

## Investigation of Achievement Motivation and Competitive State Anxiety of Badminton Players

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### ABSTRACT

The purpose of this study was to compare the achievement motivation and competitive state anxiety of Senior National Badminton Players. Forty eight badminton players (28 men, 20 women) who participated in the 64th Inter-state, Inter-zone and 73rd Senior National Badminton Championships were selected to serve as subjects for the study. The criterion measures were the scores obtained in the Sports Achievement Motivation Test by Kamlesh and Competition State Anxiety of Inventory – 2 (CSAI-2) by Martin, Vealey and Burton. No significant difference was found between seeded and unseeded senior national men and women badminton players on achievement motivation. State self confidence was found to be significant between seeded and unseeded senior national men badminton players. No significant difference was found on cognitive and somatic state anxiety between seeded and unseeded men senior national badminton players. Cognitive state anxiety was found to be significant between seeded and unseeded senior national women badminton players. No significant difference on somatic state anxiety and state self confidence was found between seeded and unseeded women senior national badminton players.

Yadav, S. K.; Sharma, Satyendra and Yadav, Neeraj (2012) Investigation of Achievement Motivation and Competitive State Anxiety of Badminton Players *International Journal of Physical Education, Sports and Yogic Sciences* 1(2): 83-85.

**Key words:** Physical variables, Standing and Sitting height, Leg length, Upper arm and Forearm length.

The success or failure of an individual athlete is dependent on the blending of physical ability, conditioning, training, mental preparation and the ability to perform well under pressure. It is not uncommon to hear coaches and athletes express disbelief on how poorly their team performed against a certain opponent or how they fell apart in a crucial situation. Anxiety plays a paramount role in sports. It is the challenge in sports participation which produces anxiety. How an athlete handles the anxiety determines how successful he would be? Anxiety may be a positive motivating force or it may interfere with successful performances in sports events. As the importance of winning continued to be stressed in competitive sports, the pressure and anxiety of performing well will also continue to increase.

The purpose of this study was to compare the achievement motivation and competitive state anxiety of Senior National Badminton Players.

### Methodology:

Forty eight badminton players (28 men, 20 women) who participated in the 64th Inter-state, Inter-zone and 73rd Senior National Badminton Championships held at Abhay Prashal, Indore from 10-18 February 2009. Out of the 28 men badminton players, on which data could be collected 14 were seeded from a total of 16 seeded players, and remaining 14 unseeded players

were randomly selected from the unseeded men players from different states. Out of the 20 women badminton players, on which data could be collected 10 were seeded players and remaining 10 unseeded players were randomly selected from the unseeded women players from different states. The criterion measures for testing the hypothesis in this study was the scores obtained in the Sports Achievement Motivation Test by M. L. Kamlesh and Competition State Anxiety of Inventory – 2 (CSAI-2) by Martin, Vealey and Burton .

Researcher took permission from the coach of the concerned subject and also the consent of the subject for administering the questionnaire. Subjects were ensured that the responses given by them on the questionnaire would be kept strictly confidential and would not be revealed to anyone.

Subjects were instructed to read to each statement and then encircle the appropriate number to the right of the statement to indicate how they felt right then at that moment. There were no rights or wrong answers. Subjects were instructed not to spend too much of time on one statement.

Sports achievement motivation questionnaire prepared and standardized by Kamlesh consist of 20 statements and each statement has two answers. Each statement has a maximum 2 as a response value. When the

subject ticked the high pole, he was given 2 points and when he ticked the low pole earned zero. The total score ranged from 0 to 40. Subjects scoring below 24 marks were characterized as low in sports achievement motivation, those scoring below 30 and above 24 marks as moderate and above 30 marks as highly motivated, as suggested by Kamlesh. Responses given by each subject on the questionnaire were separately tabulated to alternatives and thus the tables were prepared for the analysis of data.

The competitive state anxiety inventory-2 (CSAI-2) prepared and standardized by Martin, Vealey and Burton measures competitive state anxiety and has three subscales: somatic Anxiety, cognitive anxiety and confidence. Somatic anxiety refers to the physiological component of anxiety and cognitive anxiety to the worry component. These subscales reflect the multidimensional nature of anxiety. The competitive state anxiety inventory-2 (CSAI-2) has 27 items/questions subject responded each question with a 1, 2, 3, or 4. 1 = not at all, 2 = somewhat so; 3 =

moderately; 4 = very much so. Scoring for the CSAI-2 is accomplished by computing a separate total for each of the three subscales, with scores ranging from a low of 9 to a high of 36. The greater score the greater is cognitive or somatic anxiety or self confidence. The Cognitive Anxiety subscale was scored by adding the responses to items 1, 4, 7, 10, 13, 16, 19, 22, and 25. The somatic state anxiety subscale is scored by adding the responses to items 2, 5, 8, 11, 14, 17, 20, 23 and 26 (scoring for item 14 must be reversed, i.e. 4-3-2-1). The state self confidences subscale was scored by adding up the responses to items 3, 6, 9, 12, 15, 18, 21, 24 and 27.

#### Results and Discussion:

To determine the significance of difference between means of seeded and unseeded players on achievement motivation of men and women badminton players, t-ratio was applied and the data pertaining to this has been presented in Table-1 and 2.

**Table-1: Significance of difference between means of seeded and unseeded men badminton players on achievement motivation**

Factors	N	Mean	S.D.	Mean Difference	$\sigma$ DM	t
Seeded Players	14	30.14	4.80	0.86	2	0.43
Unseeded Players	14	31	5.58			

Table-1 shows no significant difference between seeded and unseeded players on achievement motivation perceived by men badminton players as the

obtained t- value of 0.43 is much less than the required value to be significant at  $t_{0.05} (26) = 2.056$ .

**Table-2: Significance of difference between means of seeded and unseeded women badminton players on achievement motivation**

Factors	N	Mean	S.D.	Mean Difference	$\sigma$ DM	t
Seeded Players	10	31	3.29	2.2	1.22	0.98
Unseeded Players	10	28.8	6.26			

Table-2 shows that there is no significant difference between seeded and unseeded players achievement motivation perceived by women badminton players as the obtained t- value of 0.98 is much less than the required value to be significant at  $t_{0.05} (18) = 2.10$

To determine the significance of difference between means of seeded and unseeded players competitive state anxiety of men and women badminton players, t - ratio was applied and the date pertaining to this has been presented in Table-3 and 4.

**Table-3: Significance of difference between means of seeded and unseeded men badminton players on competitive state anxiety**

Factors	N	Mean	S. D.	M. D.	$\sigma$ DM	t
1. Cognitive State Anxiety	14	19.35	4.64	0	0	0
	14	19.35	3.24			
2. Somatic State Anxiety	14	18.07	4.79	1.72	1.57	1.09
	14	16.35	3.41			
3. State Self Confidence	14	28.92	3.14	3.57	1.46	2.43*
	14	25.35	4.49			

\* Significant at .05 level  $\text{tab } t_{0.05} (26) = 2.056$

Table-3 showed no significant difference on cognitive state anxiety and somatic state anxiety between seeded and unseeded players on competitive state anxiety

perceived by men badminton players as the obtained t -value of 0 and 1.09 are much less than the required value to be significant at  $t_{0.05} (26) = 2.056$ . But state

self confidence showed significant difference between seeded and unseeded players as the obtained t- value of 2.43 is more than required value to be significant as tab  $t_{0.05} (26) = 2.056$ .

**Table-4: Significance of difference between means of seeded and unseeded competitive state anxiety of women badminton players**

Factors	N	Men	S.D.	Mean Difference	$\sigma$ DM	t
1. Cognitive State Anxiety	10	16.1	2.84	5.4	2.13	2.53*
	10	21.5	6.11			
2. Somatic State Anxiety	10	17.5	2.72	0.2	1.87	0.107
	10	17.7	5.98			
3. State Self Confidence	10	31.4	4.64	9.9	8.25	1.20
	10	29.1	3.84			

\* Significant at .05 level tab  $t_{0.05} (18) = 2.10$

Table-4 showed no significant difference on somatic state anxiety and state self confidence between seeded and unseeded players perceived by women badminton players as the obtained t-value of 0.107 and 1.20 is much less than the required value to be significant as tab  $t_{0.05} (18) = 2.10$ . But cognitive state anxiety showed significant difference between seeded and unseeded players as obtained t-value 2.53 is more than required value to be significant as tab  $t_{0.05} (18) = 2.10$ .

Analysis of descriptive data on achievement motivation and competitive state anxiety indicates that Senior National badminton men seeded players have moderate level (30.14) of achievement motivation and unseeded players have high level (31) of achievement motivation. In women, seeded players have high level (31) of achievement motivation and unseeded players have moderate level (28.8) of achievement motivation. Men seeded players have moderate level of cognitive state anxiety (19.35), somatic state anxiety (18.07) and state self confidence (28.92) and men unseeded players moderate level of cognitive state anxiety (19.35), somatic state anxiety (16.35) and state self confidence (25.35). In women seeded players have moderate level of cognitive state anxiety (16.1), somatic state anxiety (31.4) and state self confidence (31.4) and women unseeded players moderate level of cognitive state anxiety (21.5), somatic state anxiety (29.1) and state self confidence (29.1).

#### Conclusions:

1. Senior national men seeded badminton players have moderate level of achievement motivation and unseeded players have high level of achievement motivation.
2. Senior national level women seeded badminton players have high level of achievement motivation and unseeded players have moderate level of achievement motivation.
3. No significant difference was found between seeded and unseeded senior national men and women badminton players on achievement motivation.
4. Cognitive state anxiety, somatic state anxiety and state self confidence all are considered to be important factors as perceived by seeded and

unseeded senior national men and women badminton players.

5. No significant difference on cognitive and somatic state anxiety was found between seeded and unseeded men senior national badminton players, whereas state self confidence was found to be significant between seeded and unseeded senior national men badminton players.
6. No significant difference on somatic state anxiety and state self confidence was found between seeded and unseeded women senior national badminton players, whereas cognitive state anxiety was found to be significant between seeded and unseeded senior national women badminton players.

#### REFERENCES:

- Bell, Keith F. **Championship Thinking – The Athlete's Guide to Winning Performance in All Sports** London: Prentice Hall Int., Inc. 1983.
- Bhadana, Om Prakash "Relationship between Factors Influencing Sports Career and Anxiety, Self-Confidence, Adjustment and Achievement Motivation" **Journal of Sports and Sports Sciences** Vol. 25 (2002): 11-18.
- Cratty, B. J. **Psychology in Contemporary Sport Guidelines for Coaches and Athletes** 2<sup>nd</sup> Edition, Englewood Cliffs, New Jersey: Prentice Hall, Inc.1983.
- Kamlesh, M. L. "Construction and Standardization of Achieve and Motivation Test." **NIS Scientific Journal** Vol. 13 (July 1990): 28-38
- Martin, R.; Vealey, R. and Burton, D. "Competitive Anxiety in Sports" Champaign, IL: Human Kinetics, 1990 cited by James R. Morrow et. al. **Measurement and Evaluation in Human Performance** Third Edition Champaign 2005.

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