

# STUDY ON MENTAL TOUGHNESS AND IMAGERY AMONG SOCCER PLAYERS

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## Abstract

*The purpose of the study was to analyze the mental toughness variables and sport imagery variables among santhos trophy players of south India. For the purpose of the study a total of 40 male football players are selected from two states namely Kerala and Karnataka football team, 20 players each from Kerala and Karnataka The Mental Toughness of the subjects was measured using the Sports Mental Toughness Inventory developed by Goldberg (2012) and to measure imagery ability of the subjects the Sport Imagery Ability Questionnaire (SIAQ) developed by Williams and Cumming (2014).*

**Key Words:** *Mental toughness, mental imagery factor analysis.*

## Introduction

The psychological requirement football players include the sense of space and time, a good sight and motion, motivation, visualization, tough-mindedness etc. Today, mental skills training have become as much a part of athletic success as strength, power, and endurance training. This is thanks to the mindfulness movement and the popularity of meditation, yoga, and visualization practice in mainstream media. Research on the benefits of mindfulness meditation on resilience and stress management have carried over to the field of sports psychology. And many athletes continue to benefit from adding mental skills training to their fitness training routine.

## MATERIALS AND METHODS

The selection of subjects, collection of data, selection of the test, the procedure of administration of the tests, and the statistical techniques used are presented in this part

## SELECTION OF SUBJECTS

- To achieve the above purpose of the study the subjects were selected from south Indian Santosh Trophy teams.
- A total study of 40 Santosh Trophy players were selected from Kerala and Karnataka for the study and the age of the subjects ranged from 17-28 years.

## SELECTION OF TEST ITEMS

The first section was demographic information sheet consisting of several questions describing the sample's mental toughness and sports imagery in sports.

## SELECTION OF VARIABLES

- I. Sports imagery ability
  1. Skill imagery ability
  2. Strategy imagery ability
  3. Goal imagery ability
  4. Affect imagery ability
  5. Mastery imagery ability
- II. Mental toughness
  1. Rebound ability
  2. Ability to handle pressure
  3. Concentration ability
  4. Level of confidence
  5. Motivation

### Administration of the Questionnaire

Psychological variables among different level of football players have been selected for collection of data, in total 40 football players those who have selected in Santosh Trophy team for Kerala and Karnataka. Research Scholar has personally visited to all the players for collection of data 40 complete questionnaire has been considered for the present study. All above work has been executed with the consultation of the supervisor.

### COLLECTION OF DATA

The data for the purpose of the study will be collected from two Santosh Trophy teams from south India (Kerala and Karnataka). 20 players each will be selected from both teams

### STATISTICAL TECHNIQUES

Descriptive profile and factor structure was used for the statistical analysis

### DISCUSSIONS OF FINDINGS

#### Comparative Analysis

While considering the mean comparison value of sports Imagery ability of Santosh Trophy football players the Mastery ability is the highest mean score compare to other Sports Imagery variables because the skill level and its imagination and visualization is very high-level compare to other sports imagery variables. The Mental Toughness of Santosh Trophy football players, the Motivational factors was the highest mean score compare to other Mental Toughness variables because the motivational factors are lead the players to their highest level of achievement

**Table 1**

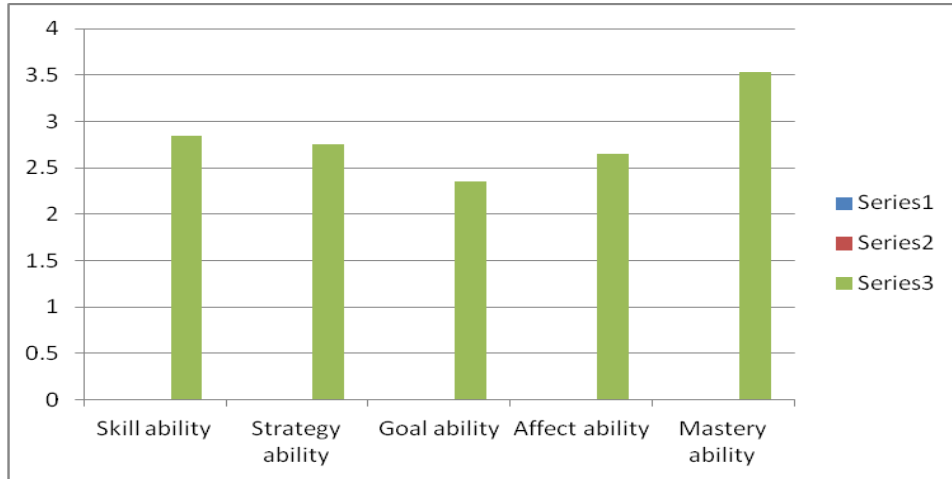
**Sports Imagery Ability variables Mean Difference**

Skill ability	Strategy ability	Goal ability	Affect ability	Mastery ability
2.85	2.75	2.35	2.65	3.53

Table 4.3 clearly indicates the mean value of sports Imagery ability of Santosh Trophy football players. The Mastery ability is the highest mean score compare to other Sports Imagery variables

**Figure 1**

**Mean comparison of sports Imagery variables of football players**



**Table 2**

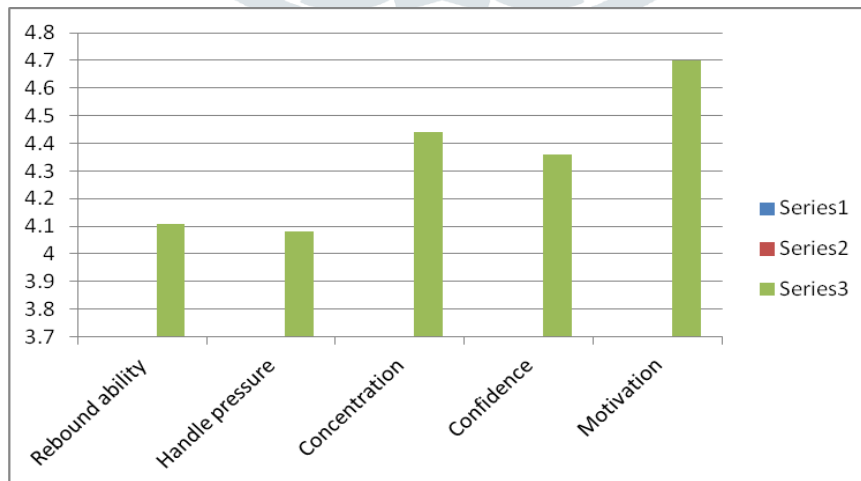
**Mean Values of Mental toughness variables among south Indian Santosh Trophy football players**

Rebound ability	Handle pressure	Concentration	Confidence	Motivation
4.11	4.08	4.44	4.36	4.70

Table 4.4 clearly indicates the mean value of Mental Toughness of Santosh Trophy football players. The Motivational factors were the highest mean score compare to other Mental Toughness variables.

**Figure 2**

**Mean comparison of Mental Toughness variables of football players**



## Factor Analysis

**Table 3**  
**Principal component analysis of sports imagery ability**  
**(Varimax solution)**

	<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>
Eigen value	1.31	1.27	1.15
Total Variance. Exp	26.11	25.47	22.97
Cum. Variance .Exp	26.11	51.58	74.55
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Skill imagery ability	0.159	<b>-0.872</b>	-0.161
Strategy imagery ability	-0.013	0.019	<b>0.925</b>
Goal imagery ability	<b>-0.733</b>	0.170	0.191
Affect imagery ability	<b>0.703</b>	0.200	0.368
Mastery imagery ability	0.499	<b>0.666</b>	-0.309

While considering the factor analysis of sports imagery ability variables of south Indian Santhosh trophy players goal imagery ability and affect imagery ability. The goal factor and affect imagery ability were heavily loaded items because the goal setting and influencing behavior of players during the training and competition is very high level compare to other south Indian states. The skill and its mastery of players factors both team applied occasionally depend upon the rival team. The strategy factor coaches applied according to the situation in the crucial match and succeed.

The Mental toughness variables of south Indian Santhosh trophy teams were very high level in rebound ability and ability to handle pressure because the mental support of coaches and teammates. The coaches applied various strategies and team line up according to the level of opposite team. The level of confidence and motivational factors in between the players and supporting staff of both team leads the highest achievement in league rounds and final rounds in the tournament. The concentration factor is mainly depending upon the strict time table of coaches and assistant coaches in outside the field. That leads the team in well planned preparation for the each and every matches.

**Table 4**  
**Principal component analysis of mental toughness variables**  
**(Varimax solution)**

	<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>
Eigen value	2.421	1.258	1.167
Total Variance. Exp	30.260	15.722	14.590
Cum. Variance .Exp	30.260	45.982	60.572
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Rebound ability	<b>0.851</b>	-0.205	0.033

Ability to handle Pressure	<b>-0.687</b>	-0.199	0.160
Concentration ability	-0.086	-0.007	<b>0.985</b>
Level of Confidence	-0.311	<b>0.793</b>	-0.061
Motivation	0.287	<b>0.730</b>	0.035

While considering the both sports imagery and mental toughness the south Indian players shows the goal imagery ability, rebound ability and level of confidence because the visualization of the players based on their goal setting with the confidence. The coaching camps and various training especially the psychological factors both team shows the confidence and proper preparations. The influence of experienced players is more effect to the young players for their skill and mastery during the training situations.

**Table 5**

**Principal component analysis of both sports imagery ability and mental toughness variables  
(Varimax solution)**

	<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>
Eigen value	1.80	1.61	1.39
Total Variance. Exp	17.95	16.05	13.86
Cum. Variance .Exp	17.95	34.00	47.86
Skill imagery ability	-0.089	-0.415	<b>-0.618</b>
Strategy imagery ability	-0.21	-0.106	<b>0.689</b>
Goal imagery ability	<b>0.60</b>	-0.129	0.306
Affect imagery ability	-0.393	<b>0.614</b>	0.058
Mastery imagery ability	0.08	<b>0.78</b>	-0.187
Rebound ability	<b>-0.765</b>	0.157	0.155
Ability to handle Pressure	0.466	0.07	-0.183
Concentration ability	0.116	-0.183	0.524
Level of Confidence	<b>0.637</b>	0.226	0.252
Motivation	0.058	0.552	-0.025

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