



EFFECT OF PROBLEM SOLVING ABILITY ON FRUSTRATION TOLERANCE : WITH REFERENCE TO MALE KABADDI PLAYERS

Anil Kumar Mishra¹ and Dr. Sudhir Rajpal²

¹Research Scholar , Department of Physical Education , Dr. C.V. Raman University , Kargi Road, Kota, Bilaspur C.G.

²Associate Professor , Department of Physical Education , Dr. C.V. Raman University , Kargi Road, Kota, Bilaspur C.G.

ABSTRACT

This study was carried out to assess the impact of problem solving ability on frustration tolerance of male kabaddi players. To conduct the study, 200 male kabaddi players (Average age 24.62 years) were selected as sample. The sample comprises of intercollegiate, national and international level male kabaddi players. Problem Solving Ability Scale prepared by Sharmila and Naga Subramani (2011) and Reaction to Frustration Scale prepared by Dixit and Shrivastava (1997) was used to assess problem solving ability and frustration tolerance of male kabaddi players. In order to distribute subjects in high, average and low level of problem solving ability, quartile methods was used. One Way ANOVA showed significantly higher magnitude of frustration tolerance in male kabaddi players exhibiting superior problem solving ability as compared to male kabaddi players exhibiting average and low level of problem solving ability. It was concluded that problem solving ability can be considered as determining factor in frustration tolerance capacity of male kabaddi players.

KEYWORDS: *Problem solving, frustration tolerance, kabaddi.*

INTRODUCTION

Problematic situation are not uncommon in life and every individual use different means and methods to solve it. Thornton (1998) described problem solving in terms of searching for new techniques, strategies, planning and implementation to remove obstacles or hurdles in the form of problem so as to achieve the desired goals. Problem solving is a mental process. In this mental process person analyze and solve particular set of problems in a meaningful manner. Problem solving skill or ability as defined by Goldstein and Levin (1987) can be considered as collection of intellectual and cognitive process beyond elementary level. Problem solving involves stages like evaluation, identifying, selecting best solution, reviewing the action taken. A theory was propounded by Newell, Shaw and Simon (1958) in relation to sports. They postulated that game situation require sportsperson to act according to tactics used by the opponent, environmental conditions or an unfamiliar opponent. Ability to solve on and off field problem is considered important for sportsperson so that they can utilize their full potential. When a sportsperson or individual are unable to remove obstacles in their desired pursuit, it is natural for them to get frustrated. Hence inability to solve problems may be linked to frustration tolerance capacity. These notions are even important in a team sport where apart from individual brilliance team cohesion is key to success. In a team sport a sportsperson can get frustrated from variety of reasons. So it is necessary for a player to tolerate frustrating situations so as to engage in sustained effort towards success. One such team sport is kabaddi and



being traditional India sports researchers like Jadhav (2012), Devaraju and Needhiraja (2013), Singh and Singh (2013), Mishra (2015), Agarwal and Mishra (2015) Sana and Shrivastava (2016), Bhagwati Chandra (2017) have explored various factors associated with sports performance in kabaddi. In spite of problem solving ability considered as major psycho-cognitive construct, its influence on frustration tolerance capacity of male kabaddi players has not been observed so far. Hence the researchers decided to assess the impact of problem solving ability on frustration tolerance of male kabaddi players.

OBJECTIVES

The objective of the present study is to assess the impact of problem solving ability on frustration tolerance among male kabaddi players.

HYPOTHESIS

It was hypothesised that frustration tolerance among male kabaddi players will show significant variation on the basis of their high, average and low level of problem solving ability.

Methodology :-

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

Sample :-

To conduct the study, 200 male kabaddi players (Average age 24.62 years) were selected as sample. The sample comprise of intercollegiate, national and international level male kabaddi players. The sample was collected through convenience sampling method.

Tools:

Frustration Tolerance :

To assess frustration in chosen male kabaddi players for the present study, Reactions to Frustration Scale prepared by Dixit and Shrivastava (1997) was preferred. It consists of 40 items with reliability indices of 0.79. The scoring pattern prescribed in manual indicates that increase in scores leads to decreased frustration tolerance.

Problem Solving Ability Scale :

To assess problem solving ability of selected male kabaddi players, Problem Solving Ability Scale prepared by Sharmila and Naga Subramani (2011) preferred. This scale consists of 40 statements based on 5 point scale i.e. always, often, sometimes, rarely, and never respectively. This scale is highly reliable and valid coefficient for its Hindi adaptation.

Procedure:

200 male kabaddi players comprising of intercollegiate, national and international reputation were selected with the help of convenience sampling. After taking care of ethical rules, preferred scales were administered to each subject according to their convenience. The scoring of response was carried out in accordance with instruction manual for both the scales. To distribute subjects with high, average and low level of problem solving ability, Q_1 and Q_3 statistical technique was used. The scores of male kabaddi players falling above P_{75} (Q_3) were considered as high problem solving ability group, scores lying below P_{25} (Q_1) were considered as low problem solving ability group while scores between the above quartile treated as average problem solving ability group. To compare frustration tolerance of male kabaddi players so distributed in high, average and low problem solving ability group, One Way ANOVA and Least Significant Difference Test was used. The results are presented in table 1 and 2 respectively.

ANALYSIS OF DATA

Table 1
One Way ANOVA : Independent Variable Problem Solving Ability, Dependent Variable Frustration Tolerance

Groups	N	Frustration Tolerance	
		Mean	S.D.
High Problem Solving Ability	52	99.98	15.69
Average Problem Solving Ability	98	108.64	12.50
Low Problem Solving Ability	50	105.32	12.41
F=7.12, p<.01			

The F=7.12 shown in table 1 indicate that frustration tolerance in male kabaddi players exhibiting high problem solving ability (M=99.98), average problem solving ability (M=105.32) and low problem solving ability (M=108.64) differ significantly.

The obtained result shown in table 1 was also confirmed by Least Significant Difference Test presented in table no. 2.

Table 2
Least Significant Difference Test with Significance Level .05

Mean (I)	Mean (J)	Mean Difference (I-J)
High Problem Solving Ability	Average Problem Solving Ability	-8.66*
	Low Problem Solving Ability	-5.33*
Average Problem Solving Ability	Low Problem Solving Ability	3.32

Statistical data shown in table 2 gives following inferences:

- Frustration tolerance in male kabaddi players exhibiting high problem solving ability was significantly superior as compared to male kabaddi players exhibiting average and low level of problem solving ability. The mean difference of 8.66 and 5.33 was found to be statistically significant at .05 level.
- Statistically non-significant difference was observed in frustration tolerance between male kabaddi players exhibiting average and low problem solving ability. The mean difference of 3.32 also confirms this finding

On the basis of analysis of data, following results are obtained :

RESULTS :

The analysis of data gives clear statistical indication about superior frustration tolerance in male kabaddi players exhibiting high problem solving ability as compared to male kabaddi players exhibiting average and low level of problem solving ability.

DISCUSSION:

Isen (1987) scientifically documented that problem solving ability is dependent upon positive and negative emotions. When an individual fails to cope with solving a problem situation, it develops negative emotions which ultimately give rise to frustration. Hence the results of the present study are not surprising.

CONCLUSION

On the basis of results, it can be concluded that problem solving ability can be considered as determining factor in frustration tolerance capacity of male kabaddi players.

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**Anil Kumar Mishra**

Research Scholar , Department of Physical Education , Dr. C.V. Raman University , Kargi Road, Kota, Bilaspur C.G.