

Comparative Study on Mental Imagery among Three Different Track & Field Events Athletes

Sheuli Ghosh^{1*}, Kallol Chatterjee², Krishnendu Ghosh³

¹M.P.Ed Scholar, Department of Physical Education & Sport Science, Visva-Bharati, Santiniketan, West Bengal, India

²Assistant Professor, Department of Physical Education & Sport Science, Visva-Bharati, Santiniketan, West Bengal, India

³Research Scholar, Department of Physical Education & Sport Science, Visva-Bharati, Santiniketan, West Bengal, India

DOI: [10.36348/jaspe.2022.v05i06.002](https://doi.org/10.36348/jaspe.2022.v05i06.002)

| Received: 04.05.2022 | Accepted: 10.06.2022 | Published: 18.06.2022

*Corresponding author: Sheuli Ghosh

M.P.Ed Scholar, Department of Physical Education & Sport Science, Visva-Bharati, Santiniketan, West Bengal, India

Abstract

Background: Running, jumping and throwing are natural and universal forms of human physical expression. Today sports become highly competitive. Track & Field is categorized under the umbrella sports of Athletes. Mental imagery is an important factor to perform better in the field of sports. **Aims:** The aim of the study is to find out the differences in sports imagery ability among the runners, jumpers & throwers of track & field. **Methods and Material:** Total 30 male Inter University level Athletes out of which 10 runners, 10 jumpers, 10 throwers were selected as subject for this study. The age of the subject was 21-25 years. **Statistical analysis used:** Descriptive statistics and one way analysis of variance was used. To calculate the collected data socscistatistics.com (Online software) was used. **Results:** The result shows that there is no significant difference of sports mental imagery ability among the runners, jumpers & throwers. **Conclusions:** There is no significant difference among the runners, jumpers & throwers in respect of Sports Mental imagery ability.

Keywords: Sports mental imagery, Runner, Jumper, Thrower.

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INTRODUCTION

The sport of track and field has its roots in human prehistory. Track and field style events are among the oldest of all sporting competitions [1]. From the time of ancient olympic athletic were the major sports events. In present situations athletics is one of the major attractions in every modern olympic games. The name athletics is derived from where the sport takes place, a running track and a grass field for the throwing and some of the jumping events. Track and field is categorized under the umbrella sport of athletics, which also includes road running, cross country running, and race walking etc [2].

The field events come in two types—Jumping and throwing competitions. In throwing events, athletes are measured by how far they hurl an implement, with the common events being the shot put, discus, javelin, and hammer throw. There are four common jumping events: the long jump and triple jump are contests measuring the horizontal distance an athlete can jump, while the high jump and pole vault are decided on the height achieved [3].

Mental imagery involves the athlete imagining themselves in an environment performing a specific activity using their senses (sight, hear, feel and smell). The images should have the athlete performing successfully and feeling satisfied with their performance [4].

Mental imagery is the reproduction of perceptual experience [5] across multisensory ways and the processing of images in the absence of external stimuli Mental Imagery Skills in Competitive Young Athletes and Non-athletes [6]. In the sport situation, imagery has been designated as the state in which people imagine themselves while effecting abilities to deal with the forthcoming duty or improve performance. Imagery may be a consequence from both thoughtful and unconscious recall procedures; an individual sees an image, or experiences a movement as an image, without experiencing the real thing through a process. Imagery plays a significant role in this context, improving performance in motor tasks [7]. It is usually assessed in relations of its mental and emotional characteristics, as well as motivational competence .Owing to the gains of imagery, it is, nowadays,

included in numerous mental skills line-ups, in addition to physical preparation [8].

STATEMENT OF THE PROBLEM

The present study was to compare among three different branches of track & field athletes in respect of sports mental imagery ability. So the problem was accordingly stated as ‘comparative study on mental imagery among three different track & field events athletes’.

OBJECTIVE

1. To find out the differences in sports mental imagery ability among the runners, jumpers & throwers of track & field.
2. To find out which group of athletes have strongest Sports mental imagery ability.

METHODS & MATERIALS

Participants:-Total 30 male Inter University level Athletes out of which 10 runners, 10 jumpers, 10 throwers were selected as subjects for this study. The age of the subject was 21-25 years. Sports mental imagery Ability was select as the variables for this present study.

Inclusion criteria

- 1) Sports mental imagery ability.
- 2) Inter University level athletes of Visva-Bharati and University of Calcutta, West Bengal, India.

Exclusion criteria

- 1) Socio-economic status.
- 2) Emotional state, motivational factors & interest of the subjects.

PROCEDURE

For the survey and comparison on Sports mental imagery among runners, jumpers & throwers, the data were collected through Sports Imagery Questionnaire (SIAQ) developed by BIRO group, University of Birmingham, 2014. The questionnaire was consist of 15 questions and the rating of each question were made on a 7-point Liket type scale ranging from 1 (very hard to image), to 7 (very easy to image) [9]. Soft copy of each questionnaire was send to each player. One online session was conducted with all the participants and in that session the researcher explained the objectives of the study. The researcher also described the format how to fill up the questionnaire and also described each and every questionnaire in details to make them understand properly. After that online session the researcher provided them 40 to 45 minutes to fill up the questionnaire, after that all the participant send the signed copy of that questionnaire to the researcher [10].

STATISTICAL PROCEDURE

For the purpose of comparing among the three groups in respect of Sports mental imagery ability, Descriptive Statistics and One way analysis of variance (ANOVA) were used at 0.05 level of significance. To calculate the collected data socscistatistics.com [11] (Online software) was used.

Table-1: Mean Standard deviation and Standard error of Runners, Jumpers and Throwers in respect of Sports mental imagery ability.

Group	Total Number	Mean	Sd	SE
RUNNERS	10	73.2	8.80	2.78
JUMPERS	10	70.9	11.76	3.72
THROWER	10	71.10	16.27	5.15

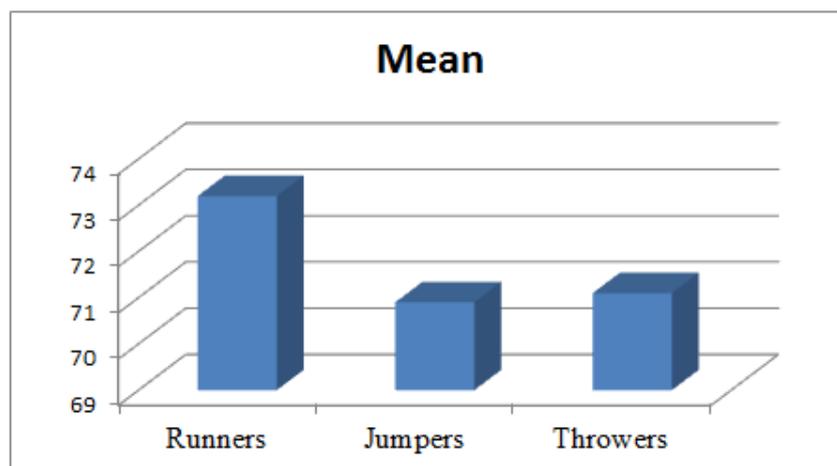


Fig-I: Graphical presentation of mean Runners, Jumpers and Throwers of Sports mental imagery ability

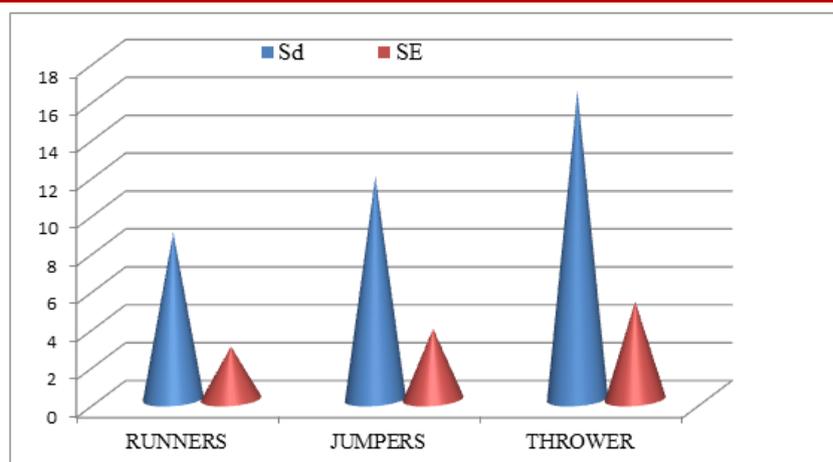


Fig-II: Graphical presentation of Standard Deviation and Standard Error of Runners, Jumpers and Throwers of Sports mental imagery ability

Table-2: Analysis of variance among Runners, Jumpers, Throwers in respect of Sports mental imagery ability

Source	SS	DF	MS	F=0.10133
Between treatments	32.4667	2	16.2333	
Within treatments	4325.4	27	160.2	
Total	4357.8667	29		

The f-ratio value is 0.10133. The p-value is .903975. The result is not significant at $p < .05$.

The result shows that there is no significant difference of sports mental imagery ability among runners, jumpers & throwers.

DISCUSSION

Through the statistical analysis and interpretation of the data it was observed that there is no statistical significant difference of Sports mental imagery ability among three different track and field events Athlete.

The researcher discussed below about the probable reasons behind the not significant differences on Sports mental imagery ability among three different track & field events Athletes.

1. All subjects were selected from inter- university level and many of them were involved in 2/3 type of events like - running as well as jumping. So their Sports mental imagery ability also more or less same.
2. The subjects were from educational field and they were not the professional players, they were only amateur players that's may be one of the reasons for not significance result.
3. Thirdly for last 15 months they all were staying in their home because of this pandemic Situation. This situation not only effects in social phenomena but also effects in every spear of lifestyle and wellness. Its also effects in sports field, specially it deteriorates physical fitness level of the sports man and also disturbed mental and emotional capacity which deteriorate their sports mental imagery ability too. That's why the result of the present study indicates not significance difference in sports

mental imagery ability of of runners, jumpers & throwers.

CONCLUSIONS

Within the limitation of the present investigation following conclusions was drawn on the basis of the obtain results. Through the statistical analysis and interpretation of the data it was observed that there is no statistical significant difference of Sports mental imagery ability among three different track and field events Athletes.

ACKNOWLEDGEMENT

The authors want to express sincere gratitude and special thanks to the participants of, Birbhum, West Bengal, India who voluntarily participated in this study and for their immense contributions and endless support to complete the current study. We would also like to acknowledge the Coaches.

Conflict of Interest

The authors of the present study declare that they have no conflicts of interest regarding the publication of this paper.

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