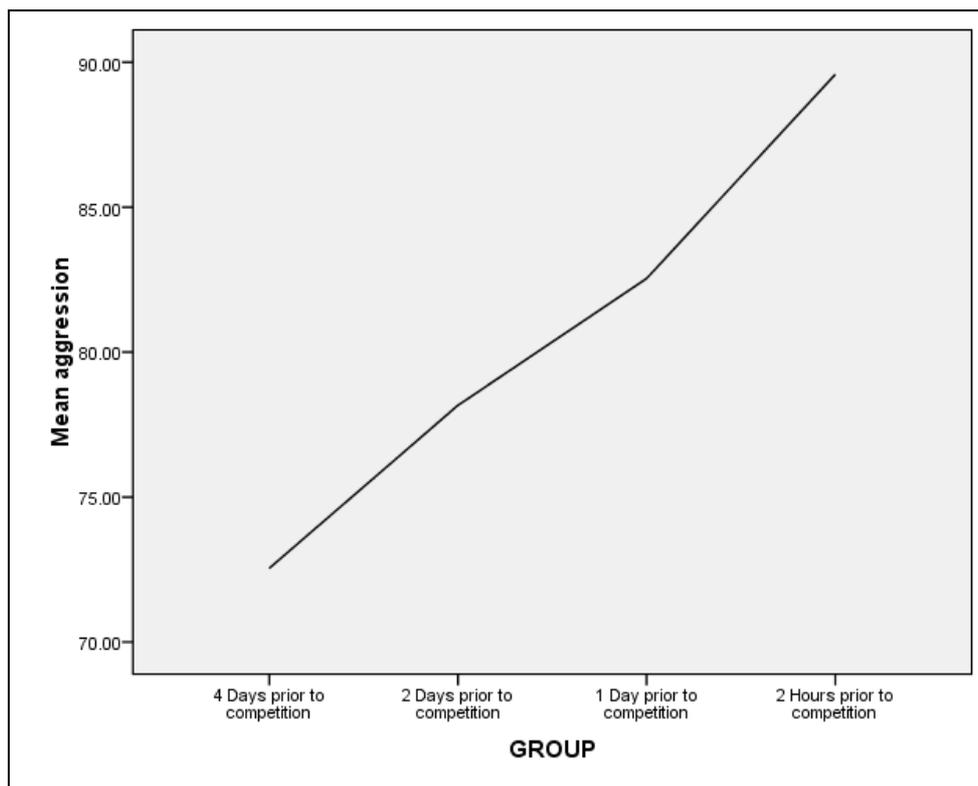
**Table 3:** Significance of Difference of Aggression of Basketball Players at Different Time Durations Prior To Competition

Sources of variations	Degree of freedom	Sum of squares	Mean sum of squares	F ratio
Among Means	3	3726	1242.25	35.279
Within Means	92	9639	104.77	

F ratio at significance level  $0.05(3, 92) = 2.71$

It appears from the table. 3 that the computed value of F ratio is 3 in 35.279 relation to aggression, which is higher than the tabulated value (2.71) at 0.05 level of significance with (3,92) degree of freedom. It shows that there is significant difference between mean values of aggression obtained at different time durations prior to competition.

To find out the mean difference, LSD post hoc test was used and the finding pertaining to this has been presented in table 3.



**Graph 3:** Shows that there is significant difference between mean values of aggression obtained at different time durations prior to competition.

**Discussion of findings**

Researcher has taken up this study to explore how temporal patterning aggression occurs prior to the competition among basketball players at different time durations. Since, self-aggression is prime factors which affect the performance in mega events thus these parameters were selected as dependent variables for this study. Researcher had justified the objective and the purpose on which the study was based the results of the study revealed a definite rate of change in aggression of

basketball players at different time durations prior to competition. The assessment aggression was done four times within a span of one week prior to competition and the results revealed important facts about aggression fluctuation. The statistical findings related to aggression with in duration of a week showed a clear rate of change and it showed a continuous decrease in self-efficacy parameter throughout the week, whereas the level of aggression was found to be continuously and significantly increasing from 4 days to 2

hours prior to competition. The rate of change in terms of fluctuation in aggression level before competition is considered to be important phenomena which cannot be avoided.

### **Discussion of the Hypothesis**

Based on the results of the study the hypothesis formulated earlier that there shall be significant difference in aggression at different duration of time prior to competition among basketball players is accepted.

### **Conclusions**

On the basis of findings of present study, the following conclusions were drawn.

Level of aggression of basketball players is increased gradually prior to the competition.

On the basis of results it's suggested that due consideration should be given on Self efficacy and aggression of players prior to competition as it leads them to success.

### **Recommendations**

1. Similar study can be done in comparison with other game and athletic events.
2. Similar study can be carried out in the different level of participation.
3. Similar study can be conducted by involving physiological, sociological and functional variable.

### **References**

1. Antonio J, Monroy Anton, Gema Saez Rodriguez. African Journal of Pharmacy and Pharmacology. 2011; 5(2):276-280,
2. Bandura A. Self-efficacy: The exercise of control. New York: Freeman, 1997.
3. Bandura A. Self-efficacy: Toward a unifying theory of behavior change. Psychological Review. 1977a; 84:191-215.
4. Bandura A. Social foundation of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall, 1986.
5. Colleen Haney J, Bonita Long C. Coping Effectiveness: A Path Analysis of Self-Efficacy, Control, Coping, and Performance in Sport Competitions. Journal of applied social psychology. 2006; 25(19):1726-1746.
6. Enrique Ortega, Aurelio Olmedilla, Pilar Sainz de Baranda, Miguel Ángel Gómez. Relationship between the level of Self-Efficacy, Performance Indicators, And Participation In Youth Basketball, Revista de Psicología del Deporte. 2009; 18(338):337-342.
7. Feltz DL. Self-confidence and sports performance. In KB Pandolf Ed., 1988.
8. Exercise and Sport Sciences Reviews, New York: MacMillan, 423-457.
9. Hirschfeld RR, Bernerth JB. Mental efficacy and physical efficacy at the team level: inputs and outcomes among newly formed action teams. J Appl. Psychol. 2008; 93(6):1429-37.
10. Kirker B, Tenenbaum G, Mattson J. An investigation of the dynamics of aggression: direct observations in ice hockey and basketball, Research Quarterly. 2000; 71(4):73-86.