



# IJRASET

International Journal For Research in  
Applied Science and Engineering Technology



---

# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

---

**Volume:** 11    **Issue:** IV    **Month of publication:** April 2023

**DOI:** <https://doi.org/10.22214/ijraset.2023.50654>

[www.ijraset.com](http://www.ijraset.com)

Call:  08813907089

E-mail ID: [ijraset@gmail.com](mailto:ijraset@gmail.com)

# A Study of Mental Imagery Among Cricket Players of Different Age Group in Birbhum District

Pathik Kabiraj<sup>1</sup>, Anjan kr. Biswas<sup>2</sup>, Prof. B. C Kapri<sup>3</sup>

<sup>1, 2</sup>Ph.D. Research Scholar, Department of Physical Education, Banaras Hindu University, Uttar Pradesh

<sup>3</sup>Professor, Department of Physical Education, Faculty of Arts Banaras Hindu University, Varanasi, India, 221005

**Abstract: Objective:** The purpose of the study was to compare and generalize the conditions of mental imagery of two age groups in cricket.

**Methodology:** 40 male players made up the study's sample, and out of which containing 20 male cricketers age ranging from 16-19 years, and other 20 players acted as second group and the age ranging from 20-24 years, simple random sampling methods were used to choose the subjects. The Birmingham Research Imaging and Observation (BRIO) group, under the direction of Drs. Sarah E. Williams and Jennifer Cumming, created a structured questionnaire on "sport imagery ability" for the goal of gathering data. Standard statistical methods parameter mean and SD were used to calculate the data that had been gathered. The data were evaluated using the MS Office Data Analysis software.

**Result and findings:** The outcome shows that cricketers between the ages of 16 and 19 had a mean mental imagery score of 73 and a median score of 20. 20 to 24 years age group of cricketer's athletic imagery ability assessment yielded a mental imagery score of 78.5.

**Conclusion:** Considering the constraints of the study, it is possible to draw the conclusion that cricketers between the ages of 20 and 24 possess more mental imagery than cricketers between the ages of 16 and 19.

**Keywords:** Mental imagery, cricketers.

## I. INTRODUCTION

A lot has changed in the world of sport since its introduction to society. The values and principles of sport, on the other hand, are still disputed by some. It is true that many people around the world appreciate sports in today's modern civilization, and that sport has the power to impact both the social and economic development of entire nations. Sport has the capacity to enthrall society and captivate a large global audience.

Worldwide, millions of people watch the Olympic Games and the FIFA World Cup (EUSA, 2015). Modern society depends heavily on sports. Sports have greatly developed throughout the years. It is not only a physical exercise but also a venue for social interaction, making it a crucial component of life. In Sports the use of varying levels of strength, stamina, endurance, glycogen, fat, fast-twitch and slow-twitch muscle fibers, aerobic and anaerobic energy and other skills and abilities are usual process and also requires different training methods. Creating workouts to address the different factors that influence athletic performance helps perform at the peak level.

There are so many factors which directly and indirectly affected the sports performance. Among all of them psychological factors are most important factors.

For thousands of years, the topic of mental imagery has been essential to discussions of mind function. Many claim that it is one of the basic brain functions that enables us to remember, make future plans, navigate, and make judgments. Moreover, mental imagery has a significant function in the onset of many mental health conditions as well as a growing one in their management. The representations of sensory information without a direct external stimulus and the accompanying sensation of that sensory information are referred to as "mental imagery." Such images are retrieved from memory and cause the person to experience the original stimulus again or a different combination of stimuli (Joel Pearson et al.).

Top athletes using a lot of mental images to accentuate their advantages and assist them overcome their disadvantages in order to compete more successfully.

Imagery not only helps athletes to regulate the anxiety they experience during competitions, but also helps athletes to stay confident, focused and mentally. Certain motor abilities can be improved with mental imagery, but it also tends to boost confidence, mental toughness, and motivation, all of which will help us play at a higher level.

## II. OBJECTIVE

To compare the mental imagery among two different age groups of cricketers in Birbhum district

## III. METHODS AND DESIGNS

- 1) *Subjects*: Total 40 male cricket player was taken as a sample, among them 20 male players, whose age ranging was 16-19 years and another 20 male player age ranging from 20-24 years minimum participate in district level.
- 2) *Parameter*: For this investigation, a psychological parameter was chosen from the Sports Imagery Ability Questionnaire (SIAQ).
- 3) *Test And Criterion Measure*: A questionnaire survey was used to gauge the subject's capacity for mental imagery, and the results were recorded as ratings. The evaluation of the individuals' comments was done using a 7-point Likert scale, with 1 being the hardest to imagine and 7 being the easiest (very easy to image).
- 4) *Design of the study*: Simple random design method was used for this study.
- 5) *Statistical tools used*: Descriptive Analysis and independent t- test were used to calculate the data and analyze the findings, the level of significance was set at 0.05 level.

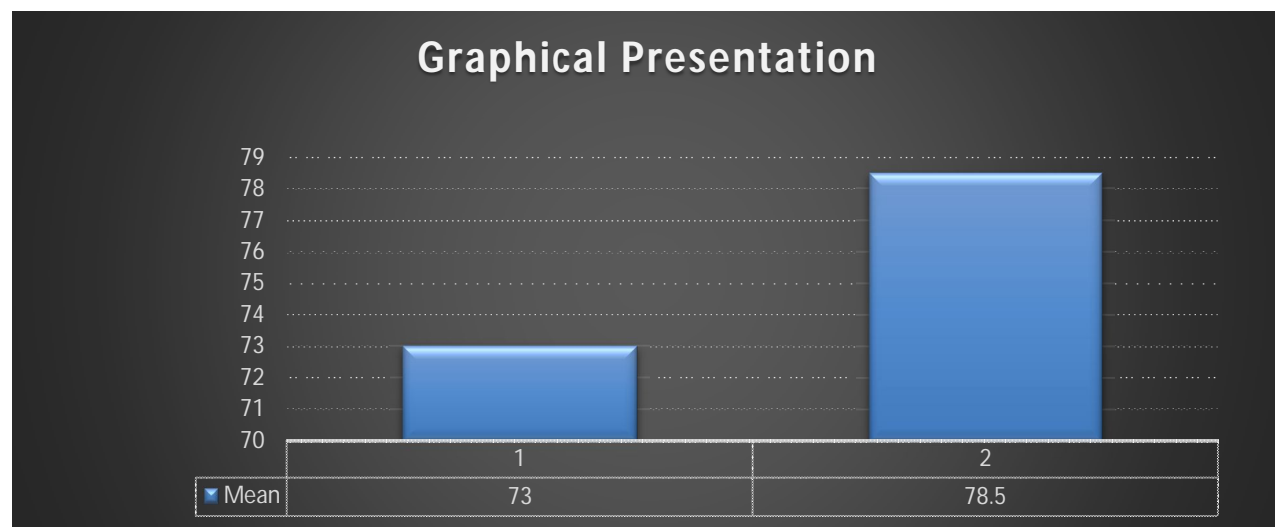
Table 1: Descriptive Statistics

Parameter	Age Group	No of players	Mean	Std. Deviation	Std. Error Mean
MENTAL IMAGERY	16 - 19 years	20	73	4.89	1.09
	20 - 24 years	20	78.5	5.23	1.17

From table no 1 it was found that the mean and S.D of the first age group (16-19 yrs.) was 73 and  $\pm 4.89$ , whereas the mean and S.D of the other age group (20-24 yrs.) was 78.5 and  $\pm 5.23$ , along with that the standard error of mean for 16-19 yrs. was 1.09 and 20-24 yrs. were 1.17.

Table 2: Independent t-test

Parameter	Age groups	Df	Mean Difference	Std. Error Difference	t ratio	Sig. (2-tailed)
MENTAL IMAGERY	16 - 19 years	19	5.5	0.33	3.33	2.09
	20 - 24 years					



From the table 1 we can see that are the mean and standard deviation value of 16 to 19 years old players were 73 and 4.89, whereas in case of 20 to 24 years age group players mean and standard deviation were 78.5 and 5.23, there is significant difference was found between 16 to 19 years age group players and 20 to 24 years age group cricket players in Birbhum district Focusing on mental imagery since the t value 3.33 was higher than the tabulated value 2.09, which was significant at the 0.05 level. It is evident from the above table that a considerable disparity between these two groups was discovered.

#### IV. CONCLUSION

Based on the findings, it can be said that there was a substantial difference in mental images between cricket players in the birbhum district who were 16 to 19 years old and those who were 20 to 24 years old.

#### REFERENCES

- [1] David G. Pearson et al (2012) "Assessing mental imagery in clinical psychology: A review of imagery measures and a guiding framework".
- [2] Jackie Andrade, Jon May, Catherine Deeprose, Sarah-Jane Baugh, Giorgio Ganis (2013) "Assessing vividness of mental imagery: The Plymouth Sensory Imagery Questionnaire".
- [3] Petar Horki , Günther Bauernfeind , Daniela S Klobassa , Christoph Pokorny , Gerald Pichler ,Walter Schippinger , Gernot R Müller-Putz "Detection of mental imagery and attempted movements in patients with disorders of consciousness using EEG".
- [4] Maamer Slimani , David Tod , Helmi Chaabene , Bianca Miarka , Karim Chamari "Effects of Mental Imagery on Muscular Strength in Healthy and Patient Participants: A Systematic Review".
- [5] Rakesh Chander Rai (2021) "Importance of imagery visualization".
- [6] Anne R. Isaac, David F. Marks (1994) "Individual differences in mental imagery experience: Developmental changes and specialization".
- [7] Donatella Di Corrado et al "Mental Imagery Skills in Competitive Young Athletes and Non-athletes".
- [8] Joel Pearson (2015) "Mental Imagery: Functional Mechanisms and Clinical Applications".
- [9] Stephen M. Kosslyn, Nathaniel M. Alpert, William L. Thompson, Vera Maljkovic, Steven B. Weise, Christopher F. Chabris, Sania E. Hamilton, Scott L. Rauch, Ferdinando S. Buonanno; Visual Mental Imagery Activates Topographically Organized Visual Cortex: PET Investigations. *J Cogn Neurosci* 1993;5(3):263–287. doi: <https://doi.org/10.1162/jocn.1993.5.3.263>.
- [10] Burhans, Rollins S., Charles L. Richman, and Donald B. Bergey. "Mental imagery training: Effects on running speed performance." *International Journal of Sport Psychology* (1988).
- [11] Kremer, John, and Aidan P. Moran. *Pure sport: Practical sport psychology*. Routledge, 2012.



10.22214/IJRASET



45.98



IMPACT FACTOR:  
7.129



IMPACT FACTOR:  
7.429



# INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089  (24\*7 Support on Whatsapp)