

# An Attempt To Find Out The Correlation Between Kabaddi Performance And Selected Physiological Variables Among Female Kabaddi Players

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# ABSTRACT

Millions of people engage in sporting events, read about them, and spend billions of dollars each year on sporting goods and services because of the importance that they put on modern culture. Despite its origins in India, the sport of Kabaddi has gained worldwide popularity. A player who wants to excel in the game must work on their strength and improve their offensive and defensive skills. In all, 220 kabaddi players participated in this analysis. Anxiety, aggressiveness, and confidence were the mental factors examined. Standardized tests were used to assess all of the psychological factors. Subjects rated their own performance on a scale from 0 to 10.

**Keywords:** Anxiety, Aggression, Psychological, Self – confidence, Performance.

# I. INTRODUCTION

A sportsperson in today's world of cutthroat competition cannot afford to leave anything to chance, since the smallest oversight in his preparation might cost him the opportunity at fame, money, and glory. Consequently, athletes will stop at nothing to get an advantage over their competition, and they will adopt any strategy that promises to do so. Mental training is just as crucial as physical training for athletes competing in a completion sport.

Sports are a psychosocial activity, full of competition against opponents and cooperation among team mates, which results in a great deal of stress and strain, both in the lead-up to and immediately following a competition. However, when players are able to effectively manage this stress and emerge from the experience with increased confidence, they are better equipped to take on future challenges. Kabaddi is a team sport, thus each player must communicate with and work together with his teammates. He can overcome the negative effects of the competition's stress and strain with the support of his psychological preparation, and he can also better adapt with his teammates to perform at their highest level.

Anxiety has become increasingly prevalent as a result of the current tendency toward increased scientific knowledge, cultural conflict. economic concerns. and industrialisation. Anxiety is a mental and emotional condition characterized by apprehension of imminent danger or the loss of a pleasurable experience. The stress and upheaval it causes usually stems from people being afraid of the unknown. It is challenging to identify anxiety and even more so to properly detect its effects on behavior. Anxiety is commonly used as a synonym for nervousness. Nearly everybody has experienced anxiety at some point in their lives. There is a continuum of nervousness from mild to severe. Tension is another word for the constant, low-level worry that seems to affect everyone. The common response of athletes to stress is nervous thinking. Athletes' on-field performance suffers when they entertain such thoughts.

Aggression, in its widest definition, refers to aggressive or offensive conduct or the tendency to engage in such activity. It can happen in response to or independently of any external stimulus. When defined more narrowly, as is customary in the fields of psychology and other social and behavioral sciences, aggressiveness is understood to include malice. Aggression is not the same thing as what most people would call assertiveness. Despite the fact that common usage conflates the two terms, such as when referring to a persistent salesperson, this distinction is important to keep in mind. Aggression amongst humans has existed for as long as we have. Tribal wars, ethnic wars, religious wars, and global battles have raged throughout history, beginning with Cain's murder of Abel and continuing to the present day. To the extent that aggressive conduct harms the opponent, either physically or mentally, diminishing their resources, it may have a favorable effect on the performance outcome of an individual or team. A team's performance outcome may also benefit from an aggressive approach if the team's process is enhanced.

Kabaddi is a violent team game that may be played either inside or outdoors on a rectangular court with fourteen players (7 on each side). Each team gets a turn at offense and defense equally. The goal of the game is to gain as many touches on the other team's defense as possible without being caught out of breath. Defense players in kabaddi are divided into three zones: the right zone, the center zone, and the left zone, each of which has a unique set of responsibilities. Together with his fellow defenders from the other sectors, he ensures the safety of the fortress at all times. Regardless of whether there are more or less offensive or defensive players on the field, each player is still designated by his position.

# II. REVIEW OF LITERATURE

Kumar, Deepak et al., (2020) The study set out to determine the psychological profiles of a variety of popular Indian traditional games. Among the psychological elements considered were measures of trait and state self-confidence, an inventory of variables associated with successful athletic careers, and an assessment of mental toughness. And

for the traditional Indian sports, we've chosen Kabaddi, Kho-kho, and Mallakamba. Thirty participants in each of the traditional Indian games were chosen at random. The following psychological instruments were used to evaluate athletes' mental makeup: the Vealey Sport Confidence Questionnaire (Trait and State Sport Confidence Inventory) was used to measure athletes' levels of self-assurance in their athletic abilities, while the inventory of factors influencing sports careers, created by M.L.

Ali, Sk et al., (2020) Kabaddi was created as a traditional Indian sport. As of recently, it has been dubbed the "National Game" in India. Only recently has there been a push to expand internationally. Different rules need to be established, appropriate coaching has to be provided, skills need to be adequately developed, and performance needs to be monitored and enhanced for a game to become popular and grow up to the world standard. This calls for some investigation. However, just a little amount of study has been done up to this point. We are making every effort to launch a study that will help close the gap. The current investigation was conducted using an expost facto research methodology and a descriptive survey technique. The present study chose as a sample 94 male Kabaddi players from various University teams in India. Participants in the 2006 Inter-University Kabaddi (Men) Tournament, held at the University of Kalyani from October 12-14, were surveyed for this study. Both the "Trait Anxiety" scale developed by Spielberger, Gorsuch, Lushane, Vagg, and Jacobs (1983) and the "Sport Multidimensional Perfectionism" Sport-MPS of Dunn, Causgrove Dunn, and Syrotuikm (2002) were taken into consideration. "Multiple Regression Analysis" was conducted. In this study, Trait Anxiety served as the dependent variable, while several aspects of the Sport-MPS (including Personal Standards, Concern Over Mistakes, Perceived Parental Pressure, and Perceived Coach Pressure) served as the independent factors. Following is the prediction equation that was arrived at: The formula for trait anxiety is as follows: Trait Anxiety = 43.569 - 0.229 Personal Standards + 0.325 Concern Over Mistakes + 0.065 Perceived Parental Pressure + 0.203 Perceived Coach Pressure. Trait Anxiety is lowered by P.S. and PCP (Perceived Coach Pressure). Kabaddi players' Trait Anxiety rises when they experience Over Mistakes (COM) or feel their parents are putting undue pressure on them.

Elumalai, Saravanan & Sekar, Sakthivel. (2018) The researchers wanted to see how well Kabaddi teams worked together and how certain psychological factors affected their performance. Subjects were four different men's Kabaddi teams from the South Zone Inter-University Kabaddi Tournament held at Satyabhama University in Chennai in September 2017. The universities in question include Manonmaniam Sundarnar, Bharathidasan, Bharathiar, and the Tamil Nadu Physical Education & Sports University. The factors of self-concept, aggression, sports achievement motivation, and team effectiveness (dependability, cooperation, and sharing) were chosen. Kabaddi players were compared on their team performance, drive for athletic success, sense of identity, and aggressive tendencies using analysis of variance. Scheffe's post-hoc test was applied if the 'F' ratio was statistically significant. The study found that the players from Tamil

Nadu Physical Education University, Manonmaniam Sundaranar University, Bharathidasan University, and Bharathiyar University who participated in the south zone inter university competition had significantly different levels of Team Effectiveness (Dependability) and Sports Achievement motivation. Players from the Tamil Nadu Physical Education University, Manonmaniam Sundaranar University, Bharathidasan University, and Bharathiyar University who participated in the south zone inter university tournament showed no significant differences in Team Effectiveness (Sharing, Co-operation), Self-Concept, or Aggression.

Chelliah, Durai. (2015) The researchers wanted to see how right- and left-foot dominant kabaddi players differed in terms of their bodies and minds. Twenty-four male Kabaddi players (twelve with right foot dominance and twelve with left foot dominance) aged 21 to 27 were recruited from the Physical Education and Sports Department at Manonmaniam Sundaranar University in Tirunelveli, Tamil Nadu, India. Using t-tests, we determined that breath-holding time, resting heart rate, aggression, and trait anxiety were all significant independent factors. We used the radial pulse method, the manual nostril clip method, and the resting pulse rate to determine how long we could hold our breath. The Smiths Aggression Scale and the Spielberger Trait Anxiety Inventory were both created in 1983. Independent t-tests were performed at the df=0.05 level of confidence on the data gathered. Among Kabaddi players, those that favor one foot over the other tend to be more dominant on factors 1 and 2, but not on variables 2 and 3.

#### III. METHODOLOGY

**Selection of the Subjects:** The participants in this study were collegiate women who played Kabaddi competitively and had engaged in regular training.

**Sample size of the Study:** 220 female Kabaddi players between the ages of 18 and 28 made up the study's sample.

**Selection of the variables for the Study:** Specifically, the following factors were chosen:

**Independent Variables:** Independent psychological factors included in this analysis include

- Anxiety
- Aggression
- Self-confidence

# IV. DATA ANALYSIS & INTERPRETATION

Table 1: Descriptive statistics of psychological variables

| Psychological variables | Mean    | Std. Deviation |
|-------------------------|---------|----------------|
| Anxiety                 | 28.5111 | 4.03683        |
| Aggression              | 14.9000 | 3.19409        |
| Self Confidence         | 34.2278 | 7.18691        |

The information below is derived from the table above.

With a mean score of 28.51 and a standard deviation of 4.04, anxiety was a common problem among the participants. As a team, the players' averaged 14.90 on the Aggression scale, with a standard deviation of 3.19. Average player self-confidence was 34.23, with a range of -7.19.

Table 2: Correlation analysis was used and the computations made were tabulatedin the table

| Psychologica       | l variables            | Performance | Anxiety | Aggression | Self<br>Confidence |
|--------------------|------------------------|-------------|---------|------------|--------------------|
| Performance        | Pearson<br>Correlation | 1           | .012    | 083        | 008                |
|                    | Sig. (2-tailed)        |             | .869    | .268       | .916               |
| Anxiety            | Pearson<br>Correlation | .012        | 1       | 217**      | 157*               |
|                    | Sig. (2-tailed)        | .869        |         | .003       | .035               |
| Aggression         | Pearson<br>Correlation | 083         | 217**   | 1          | .515**             |
|                    | Sig. (2-tailed)        | .268        | .003    |            | .000               |
| Self<br>Confidence | Pearson<br>Correlation | 008         | 157*    | .515**     | 1                  |
|                    | Sig. (2-tailed)        | .916        | .035    | .000       |                    |

\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed

The following conclusions were made using the data in the previous table.

Though there was a positive correlation between Performance and Anxiety (r = 0.012, P = 0.869), the test did not reach statistical significance (i.e., a 5% level of confidence) because the two variables did not significantly interact with one another.

A negative connection (r = -0.083, P = 0.268) was found between Performance and Aggression. To put it another way, there was no statistically significant inverse relationship between Performance and Aggression (at the 5% level of significance).

Self-Esteem and Performance had a negative connection (r = -0.008, P = 0.916). At the 5% level of significance, the test failed to show a negative relationship between performance and self-confidence.

The test was significant at the 5% level since the estimated Chi-square value was larger than the table value; this means that the Self Confidence levels of Kabaddi players are not uniformly distributed.

# V. CONCLUSION

Results indicated that only aggressiveness out of the three chosen psychological factors was substantially connected with Kabaddi performance; results indicated that neither anxiety nor self-confidence was significantly correlated with Kabaddi performance. Kabaddi is an interval sport that combines anaerobic and aerobic elements. Long games and tournaments require players to repeatedly bend, leap, and move about, testing the limits of their muscular endurance. It's a necessary trait if you want to succeed in Kabaddi. Technically, Kabaddi is similar to many other sports in that the muscles in your legs and thighs are crucial for things like quickness, agility, and kicking. Strength in the thigh and cough muscles can help boost the pace of a kick.

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