P-ISSN: 2394-1685
E-ISSN: 2394-1693
Impact Factor (RJIF): 5.38
IJPESH 2022; 9(6): 254-256

www.kheljournal.com
Received: 18-08-2022
Accepted: 20-09-2022

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Effect of trataka on playing abilities of tennis player

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Abstract
This study purpose is to find out the effect of trataka on the playing ability of tennis player. For the purpose of the study, the researcher selected 60 subjects. These randomly selected participants were randomly allocated to the groups formed i.e. experimental group and control group. The independent variable was trataka practice. The participants practiced trataka for 6 week thrice a week. The data was collected pre and post getting the treatment. For the data analysis paired-t test was employed to get the results. Based on the results of the study, the researcher has concluded that there is a positive and significant effect on Tennis performance due to the trataka practice.

Keywords: Trataka, tennis, forehand, hitting and backhand etc

Introduction

A tennis match is characterized by repetitive short actions of moderate intensity (Kovacs, 2007, Torres-Luque *et al*., 2011) [9, 16]. A tennis match can last from 1 to 5 hours. Most matches consist of three sets, and the average duration is 1.5 hours. (Bergeron *et al*., 1995; Kovacs, 2007; Torres-Luque, Cabello, & Carrasco, 2004) [10, 9, 14]. Ground strokes are fundamental to all tennis play. To balance the skill aspect of hitting ground strokes, players need to develop both their forehand and backhand equally (Tajul Arifi n Muhamad *et al*., 2011) [15].

According to research, elite tennis players have higher body means than normal players. They also have advanced and longer upper and lower extremities (Karagoz, 2008) [17]. There are two main techniques in tennis: forehand and backhand. To perform forehand and backhand strokes properly, the legs, hips, shoulder muscles, and arm muscles must be in harmony (Gul *et al*., 2017) [18]. In order to achieve an accurate stroke, the racket must be held very tightly, and the wrist, arm, and grip must be very good (Tuzcuolu, 2006).

Trataka improves attention and reduces distractions of the mind, so we can say that it strengthens the optic nerve and improves the coordination of the eye muscles and hand. It could make the thoughts calm and consistent and additionally enables in lowering the pressure and enhance overall performance of the player, thereby growing the energy of attention Trataka practice, non-stop observant at the flame of a candle or any item is to be done, that allows in maintaining the eyes healthful and with inside the remedy of positive eye problems (B.R Raghvendra, 2016) [19] and to boot enhances awareness through lowering tension and distractions. (K. Swati *et al*., 2018) [1]

Trataka is a holistic technique for aligning the body and mind so that harmony can be achieved, and is traditionally believed to induce a state of well-being. It is also very useful for improving performance in athletes (Badra and chatterjee, 2017) [4]. You can lower your anxiety levels and increase your focus on the task at hand. Practicing the trataka improves mind-body coordination and, as a result, greater precision in achieving harmony between perception and performance. (Datta and goswami, 2019) [2]

The purpose of the present study was to determine the effect of trataka practice on the playing abilities of tennis players.

Methodology

For the study 60 subjects selected from Lakshmibai National Institute of Physical Education, Gwalior (LNIPE), ageing 18 to 24 were selected as a subject. Subjects had more than three years experience of playing tennis. The subjects were divided into two sub-groups, 30 in each group (experimental group and control group).

Both group involved in regular tennis practices but Trataka practices also given to only experimental group for 6 weeks. Pre-test data was collected before the trataka practices from the selected subjects and post data was collected after giving trataka practice. The Hewitt Tennis Achievement test is used to assess tennis players' abilities before and after training. In this test, the researchers let the individuals five minutes to warm up in order to avoid harm and to obtain better data. The researcher gives each individual ten balls on both sides for forehand and backhand strokes. The tennis court is also marked using chalk or tape. As an outcome, when the ball dropped following the execution of the skill, points were awarded.

Results

Table 1: Descriptive Statistics (Mean and Standard Deviation) of Dependent Variables.

Variables		Control Group		Experimental Group	
		Mean	SD	Mean	SD
Forehand Drive	Pre-Test	10.33	3.87	10.16	3.82
	Post-Test	10.10	4.02	10.80	3.46
Backhand Drive	Pre-Test	9.40	2.17	9.56	3.63
	Post-Test	9.46	2.09	10.50	2.95

Table 1 showed the descriptive statistics (mean and standard deviation) of control group and Trataka visual training group before 6 weeks of training and after 6 weeks of training on selected playing abilities – Forehand and Backhand drive.

Table 2: Dependent Sample t-test of Forehand and Backhand Drive between control and main group of Tennis players.

Variables	Control Group		Experimental Group	
	t-value	p-value	t-value	p-value
Forehand Drive	0.664	0.512	2.61	0.014
Backhand Drive	0.159	0.875	2.51	0.018

Table 2 showed the results of the paired t-test for forehand and backhand drive of control group. For control group the p-value for forehand drive is 0.512 and backhand drive is 0.875 which is greater than 0.05, it showed a non-significant difference in control group's playing abilities before and after 6 weeks period of time.

It also showed the results of the paired t-test for forehand and backhand drive for trataka intervention group. For trataka intervention group, the p-value for forehand drive is 0.014 and the p-value for backhand drive is 0.018, both p-values are less than 0.05. Therefore, this showed a significant difference in playing abilities of trataka intervention group.

Discussion of finding

Researchers conducted the study to investigate the effect of trataka practice on tennis player performance. Their findings suggest that trataka practice has a significant impact on young tennis player performance. Tennis performance might have been significantly enhanced by the particular training as trataka helps develop focus and brings balance between body and mind (chattha r *et al*., 2008) [5]. The regular practice of trataka significantly reduces neural activity in the brain associated with factors such as anxiety and other social pressures, and the parasympathetic nervous system is affected less. By practicing trataka, the physiological factors such as blood pressure, heart rate, and adrenaline and cortisol levels may be better controlled (s. prashanth *et al*., 2021) [6]. The trataka practice was carried out just before the tennis training sessions, so it is possible that the subjects were better able to integrate the positive effects of trataka practice into their tennis training.

Conclusions

The researcher concluded from the study that trataka training would improve tennis player's abilities as a result of positive and significant changes in their playing styles. Researchers can use the results of this study to plan future controlled experiments to test the efficacy of trataka. On the basis of result we can easily concluded that trataka helps the tennis player to focus on the game. So the tennis player can hit the strokes with full concentration and focus.

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