Temporal patterning of self-efficacy among university level basketball players

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Abstract

Modern competitive sports of today demands more emphasis on the training of psychological aspects of sports. The purpose of the study was to ascertain the temporal patterning of self-efficacy among university level basketball players. Total sample comprised of 24 AIU Level players from two universities of Punjab namely, Lovely Professional University, Punjab (12), and Guru Nanak Dev University, Punjab (12). The age range was between 18-28 years. Sample was selected with purposive sampling technique. Self-efficacy Scale by Dr. (Mrs.) G.P. Mathur and Dr. (Mrs.) Rajkumari Bhatnagar, (2012) was used to measure self-efficacy and its rate of changes. To find out the significant difference of self-efficacy of AIU level basketball players at different time durations prior to competition, trend analysis was done by employing one way analysis of variance. the computed value of F ratio is 13.55 in relation to self-efficacy, 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 self-efficacy obtained at different time durations prior to competition.

Keywords: Temporal patterning, self-efficacy, basketball players

Introduction

The percentage contribution of various performance factors are complex combination. This supersedes each other depending upon the nature of activity. Modern competitive sports of today demands more emphasis on the training of psychological aspects of sports. The high level performers seen in competitive sports is nothing but perfect optimum harmonious relationships between one’s psychological preparedness and technical preparation. Many coaches and psychologist throughout the world believe that future records will be broken primarily because of increased attention to the psychological parameters of the human personality; understanding of the psychological and behavioral aspects of the athletes will provide useful information and guidelines which may be helpful to coaches and athletes. Self-efficacy is people’s belief in their capabilities to perform in ways that give them control over events that affect their lives. Bandura (1977) [3] used self-efficacy to denote a situation specific variable which influences performance and determines how much efforts individual will expand and how long they will persist in the face of obstacles and difficult experiences. Therefore, higher the self-efficacy more will be the intensive effort while lower the self-efficacy less will be the effort and difficult tasks will be viewed as threats. Self-efficacy beliefs are not judgments about one's skills, objectively speaking, but rather about one's judgments of what one can accomplish with those skills (Bandura, 1986) [4].

Statement of the problem

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

Objectives of the study

- To study the temporal patterning of Self- Efficacy among university level basketball players prior to competition.
Hypotheses
- There would be a significant difference in temporal patterning of self-efficacy at different time durations prior to competition.

Delimitation
1. The study was delimited to university level male-female basketball players.
2. The study was delimited to following variables and scales:
3. Self-efficacy will be measured through Self efficacy Scale by Dr. (Arun Kumar Singh and Dr. Shruti Narian, 2014).
4. The study was also delimited to the following day as well as timing, to see the temporal patterning of self-efficacy.
   a. 4 Days prior to competition.
   b. 2 Days prior to competition.
   c. 1 Day prior to competition.
   d. 2 Hours prior to competition

Review of the related literature
Yadav and Sisodiya (2014) evaluated the sports aggression between basketball players during the competition and also to investigate any possible differences between men and women players. Struggle for supremacy, dominance and excellence in sports obviously involve aggression. Results of the study was analyzed through “t” test and significant difference was found (“t” ratio) of aggression between men and women in colligate basketball players.
Ghosh et al. (2014) conducted a study on the self-confidence level of North Bengal University Football, Kho-Kho and Kabaddi players before attending the inter university tournament. The purpose of this study was to compare the self-confidence level between Football, Kho-Kho and Kabaddi players. Hardy and Nelson (1992) questionnaire was used to measure the self confidence level of the subjects. List significance difference (LSD) post-hoc test was used to measure the paired mean significance difference. The result indicated there was a mean significance difference in self-confidence level between Football, Kho-Kho and Kabaddi players of North Bengal University. The researcher was concluded that Kho-Kho players are more confident than the Football and Kabaddi players before attending the respective inter university tournaments.

Method and procedure
A descriptive method was adopted for carrying out the current research work. Total sample was comprising of 24 AIU Level players from two universities of Punjab namely, Lovely Professional University, 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
Self-efficacy: Self efficacy Scale by Dr. (Mrs.) G.P. Mathur and Dr. (Mrs.) Rajkumari Bhatnagar, (2012).

Statistical procedure
To find out the significant difference of self-efficacy of AIU level basketball players at different time durations prior to competition, trend analysis was done by employing one way analysis of variance. The analysis was done through SPSS package (over.16) at level of significance.

Analysis of Data
The data consist of self-efficacy have been analyzed by One way ANOVA (F ratio), to assess the significant differences between group means. F value thus obtained were tested for significance at 0.05 level of significance. Further, the significance of F-ratio was examined with the LSD post hoc test.

<table>
<thead>
<tr>
<th>Mean</th>
<th>4 Days prior to competition</th>
<th>2 Days prior to competition</th>
<th>1 Day prior to competition</th>
<th>2 Hours prior to competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>6.26</td>
<td>6.97</td>
<td>8.91</td>
<td>10.08</td>
</tr>
</tbody>
</table>

Table 1: Mean and Standard Deviation of Self-Efficacy at Different Time Durations Prior To Competition among Basketball Players

Table 1 shows the mean and standard deviation of basketball players at different time durations prior to the competition in respect to self-efficacy. Highest mean value 80.37 observed at 4 days prior to the competition and lowest value 65.62 at 2 hours prior to the competition. It is evident from table 1 that there is gradual reduction in the level of self-efficacy as the player’s approaches close to the competition.

The graphical representation of self-efficacy of basketball players at different time durations prior to the competition have been present in Graph 1.

Graph 1: Means of self-efficacy scores of basketball players at different time durations prior to competition.
Table 2: Differences of Means of Self Efficacy at Different Time Duration Prior To the Competition of Basketball Players

<table>
<thead>
<tr>
<th>4 days prior to the competition</th>
<th>2 days prior to the competition</th>
<th>1 days prior to the competition</th>
<th>2 hours prior to the competition</th>
<th>Mean difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>80.37</td>
<td>74.33</td>
<td>71.12</td>
<td>65.62</td>
<td>6.04</td>
</tr>
<tr>
<td>80.37</td>
<td></td>
<td>71.12</td>
<td>65.62</td>
<td>9.25</td>
</tr>
<tr>
<td>80.37</td>
<td>74.33</td>
<td></td>
<td>65.62</td>
<td>14.7</td>
</tr>
<tr>
<td>80.37</td>
<td>74.33</td>
<td>71.12</td>
<td></td>
<td>3.2</td>
</tr>
<tr>
<td>80.37</td>
<td>74.33</td>
<td>71.12</td>
<td>65.62</td>
<td>8.21</td>
</tr>
<tr>
<td>80.37</td>
<td></td>
<td></td>
<td>65.62</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Table no. 2 revealed that there is significant difference between the paired means of self-efficacy of basketball players, at four days prior to the competition and two days prior to the competition (6.04) and one day prior to the competition and two hours prior to the competition (5.5). The highest self-efficacy was observed four days prior to the competition (80.37), where the lowest self-efficacy was observed two hours prior to the competition (65.62). The highest significant paired mean difference was recorded between the performance of self-efficacy at four days prior to the competition and two hours prior to the competition (14.75). The lowest significant paired mean difference was recorded between the performance of self-efficacy at two days prior to the competition and one day prior to the competition (3.81).

It can be seen from the table 2 that self-efficacy of the basketball players gradually reducing as the player approaches near to the time of competition.

Table 3: Significance of Difference of Self Efficacy of Basketball Players at Different Time Durations Prior To Competition

<table>
<thead>
<tr>
<th>Sources of variations</th>
<th>Degree of freedom</th>
<th>Sum of squares</th>
<th>Mean sum of squares</th>
<th>F ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Among Means</td>
<td>3</td>
<td>2736.03</td>
<td>912.01</td>
<td>13.55</td>
</tr>
<tr>
<td>Within Means</td>
<td>92</td>
<td>6191.20</td>
<td>67.29</td>
<td></td>
</tr>
</tbody>
</table>

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

It appears from the table, no. 1.3 that the computed value of F ratio is 13.55 in relation to self-efficacy, 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 self-efficacy 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.

Discussion of findings
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 self-efficacy of basketball players at different time durations prior to competition. The assessment of self-efficacy was done four times within a span of one week prior to competition and the results revealed important facts about self-efficacy fluctuation.

The statistical findings related to self-efficacy 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. The rate of change in terms of fluctuation in self-efficacy level before competition is considered to be important phenomena which cannot be avoided.

References