INTRODUCTION

Handball around the world is more dynamic and faster than ever before. The modification of rules and implementing various training methodologies resulted in drastic change in the playing format of the game. Handball is a strenuous contact Olympic team sport that places emphasis on running, jumping, sprinting, arm throwing, hitting, blocking, and pushing. This game is nurtured from young age in the schools and progressed to higher level.

Reaction ability is an important measure of performance indicating the speed and effectiveness of decision making in all sports. In sports performance reaction time is the ability to respond quickly with proper posture and control to a stimulus such as sound or sight. Reaction time is the interval time between presentation of stimulus and the initiation of the muscular response to that stimulus.

The tenuous link between intelligence and reaction time is reviewed in Deary et al. (2001). Lee and Chabris (2013) investigated the ability of more intelligent people to respond faster to two stimuli that were very close together, and concluded that the superior ability of intelligent people resided in the processing time of the brain, not in faster stimulus perception or response of the muscles.

Handball requires faster reaction towards ball and players within the court. In schools the children often experience slower reaction ability initially, later when they are exposed to rigorous handball practice their level of reaction ability improves. Playing handball modify their reaction ability which assist them in their daily life. The purpose of this study was to compare visual and auditory reaction time among different levels of male handball players.

METHODOLOGY

Subjects and Variables

Sixty (60) male handball players were selected from cuddalore district, Tamilnadu, India. These players were classified into three groups as junior (n = 20), senior (n = 20) and super senior (n = 20) respectively. Visual and auditory reaction time was selected and tested by Chronometer on their right hand which is the dominant hand for all these players. The result of ANOVA revealed that visual and auditory reaction time differs significantly among male handball players of different levels (p < 0.05). It is concluded that handball players showed visual and auditory reaction time found to be more variable with of different playing levels.

RESULTS

Table 1 clearly shows that visual reaction time (F = 60.5, p < 0.05) and auditory reaction time (F = 60.5, p < 0.05) among handball players of different levels showed a significant difference. Super senior boys performed better in both visual and auditory reaction time than others (Figure 1). Since F is significant Scheffe’s post hoc test was performed. It showed a significant difference on visual and auditory reaction time between super senior vs. Senior and junior (p < 0.05).

DISCUSSION

The right hand visual and auditory reaction time of male handball players showed significant difference among different playing levels. Super senior boys had clocked lower time in visual and auditory reaction time. Baruwal (1983) found that
top class sportsmen and athletes normally had shorter reaction time than non-athletes and continuous participation in sports at higher level did reduce reaction time. Also team game players had quicker reaction time than others. The abilities to perceive the meaning of a stimulus, react correctly and to move to the required spot within less time are of vital importance in handball, basketball, volleyball, tennis etc.

Therefore since the auditory stimulus reaches the cortex faster than the visual stimulus, the auditory reaction time is faster than the visual reaction time. Reaction times are widely used to evaluate neuromuscular-physiological responses in sports. Faster reaction times are significant for better performance of athletes. The faster the stimulus reaches the brain, the faster the signal is processed and the necessary responses are sent for the necessary motor reaction.

**CONCLUSION**

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**References**


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