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## A comparative study of reaction ability between national level and state level boxers

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### Abstract

The present study has been designed to investigate the Reaction ability between state level and national level boxing players. For accomplish the study 30 male state level and 30 male national level boxers were randomly selected as sample. The age of all samples was ranged 15-22 year. Male Sports persons who participate at state level and national level were randomly selected as samples. All samples were selected from the Haryana state. Reaction ability was evaluated by using “Visual Reaction Timer” and will record in 1/100th seconds. The obtained data were analyzed by applying t-test in order to determine the reaction ability of different level boxing players. The level of significance was set at 0.05. For obtaining reliable result special statistics software (SPSS-20) was used. After analysis the obtained results it was observed that hypothesis which was formulated earlier that “There would be no significant difference in reaction ability between state and national level boxing players”. is rejected. A significant difference was found between state level and national level players. National level boxers are having much better reaction ability in comparison of state level boxing players.

**Keywords:** Reaction ability, boxer, state level, national level

### Introduction

In the world of boxing, reaction time is everything. Without a doubt, it plays a key role in the real offense and defense in the ring. That's why the best fighters the sport has seen have incredible reaction times; He never ceases to fascinate fans around the world with his incredible counterattack abilities or his extraordinary ability to evade swarms of blows. Having a good hand-eye-foot coordination will allow you to have a rapid lateral movement and a good movement of the head and upper body at the same time, remaining relaxed with little or no effort. In other words, the entire body and posture will be large enough to not only react to anything, but also to perform techniques more quickly and efficiently. To main objective of the study is to compare the Reaction ability between state and national level boxing players. There would be no significant difference in reaction ability between state and national level boxing players.

### Research process and methodology

For accomplish the study 30 male state level and 30 male national level boxers were randomly selected as sample. The age of all samples was ranged 15-22 year. Male Sports persons who participate at state level and national level were randomly selected as samples. All samples were selected from the Haryana state.

### Tools and techniques

Reaction Ability: This variable was evaluated by using “Visual Reaction Timer” and will record in 1/100th seconds.

### Method and procedure

**Purpose:** This test was administered to measure the reaction ability of the subjects.

**Equipments:** Visual Reaction Timer, Table and Chairs, Pencil, Papers and Pad.

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**Instructions**

1. Buzzer should be pressed only when light was shown on monitor of reaction timer.
2. Press the buzzer in front of the light which blinks.
3. Two trails were given to each subject and the best was considered.

**Procedure**

Visual Reaction timer was kept on a table and started by plugging the plug. The subject was asked to sit on chair reachable to the table where reaction timer was placed opposite to the scholar's chair. On signal, the lights blinked, the subject reacts immediately to the lights pressing the buzzer in front of particular light for measuring reaction time.

Each subject was given a practice trail before actual commencement of the test.

**Scoring:** The score was the time taken in 1/100th seconds.

**Statistical method**

- The obtained data were analyzed by applying t test in order to determine the reaction ability of different level boxing players.
- The level of significance was set at 0.05.
- For obtaining reliable result special statistics software (SPSS-20) was used.

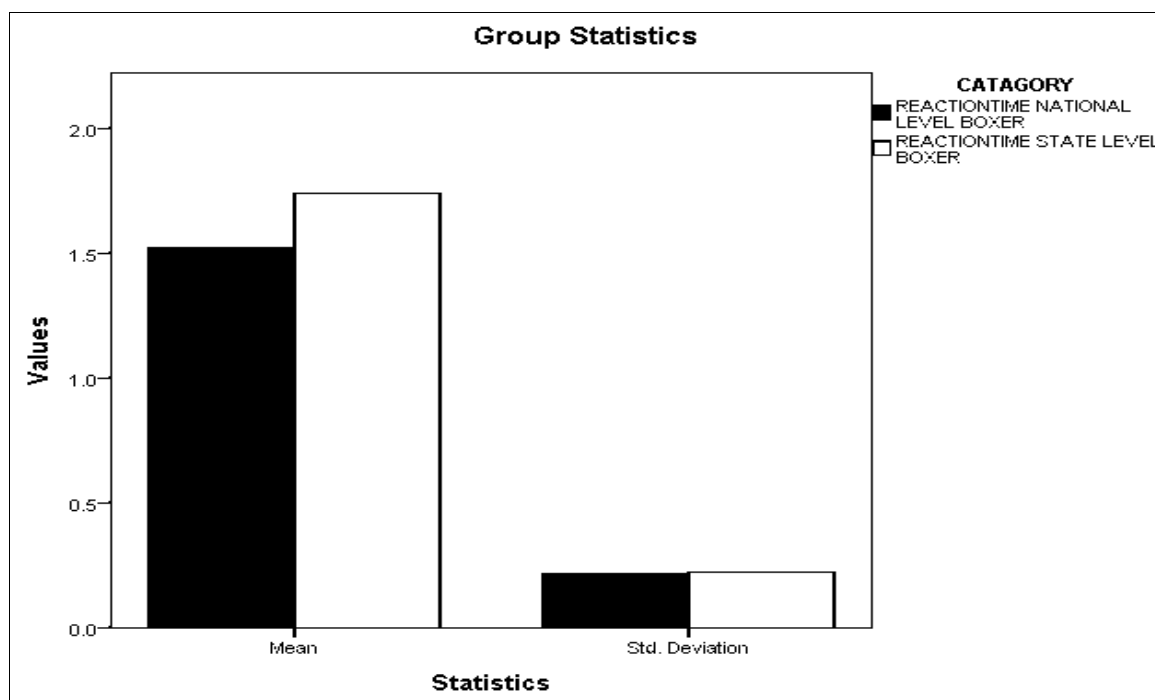
**Table 1:** Mean difference between state level and national level boxing players, (n=total numbers of students)

Variable	Group Statistics						T value
	Group	N	D.F.	Mean	Std. Deviation	Std. Error Mean	
Reaction ability	State level boxer	30	58	1.74	.22	.04	3.81*
	National level boxer	30		1.52	.21	.03	

\*Significant at 0.05 level

Table 1 shows that 't' value 3.81. The Mean score of state level is 1.74 and mean score of national level players is 1.52. Mean score of national players is lower than state level

players which show a significant difference. t value 3.81 is higher than the table value 0.05. So a significantly difference was found between state level and national level players.



**Fig 1:** The graphical presentation of mean and standard deviation Reaction ability between state level and national level players

**Result and conclusion**

After analysis of obtained results it was observed that hypothesis which was formulated earlier that "There would be no significant difference in reaction ability between state and national level boxing players" is rejected. A significant difference was found between state level and national level players. National level boxers are having much better reaction ability in comparison of state level boxing players.

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