Relationship between sports Competition Anxiety and Physical Fitness components of University level players of Punjab

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Abstract- Sports psychology is that branch of psychology which is intimately connected with human behavior on the play field, both under practice and competitive situations. Sport psychology is an interdisciplinary science that draws on knowledge from many related fields including biomechanics, physiology, kinesiology and psychology. It involves the study of how psychological factors affect performance and how participation in sport and exercise affect psychological and physical factors. The present paper deals with the relationship of sports competition anxiety and physical fitness components of university level badminton players of Punjab. The Sports Competition Anxiety Test (SCAT) by Wren Martin was used. The Physical Fitness components were measured through the AAHPER Youth Fitness Battery consists of six test items. The six test items are pull ups, Bent knee sit ups, shuttle run (10x4 yards), standing broad jump, 50 yards dash and 600 yard run-walk. The product moment correlation was calculated. The results indicate that there is no significant correlation between Sports competition anxiety and physical components of physical fitness namely pull ups, Bent knee sit ups, shuttle run (10x4 yards), standing broad jump, 50 yards dash and 600 yard run-walk.

I. INTRODUCTION
Participating in any type of competition, be it a formal or informal competition, gives pressure on athlete. This pressure sometimes improves the performance and sometimes influences the performance negatively. Pressure collected because of the upcoming competition might also consequences in tension which influence the performance in sports in each the approaches. Anxiety is a mental and physiological kingdom characterized by using cognitive, somatic, emotional and behavioral additives. These components combine to create an ugly feeling this is typically related to uneasiness, apprehension, fear, or worry. Anxiety is a generalized temper condition that can frequently arise without an identifiable triggering stimulus. As such, its miles outstanding from fear, which takes place in the presence of a discovered risk.

Additionally, fear is associated with the specific behaviors of get away and avoidance, while tension is the end result of threats which might be seemed to be uncontrollable or unavoidable. Numerous studies have verified the impact of mental elements on sports activities performance. In the video games and sports activities, mental and physiological elements play a critical function in figuring out the overall performance degree. Anxiety is a psychological and physiological country characterized by using somatic, emotional, cognitive and behavioral components. The root meaning of the word anxiety is `to vex or trouble; in either the absence or presence of psychological stress, anxiety can create feelings of fear, worry, uneasiness and dread. Anxiety is taken into consideration to be a regular reaction to a stressor. It may help someone to deal with a tough situation by using prompting one to cope with it. When anxiety becomes immoderate, it can fall underneath the class of an anxiety ailment. Physical effects of tension may encompass coronary heart palpitation, muscle groups weak point and anxiety, fatigue, nausea, chest ache, shortness of breath, stomach ache/ head ache and immune and digestive system tasks are inhibited (the fight or flight response). External symptoms of tension may consist of pale skin, sweating, trembling and papillary dilation. Someone who has tension may experience it as a sense of dread or panic. Competitive anxiety causes performance deterioration. Optimum stage of tension earlier than, throughout and after the opposition enables the sports man or woman to be prepared to perform. Too much of anxiety causes muscle tension, nervousness, in ability to make decisions, feeling over whelmed, feeling out of control, trembling, nail biting, increased sweating, etc., which deteriorates the performance. Many athletes who perform well during training or practice can suffer from performance anxiety on game day, i.e. Feelings of anxiousness, tension or fear interfere with sports overall performance.

II. REVIEW OF LITERATURE
Leddy et al. (2014)5 study on 343 male collegiate athletes also found that injured athletes experienced more symptoms of both depression and anxiety than athletes who had not experienced injuries.
Study by Kolt and Kirkby (2014) on gymnasts found that there is a difference depending on how serious the injury is. The gymnasts who were dealing with more severe injuries reported higher cognitive anxiety and were also more tired and anxious.

Widmeyer and Birch (2014) examined the relationship between aggression and performance of 32 professional ice hockey teams of various times during 1,176 games over a period of four seasons. Aggressive penalties were operationally defined as non-sanctioned aggressive acts in which a player will make the intent to do harm (i.e., slashing, spearing, high sticking, cross checking etc.) were separated out from accidental penalties such as tripping or interference which are usually committed in order to prevent the opponent from scoring. The average number of points a team accumulated per game was correlated with a number of dependent measures, average penalty minutes per game in the first segment of the season. Result indicted no significant relationship between aggression and team performance. For all games combined, however, a significant positive relationship was obtained for aggression exhibited by teams in the first period of games and the average number of points they accumulated per game. The authors concluded that aggression is as effective strategy to achieve success in an ice hockey game, provided it takes place early in the contest.

2.1 Objective
To study the relationship of sports competition anxiety and physical parameters of university level badminton players of Punjab.

2.2 Sample Selection
A total of 30 university level badminton players were selected through purposive sampling technique from Punjab. All the 30 university level badminton players had represented their university in university level tournaments.

2.3 Tool Description
The Sports Competition Anxiety Test (SCAT) by Wren Martin was used. The sports competition anxiety test is latest and most popular specific anxiety test, whose purpose, as claimed by the author is to assess individual differences in competitive trait anxiety or the tendency to purpose competition situation on threatening and/or to respond to these situations with elevated state anxiety.

The sports competition anxiety test (SCAT) contains fifteen items. Subjects were asked to indicate how they generally feel when they compete in games and sports, and respond to each item using a three point ordinal scale (Hardly ever, some times and often). Ten of the items are included to reduce possible responses bias. Total scores of the SCAT range from 10 (low competitive trait anxiety) to 30 (high competitive trait anxiety).

III. PHYSICAL FITNESS MEASURES
The AAHPER Youth Fitness Battery consists of six test items. Each test is designed to measure physical fitness of badminton players. The six test items are pull ups, Bent knee sit ups, shuttle run (10x4 yards), standing broad jump, 50 yards dash and 600 yard run-walk. The detailed description of the administration of test items is given below:

3.1 Pull Ups
Purpose : The purpose of the test will be to measure muscular endurance of arms and shoulders.
Equipment : Horizontal fixed bar, pen and paper.
Procedure : The subject was asked to use an overhand grasp with the palms facing away from the body. From the hanging position, the pupil raised the body by the arms until the chin was placed over the bar and then lowers the body to a full extension / hand. Subject repeated the action as many times as possible. Neither swinging, nor kicking the legs nor knee raising was allowed.
Scoring : The maximum number of completed pull ups performed at one go was considered as the final score of each subject.

3.2. Sit Ups (Bent Knee)
Purpose : The purpose of the test was to measure muscular strength and endurance (trunk and abdomen).
Equipment : A mat for each subject, pen, paper and stop watch.
Procedure : The subject was asked to lie on the back with the knees bent face off the floor, heels not more than 12” from the buttocks and angle of the knees not less than 900. The subject was asked to locked fingers on the back of the neck with the elbows placed squarely on the mat. The subject’s feet were held by an assistant or partner to keep them in touch with the surface. The subject was asked to lighten the abdominal muscles and bring the head and
elbows forwards as he sits-up finally to touch the elbows to the knees. The entire process constitutes one sit up. The subject was asked to return to the starting position and to sit-up again. At the signal ‘go’ the performers started sit-ups and the timer started the watch simultaneously. The performers then continued performing the sit ups at his best possible speed till the timer gave a stops signal after 60 seconds.

Scoring : The number of correctly performed sit ups in 60 seconds was the score of this test. Only one effort was allowed to the subject. The following types of sit-ups were list counted for the score.

The subject who could keep the fingers closed behind the neck.
The subject who brought both elbows forward in starting to the sit-ups with pushing off the floor with the elbow.
The subject who returned to starting position with elbows flat on the surface.

3.3 Shuttle Run
Purpose : The purpose of the test was to measure the speed and agility of the subject.
Equipment : Two block/duster (made of wood), the approximate size of the object 2”x2”x4”, a stopwatch and marking powder. All subjects run bare footed.
Procedure : Two parallel lines were drawn on the floor 10 yards apart. Two wooden blocks/duster were placed behind the other line. On the signal ready? Go! the timer started the watch and the subject run towards the blocks/duster, picked up one block, run back to the starting line and placed one block behind the starting line, run back and picked up the second block duster and carried back across the starting line. As soon as the second block is placed on the ground the timer stopped the watch and recorded the time.

Scoring : Two trails were given to each subject with some rest in between, the time of the better of the two trails were recorded to the nearest 10th of a seconds as the score of the test item.

3.4 Standing Broad Jump
Purpose of the test : The purpose of the test was to measures the power or explosive strength of legs.
Procedure : The subject was asked to stand behind the starting line with the feet parallel to each other. He was instructed to jump as farthest as possible by bending knees and swinging arms to take off for the broad jump in the forward direction. Each subject was given three trials.

Scoring : The distance between the starting line and the nearest point of landing provided the score of the test. The best (Maximum Distance) trails was used as the final score of the test.

3.5 50 Yard Dash
Purpose : The purpose of the test was to measure speed ability.
Equipment: Stop watches, Pen, Paper.
Procedure : Two lines were marked on the floor 50 yards apart. One line was be used as a starting line and the other as the finish line. On the signal Ready? Go! the subject started running at the best to reach the finish line at their earliest. The signal ‘go’ is accompanied with the down ward sweep of the starter’s arm to give the visual signal to the timer who stood at the finish line.

Scoring : The interval between the starting signal and the instant subject crossed the finish line is the score of the test. The time is recorded correct up to the 10th of a second.

3.6 600 Yard Run-Walk
Purpose : The purpose of the test was to measure cardiovascular endurance.
Equipment : Track area, stop watch, pen and paper.
Procedure : At the signal Ready? Go! the subject starts running for 600-hundred yard distance. The track marked of 200 yards was used for conducting test. The tester along with his assistants counted the number of laps completed. Three rounds have to be completed. Although the tester had tried his level best to encourage all the subjects to run the entire distance. The subjects were further instructed to walk-in between if they feel any discomfort.

Scoring : Time is recorded in minutes and seconds.

Sit-Ups : Subject will lie on the back with legs bent, hands behind head. Roll up to the sitting position and bent forward as much as you can, keeping legs bent. Return to the starting position.

Push Ups : Subject will put palms on the ground at shoulder width, with elbows straight and body extended from shoulder to feet. Bend elbows keeping body extended without resting the chest on the ground. Push-up and come to starting position.
Shuttle Run: On the signal the subject will run from one side line to the other and back continuously. One feet has to cross the side line each time. This is continued for one minute. The maximum dose is the number of times the side line has been crossed on either side, in one minute.

IV. DATA COLLECTION
The subjects were contacted personally and their sincere cooperation was solicited. Necessary instructions were given to subjects. Confidentiality of responses was assured. No time limit for filling in the questionnaire was set but the subjects were instructed to respond as quickly as possible. As soon as player completed filling questionnaire they were thanked for their cooperation. Thereafter the physical fitness components were measured as presented above. After scoring the data analysis was executed.

V. STATISTICAL TECHNIQUE USED
The product moment correlation was computed to find the relationship. The level of significance for the study was ascertained at 0.05 level of significance. The 21.0 version of SPSS was used for statistical calculations in the present study.

VI. RESULTS
Table 1 showing correlation between Physical Fitness Components and Psychological Parameters for University level badminton players from Punjab.

<table>
<thead>
<tr>
<th>Punjabi Sports Competition Anxiety</th>
<th>Standing Broad Jump</th>
<th>Sit Ups</th>
<th>Pull Ups</th>
<th>50 Yards</th>
<th>600 Yards</th>
<th>Shuttle Run</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.061</td>
<td>.127</td>
<td>.037</td>
<td>.135</td>
<td>.076</td>
<td>.106</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>747</td>
<td>504</td>
<td>846</td>
<td>478</td>
<td>692</td>
<td>578</td>
</tr>
<tr>
<td>N</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

** significant at 0.01 level
* significant at 0.05 level

The above table shows that the coefficient of correlation between standing broad jump component of physical fitness and sports competition anxiety component of psychological parameter is found to -0.061 which is insignificant at 0.05 level. It infers that there is no relationship between distance of standing broad jump and sports competition anxiety of total university level badminton players from Punjab.

The above table shows that the coefficient of correlation between Sit Ups component of physical fitness and sports competition anxiety component of psychological parameter is found to -0.127 which is insignificant at 0.05 level. It infers that there is no relationship between number of Sit Ups and sports competition anxiety of total university level badminton players from Punjab.

The above table shows that the coefficient of correlation between Pull Ups component of physical fitness and sports competition anxiety component of psychological parameter is found to 0.037 which is insignificant at 0.05 level. It
infers that there is no relationship between Pull Ups and sports competition anxiety of total university level badminton players from Punjab.

The above table shows that the coefficient of correlation between 50 yard run component of physical fitness and sports competition anxiety component of psychological parameter is found to 0.135 which is insignificant at 0.05 level. It infers that there is no relationship between time taken in 50 yard and sports competition anxiety of total university level badminton players from Punjab.

The above table shows that the coefficient of correlation between 600 yard run and walk component of physical fitness and sports competition anxiety component of psychological parameter is found to 0.076 which is insignificant at 0.05 level. It infers that there is no relationship between time taken in 600 yard run and walk and sports competition anxiety of total university level badminton players from Punjab.

The above table shows that the coefficient of correlation between Shuttle run component of physical fitness and sports competition anxiety component of psychological parameter is found to 0.106 which is insignificant at 0.05 level. It infers that there is no relationship between time taken in Shuttle run and sports competition anxiety of total university level badminton players from Punjab.

VII. DISCUSSION

Anxiety is the spice of life. The relationship between sports competition anxiety and physical parameters are not found significant for university level badminton players of Punjab this may be due to that in the one side the low anxiety does not indicate that the performance of university level players over physical parameters is not up to the mark on the other side the high anxiety also deviates the performance on physical parameters sometimes due to this high competition the players touches the peak performance. Therefore the relationship between sports competition is not fixed one.

VIII. REFERENCES


