

ASSESSMENT OF OBSERVED REACTION TIME BETWEEN BOXING AND SOFTBALL INTER- COLLEGE MALE PLAYERS

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ABSTRACT

The purpose of this study was to compare Observed reaction time between Boxing and Softball Inter- college male players. For achieving the purpose of the study, data was collected on total 30 male players (Boxing–15 and Softball–15) from under Guru Kashi University, Talwandi Sabo. The age of all players range between 18 to 25 years. To check reaction time level of recruited subjects, Observed Reaction Time tester was used. To compare reaction time between Boxing and Softball Inter- College level male players mean, standard deviation and unpaired t–test were employed with the help of statistical package of SPSS the significance level was set at 0.05 percent. The result showed that there was a significant difference between Observed reaction time of boxing and softball Inter- College male players.

Key Words: Inter- college, Reaction time, Boxing, Softball, and Male.

INTRODUCTION

Reaction time is the time interval between the application of a stimulus and the appearance of appropriate voluntary response by a subject as rapidly as possible. (Teichner, W.H,1954). It is a measure of function of sensor motor association (Shenvi and Balasubramanian,1994) and performance of an individual. It involves stimulus processing, decision making, and response programming (Das, et.al. 1997). Reaction time has been widely studied as its practical implications may be of great consequence, e.g., a slower than normal reaction time while driving can have grave results. Many factors such as physiological, psychological, pharmacological etc., have been shown to affect reaction times. They are age, sex, gender, handedness, physical fitness, sleep, fatigue, distraction, alcohol, caffeine, diabetes, personality type and whether the stimulus is auditory or visual (Nikamand and Gadkari, 2012).

Peterson (2012) hypothesized that players of different levels of play might differ not only in their football skills but also in their way of playing football and with respect to psychological factors such as concentration, reaction time, or competitive anxiety. The psychological characteristics of a player might influence his way of playing football (in particular with respect to fair play) and also his risk of injury. A group of 588 football players were studied by questionnaire; additionally, reaction time tests were performed. Psychological characteristics were assessed by three established self-evaluation questionnaires: the Athletic Coping Skills Inventory, the State Competitive Anxiety Test, and the State-Trait-Anger-Expression-Inventory. Football-specific characteristics that were investigated included playing experience and positions played, style of play, number of training hours and games, as well as aspects of fair play. Reaction time was tested twice: without the influence of physical exercise and immediately after a 12-minute run. A significant reduction in reaction time was observed after physical exercise. In high-level players, the reaction time immediately after the 12-minute run was significantly shorter than it was in low-level players. The questionnaire answers given

regarding fair play clearly indicated that fair play is not paid sufficient respect. The relationship between psychological characteristics and attitudes toward fair play was analyzed and discussed.

Gray (2007) addressed the question, what should baseball players focus their attention on while batting? Less-skilled and highly skilled (college) baseball players participated in four dual-task conditions in a baseball batting simulation: two that directed attention to skill execution (skill/internal [movement of the hands] and skill/external [movement of the bat]) and two that directed attention to the environment (environmental/irrelevant [auditory tones] and environmental/external [the ball leaving the bat]). Batting performance for highly skilled players was best in the environmental/external condition and worst in the skill/internal condition. Performance of less-skilled batters was significantly better in the two skill conditions than in either of the two environmental conditions. We conclude that the optimal focus of attention for highly skilled batters is one that does not disrupt procedural knowledge and permits attention to the perceptual effect of the action, whereas the optimal focus of attention for less-skilled batters is one that allows attention to the step-by-step execution of the swing.

PROCEDURE AND METHODOLOGY:

The present research was entitled as “Appraisal of Observed reaction time between Boxing and Softball Inter- College male Players”. To achieve this purpose total 30 Inter- College male players (15- Boxing and 15 – Softball) were recruited as subject. The age of all subjects were ranged from 18 to 25 years. To check reaction time level of recruited subjects, Observed Reaction Timer tester was used in this study. After the collection of relevant data, it was processed and analyzed with descriptive statistics. To compare the subjects mean, standard deviation and unpaired t-test was employed with the help of statistical package of SPSS. The significance level was set at 0.05 percent.

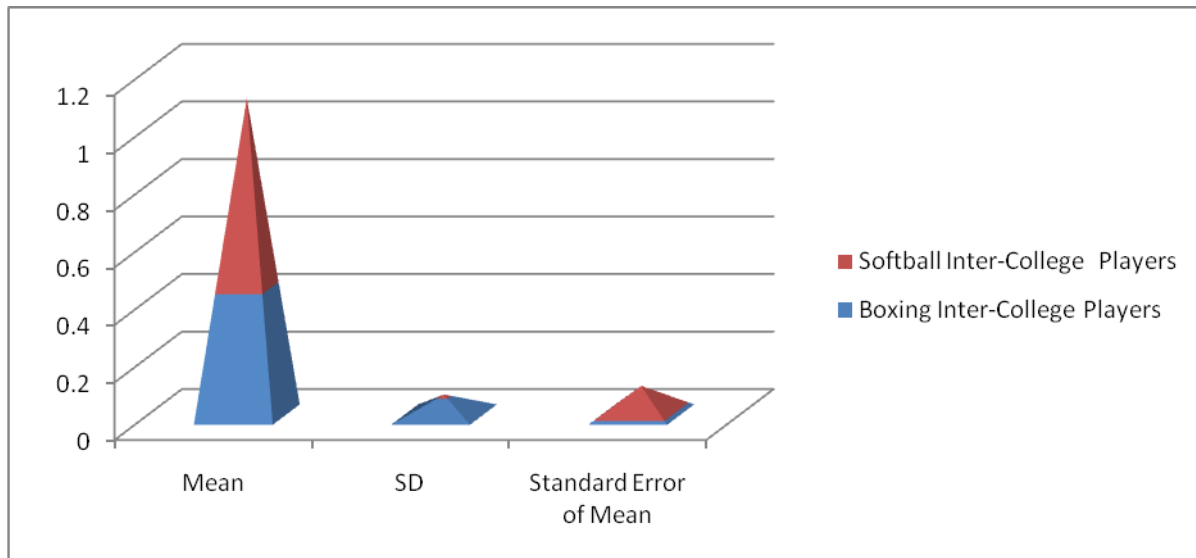
RESULT AND FINDING

Table -1
MEAN AND STANDARD DEVIATION OF OBSERVED REACTION TIME VARIABLE
BETWEEN BOXING AND SOFTBALL INTER- COLLEGE MALE PLAYERS

| Group | N | Mean | Standard Deviation | Standard Error of mean | t-value |
|--------------------------------|----------|-------------|---------------------------|-------------------------------|----------------|
| Boxing Inter-College Players | 15 | 0.44 | 0.06 | 0.01 | 2.33* |
| Softball Inter-College Players | 15 | 0.66 | 0.01 | 0.09 | |

$$t_{.05 (28)} = 2.04$$

Table & Figure 4.1 statistically represent that the Mean and Standard Deviation with regard to boxing male players was 0.44 and 0.66 where as in case of Softball male players was 0.01 and 0.09 respectively. The calculated t-value (2.33) which is more than the tabulated t-value (2.04) at 0.05 level. So, it indicates that there is significant difference between visual reaction time variable between Boxing and Softball players.

Figure-1**MEAN AND STANDARD DEVIATION OF OBSERVED REACTION TIME VARIABLE BETWEEN BOXING AND SOFTBALL INTER- COLLEGE MALE PLAYERS.****DISCUSSION**

Descriptive statistics indicated the significant differences between Observed reaction time between Boxing and Softball Inter- College male players. Analysis of student t- test showed the significant difference. The basis of analysis of the data, investigator found that the earlier study of Shenvi and Balasubramanian Singh, C. (1994) “A Comparative Study of Visual and Auditory Reaction Times in Males and Females” supported the present study.

REFERENCE

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