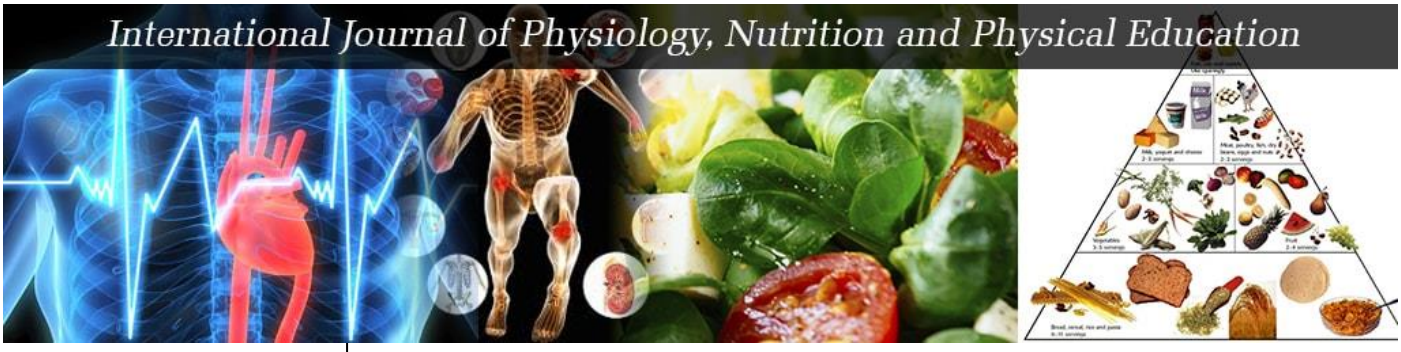

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Dr. Deepak Paswan
Assistant Professor, Belda College, West Bengal, India

Corresponding Author:
Dr. Deepak Paswan
Assistant Professor, Belda College, West Bengal, India

Effect of yoga training on reaction time of wicket keepers in cricket

Dr. Deepak Paswan

Abstract
In today's world yoga has become an integral part of our lifestyle; we practice yoga for many of the benefits. Practicing yoga helps us to improve the flexibility and also gives us the peace of mind; many studies have also proved that if you practice yoga on daily basis then it can help you to get rid of disease like diabetes. Like the other benefits, the main purpose of this study was to see whether practicing yoga can help the wicketkeepers in cricket to improve their reaction time or not.
Wicket-keeping in cricket is all about the reaction time as in a fraction of time the game can turn just because of a good reactive stumping or catching. The keepers who have great amount of reaction time can really fetch good results for the team; the modern greats like Adam Gilchrist, Mahendra Singh Dhoni, Kumar Sangakkara and Mark Boucher are some of the examples wicketkeepers who had great reaction time. So, in this present study we wanted to see that weather practicing yoga can improve the reaction time of wicketkeepers or not?
For the purpose of the study the 10 students from the cricket match practice group was taken from Lakshmibai National Institute of Physical Education. These 10 students were practicing as regular wicketkeepers and have represented in various levels of cricketing tournaments. Out of the selected 10, 5 keepers were kept in control group and other 5 were kept in experimental group. The experimental group was given 12 weeks yoga training program and it was seen that there was a significant decrease in the reaction time of the wicketkeepers when compared with the control group (from 263± 5.74 to 216.23 ± 4.49 ms).

Keywords: Wicket keeping and stumping

Introduction
Yoga nowadays is the answer to all the unanswered questions, and same thing was tested to see weather through yoga the reaction time can be improved or not in the wicket keeping skills of a cricketers. As wicket keeping requires the précised skills like endurance, agility and most importantly the reaction time. As it takes a fraction of seconds to stump down the batsman of opposition team and with your precise keeping skills the whole total phase of the game can be changed in your favor.
It used to be believed that keeping skills are not learned rather acquired, as we all cannot become a good wicketkeeper as the reaction is inherited.
But with the help of this study you can improve your reaction time and be a good wicket keeper as well.

Methodology
A total of 10 wicket keepers between the age group of 18-25 years were chosen for the purpose of the study from the cricket match practice group of Lakshmibai National Institute of Physical Education Gwalior, Madhya Pradesh and random group design was used for the experimental study and a total of twelve weeks of yoga training was given to the wicket keepers six days a week, the group was divided into two groups a total of 5 subjects were assigned to the experimental group and 5 were in control group, the treatment was given to the experimental group and the control group were allowed to carry out their normal routine.
To measure the reaction time the measurements were taken2 hours after the having a light breakfast.

The reactions to visual and auditory reaction were measured in a fat moving paper. The visual and auditory signals were given to subjects from front.
The 10 reaction time responses of each subject and mean of 3 similar observation was taken as an individual value for statistical analysis.

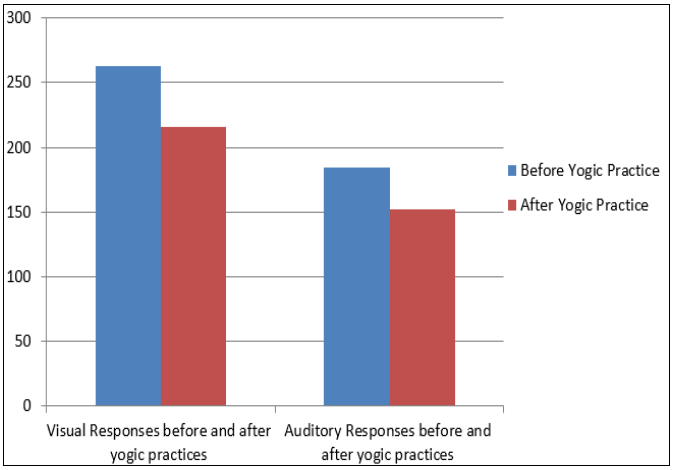
Table 1: Yogic exercises that were given to the wicketkeepers

Yogic exercise	Duration in minutes
Talasan	0.5
Supt vajrasana	1.0
Sarvangasan	1.0
Nauli	0.5
Halasan	1.0
Shavasan	15.0
Paschimottanasan	1.0
Bakasan	1.0
Pavanmuktasan	1.0
Matsyasan	1.0

The yogic sessions were kept six days a week starting from Monday to Saturday for 30 minutes in the morning time for 12 weeks' time. The experimental group was given the treatment and the control group was carrying out their normal practice sessions like before.
for the purpose of the study we used t- test to see whether there are any significant difference for not in the reaction time of the wicket keepers after the 12 weeks of yogic practice.
The level of significant was kept at 0.05 while comparing the results obtained.

Analysis of data, Conclusion and Discussion

For the analysis of data t-test was used to see the effect of the findings to see the effect of training on the experimental group, and hence we found the following conclusions.
After the analysis of data the reaction time were seen to have decreased significantly in visual and auditory responses.
The visual responses showed that (263±5.74 ms to 216.23±4.49 ms) ** and in the case of auditory responses the reaction time was found (184.26±5.6 ms to 151.74±4.8 ms) **.



** The values were significant at 0.05 levels

Fig 1: Analysis of data the reaction time were seen to have decreased significantly in visual and auditory responses

Discussion and Conclusion

Hence by the above study it can be concluded that there is a significant positive effect of yogic exercises on the reaction time of the wicket keeper's reaction time. And it was also seen that the auditory reaction time was much shorter than the visual responses as because you can get a sample amount of time to react for auditory responses than the visual responses as sound travel slower than light.
This happens because yoga has a significant effect on the sensori-motor performance and could be due to an enhanced processing ability of CNS (central nervous system).

The main effects of yoga on central nervous system can be due to the following causes

1. Greater arousal rate
2. Faster rate of information processing
3. Improvement in concentration power
4. Ability to ignore or inhibit extraneous stimuli

There after it can be concluded that with 12 weeks of proper yoga training the reaction time of wicketkeepers can be improved.

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