



A CORRELATIONAL STUDY BETWEEN EMOTIONAL INTELLIGENCE AND PROBLEM SOLVING ABILITY AMONG BADMINTON PLAYERS

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ABSTRACT

The purpose of the study was to assess the correlation between emotional intelligence and problem solving ability of badminton players. To conduct the study 100 male badminton players and 100 female badminton players were selected as a sample. The criterion for the selection of badminton players was set to minimum participation in intercollegiate badminton events. The purposive sampling method was used for the selection of subjects. To assess problem solving ability of selected badminton players, Problem Solving Ability Scale prepared by Sharmila and Naga Subramani (2011) was used. This scale consists of 40 statements based on 5 point scale i.e. always, often, sometimes, rarely, and never respectively. Numerical weightage of 4, 3, 2, 1 and 0 are assigned as per the response. This scale is highly reliable and valid. To measure emotional intelligence, five dimensional sports emotional intelligence test prepared by Agashe and Helode (2008) was adopted. This Hindi Inventory comprises of in all 15 items in which 3 items each for tapping self-awareness, self-regulation, self-motivation, empathy and social skills respectively. The test-retest reliability coefficient of this inventory is 0.71, which is statistically significant and denotes very high level of reliability of the inventory scores through “stability” indices. Pearson correlation coefficient 'r' was computed and a moderate level of positive association was observed between emotional intelligence of badminton players with their problem solving ability. It was concluded that emotional intelligence and problem solving skills of badminton players are embedded in each other and facilitates each other.

Keywords : Problem solving skills, emotional intelligence, badminton

1. INTRODUCTION

The role of emotional intelligence and problem solving skills are extensively documented under the domain of sports psychology. Emotional intelligence can be used as problem solving strategy. Problem arising out of personal grudge or success of fellow teammate can sometimes upset you and you can be jealous. In this situation it is essential to identify emotions and judge whether you are really jealous with other success or it is just because of frustration of not achieving the similar milestone. It is also necessary to use varied emotions to think rationally about the problems and pinpoint the obstacles that is preventing from attaining desired goals. Similarly understanding controlling emotions actually help us to think more productively while dealing with a problem. There are instances where problem solving is dependent on emotions. Problem solving also encompass ability to know about the emotions that affect our decision making process. It is opined that person with high level of emotional intelligence approach much more efficient, effective and controlled approach to solve the problems. A person high in emotional intelligence are well adjusted to the environment and able to assess the situation in fairness while keeping their emotions in check.

Researches and experiments conducted in the 90s onwards have tried to challenge such over-dominance of the intelligence and its measure intelligent quotient (I.Q.), by replacing it with the concept of emotional intelligence and its measure, emotional quotient (E.Q.). These have revealed that a person's emotional intelligence measured through his E.Q. may be a greater predictor of success than his or her I.Q. Goleman and his colleagues have suggested that EI is 'a convenient phrase with which it is easier to focus attention on human talent. Even though it is a simple phrase, it incorporates the complexity of a person's capability'. Based on extensive research Goleman (1995, 1998) has proposed five dimensions of EI consisting of 25 competencies namely, self awareness, self regulation, self motivation, empathy and social skills.

Some landmarks studies on emotional intelligence shows its importance for performance enhancement in sports. Laborde et al. (2001), Lane et al. (2009), Soleimani et al. (2013) and Arribas-Galarraga et al. (2020) reported a strong relationship between emotional intelligence with sports performance. Similarly the cognitive aspect of sports performance has also been highlighted by researchers namely Volkamer, 2009, Hristovski (2012), Agashe and Shambharkar (2014) in which they putforth the useful link between problem solving ability with emotional intelligence.

Despite extensive research no such study has been conducted on badminton players in this regard. The very nature of badminton requires emotional intelligence and problem solving ability, so the present study was planned to investigate the correlation between emotional intelligence and problem solving ability of badminton players.

1.1 Objectives

The objective of the present study is to explore the possible association between emotional intelligence and problem solving skills in badminton players.

1.22 Hypothesis

It was hypothesized that the emotional intelligence will be strongly correlated with the problem solving ability of badminton players.

2. METHODOLOGY

The following methodological steps were taken to conduct the present study.

2.1 Sample:-

To conduct the study 100 male badminton players and 100 female badminton players were selected as a sample. The criterion for the selection of badminton players was set to

minimum participation in intercollegiate badminton events. The average age of the sample was 23.14 years. The purposive sampling method was used for the selection of subjects.

2.2 Tools:

Problem Solving Ability Scale: To assess problem solving ability of selected badminton players, Problem Solving Ability Scale prepared by Sharmila and Naga Subramani (2011) was used. This scale consists of 40 statements based on 5 point scale i.e. always, often, sometimes, rarely, and never respectively. Numerical weightage of 4, 3, 2, 1 and 0 is assigned as per the response. This scale is highly reliable and valid.

Sports Emotional Intelligence Test : To measure emotional intelligence, five dimensional sports emotional intelligence test prepared by Agashe and Helode (2008) was adopted. This Hindi Inventory comprises of in all 15 items in which 3 items each for tapping self-awareness, self-regulation, self-motivation, empathy and social skills respectively. The test-retest reliability coefficient of this inventory is 0.71, which is statistically significant and denotes very high level of reliability of the inventory scores through “stability” indices.

2.3 Procedure:

The selected badminton players were subjected to sports emotional intelligence test and problem solving scale. The response was converted into scores and tabulated in respective groups. Pearson correlation was calculated and depicted in the form of tables.

3. RESULTS

**TABLE 1
CORRELATION MATRIX FOR VALUE OF PEARSON CORRELATION 'R'
BETWEEN EMOTIONAL INTELLIGENCE AND PROBLEM SOLVING
ABILITY (N=200) OF BADMINTON PLAYERS**

ABILITY OF MALE BADMINTON PLAYERS	Emotional Intelligence	Problem Solving Ability
Emotional Intelligence	1	.570, p<.01
Problem Solving Ability	.570, p<.01	1

In this study it was investigated that whether emotional intelligence and problem solving ability of 200 badminton players are correlated and the Pearson 'r' depicted that emotional intelligence (EI) and problem solving ability were moderately and positively correlated. The $r(df=198) = 0.570, p<.01$ support this as calculated 'r' value is greater than the table value for $df(N-2) = 198$ at .01 level i.e. 0.181.

**TABLE 2
CORRELATION MATRIX FOR VALUE OF PEARSON CORRELATION 'R'
BETWEEN EMOTIONAL INTELLIGENCE AND PROBLEM SOLVING**

ABILITY OF MALE BADMINTON PLAYERS	Emotional Intelligence	Problem Solving Ability
Emotional Intelligence	1	.505, p<.01
Problem Solving Ability	.505, p<.01	1

In this study it was investigated that whether emotional intelligence and problem solving ability of 100 male badminton players are correlated and the Pearson 'r' depicted that emotional intelligence (EI) and problem solving ability were moderately and positively correlated. The $r(df=98) = 0.505, p<.01$ support this as calculated 'r' value is greater than the table value for $df(N-2) = 98$ at .01 level i.e. 0.254.

TABLE 3
CORRELATION MATRIX FOR VALUE OF PEARSON CORRELATION 'R'
BETWEEN EMOTIONAL INTELLIGENCE AND PROBLEM SOLVING
ABILITY (N=100) OF FEMALE BADMINTON PLAYERS

ABILITY OF MALE BADMINTON PLAYERS	Emotional Intelligence	Problem Solving Ability
Emotional Intelligence	1	.604, p<.01
Problem Solving Ability	.604, p<.01	1

In this study it was investigated that whether emotional intelligence and problem solving ability of 100 female badminton players are correlated and the Pearson 'r' depicted that emotional intelligence (EI) and problem solving ability were moderately and positively correlated. The $r(df=98) = 0.604, p<.01$ support this as calculated 'r' value is greater than the table value for $df(N-2) = 98$ at .01 level i.e. 0.254.

4. DISCUSSION

Result reveal significant and positive correlation between emotional intelligence and problem solving ability of badminton players. It indicate that problem solving ability is emotion specific and one need to control and manage their emotions effectively so that they put their energy and focus to solve the problem.

5. CONCLUSION

Based on the results, it may be concluded that that emotional intelligence and problem solving skills are embeded in each other and facilitates each other, hence emotional intelligence and problem solving skills of badminton players needs detailed evaluation so as to facilitate their performance by incorporating both emotional and cognitive aspect as their psychological characteristics.

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