



Effect Of Shatkriyas And Micro Exercises On Eyesight Of Screen Users

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ABSTRACT:

Aim and Objective: The aim and objective of the study was to see the effect of shatkriyas and micro exercises on eyesight of screen users.

Methodology: The students who frequently use digital screen, mobiles, tablet, computers were purposively selected, those who were having eyesight problems from various schools of sakti district, chhattisgarh. Out of them, 20 students age ranging between 14-19 years were randomly selected as the subjects for the study. Shatkriyas and micro exercises were selected as independent variables. Whereas eyesight/eye vision of screen users were selected as the dependent variables. Pre-test post-test randomized group design was employed in the study. The participants' overall both eye checkup was done by using anterior segment test with the help of slit lamp tools/machine. The participants' manual data of myopia and shot-sightedness (-) minus sign was collected by using snellen's chart tools/machine (subjective test). The data were collected twice, once before the yoga training as pre data and one after the yoga training as post data from both the groups. The shatkriyas and micro exercises group was administered yoga training for eight weeks while control group have not participated in any kind of yoga training. Descriptive statistics were used to describe the nature and characteristics of the data. Analysis of Co-variance (ANCOVA) was applied to see the significant difference between both the groups on eyesight and level of significance was set at 0.05.

Conclusion: It was concluded that a significant difference was found between both the groups for both right and left eyesight. A significant effect of yoga training on eyesight was found. Shatkriyas and micro exercises have better responses after eight weeks training for both right and left eyesight.

Key Words: Yoga, Shatkriyas, Micro Exercise, Eyesight, Screen Users.

INTRODUCTION

Yoga is a technique of exercise which derived from ancient Indian. This includes changes in diet and mental behavior. It trained body posture (yoga asanas), shatkriyas, regular breathing exercises (pranayama), joint and visual cleansing micro exercises, relaxation and meditation. Yoga can improve physical and mental health by influencing hypothalamic-pituitary-adrenal axis and sympathetic nervous system. It develops the physical stability, balancing power in the body, eyesight, and helps in the healing of eye diseases.

The shatkriyas (sanskrit: shatkarma, literally six action), also known as shatkriyas, are a set of hatha yoga purification of the body, to prepare for the main work of yoga towards moksha (liberation). Shatkriyas also known as shatkarma, refers to the yogic practices involving purification of the body. These practices outlined by yogi swatmarama in the hatha yoga pradipika as kriya.

Micro exercises are independent in nature. People of every age can practice these exercises and get benefited. They provide good exercise to the organs as a result, the efficiency of functioning of the organs increases and man feels energized. These exercises can be comfortably practiced within 10-20 minutes during which entire body is relaxed and recharged. These exercises can be comfortably practiced within 10-20 minutes during which entire body is relaxed and recharged. Maintenance of health is the assumed result of micro yoga practice.

The eye is a part of the body through which the objects the world is seen situated in each orbital cavity on both right and left, it is almost circular. The images of object lie on retina which is transfer via eye lenses and cornea. So, eyesight is based on the proper health of eye. There are three types of eyesight/visual defects i.e. (1) Short sightedness or myopia: - common eye condition that causes distant objects to appear blurred, while close objects can be seen clearly. if it has a minus (-) sign, it means you have nearsightedness or myopia. Myopes cannot see for clearly and require distance vision correction or correction for nearsightedness. (2) Far sightedness or hypermetropia: - farsightedness (hyperopia) is a common vision condition in which you can see distant objects clearly, but objects nearby may be blurry. if it has a plus (+) sign, it means you have long – sightedness or hypermetropia and your farsighted prescription. (3) Presbyopia is the gradual loss of your eyes' ability to focus on nearby objects. It's a natural, often annoying part of aging.

Purpose of the Study

The purpose of the study was to see the effect of shatkriyas and micro exercises on eyesight of screen users.

Significance of the Study

1. The results of the present study would provide a guideline to understand the significant effect of shatkriyas and micro exercises on eyesight of screen users.
2. The results of the study would be helpful for the yoga trainer or instructor for making schedule according to the subjects if required.

Hypothesis

It was hypothesized earlier that there will be a significant effect of shatkriyas and micro exercises on eyesight of screen users.

Delimitations

1. The study was delimited to 20 subjects only.
2. The age of the subjects was ranging from 14 to 19 years.
3. Shatkriyas and micro exercises were also delimited as independent variables.
4. Eyesight of screen users were also delimited as the dependent variables.

Limitations

1. Psychological factors of selected subjects like anxiety, stress, motivation etc. was not examined.
2. Training background of selected subjects was not considered.
3. No specific motivational techniques were used during the test.

METHODOLOGY

- ✚ **Selection of Subjects:** The students who frequently use digital screen, mobiles, tablet, computers were purposively selected, those who were having eyesight problems from various schools of sakti district, chhattisgarh. Out of them, 20 students age ranging between 14-19 years were randomly selected as the subjects for the study. The students were randomly assigned into two groups, each consisted of 10 students. As per as the eyesight is concerned, up to the -1.00 level (-0.25 to -1.00) were considered.
- ✚ **Selection of Variables:** Shatkriyas and micro exercises were selected as independent variables. Whereas eyesight/eye vision of screen users were selected as the dependent variables.
- ✚ **Experimental Design:** Pre-test post-test randomized group design was employed in the study.
- ✚ **Tools:** The participants' overall both eye checkup was done by using anterior segment test with the help of slit lamp tools/machine. The participants' manual data of myopia and shot-sightedness (-) minus sign was collected by using snellen's chart tools/machine (subjective test).

- ✚ **Collection of Data:** The data were collected twice, once before the yoga training as pre data and one after the yoga training as post data from both the groups. Eyesight of all the selected students were tested with the help of medical specialist.
- ✚ **Administration of Training Programme:** The shatkriyas and micro exercises group was administered yoga training for eight weeks while control group have not participated in any kind of yoga training.
- ✚ **Statistical Techniques:** Descriptive statistics were used to describe the nature and characteristics of the data. Analysis of co-variance (ANCOVA) was applied to see the significant difference between both the groups on eyesight and level of significance was set at 0.05.

RESULTS AND DISCUSSION

1. Right Eyesight

Table 1 Descriptive Statistics of Both the Groups for Right Eyesight							
Groups	N	Pre-Data		Post-Data		Adjusted*	
		Mean	SD	Mean	SD	Marginal Mean	SE
Shatkriyas and Micro Exercises Group	10	-0.45	0.19	-0.19	0.20	-0.19	0.019
Control Group	10	-0.49	0.21	-0.48	0.21	-0.47	0.019

*Covariates appearing in the model are evaluated at the following values: pre data = -0.478

Table 1 indicated the descriptive statistics of both the groups for right eyesight. The mean and SD of pre-data for both the groups i.e. Shatkriyas and micro exercises group, and control group were -0.45 ± 0.19 and -0.49 ± 0.21 respectively. The mean and SD of post data for both the groups i.e. Shatkriyas and micro exercises group, and control group were -0.19 ± 0.20 and -0.48 ± 0.21 respectively. The adjusted mean for both the groups i.e. Shatkriyas and micro exercises group, and control group were -0.19 and -0.47 respectively. Whereas covariates appearing in the model are evaluated at the pre data is -0.478.

Figure 1

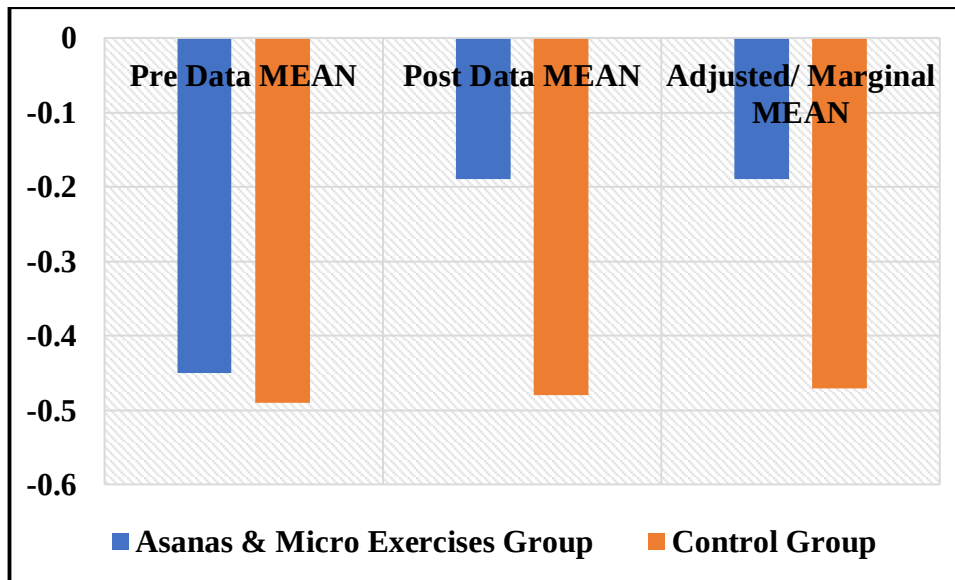


Figure 1: Mean and Adjusted Mean of Both the Groups for Right Eyesight

Table 2

ANCOVA Table of Right Eyesight

Sources of Variation	Sum of Squares	DF	Mean Square	F	P-Value
Between Group	0.578	1	0.578	41.28*	0.00
Error	0.246	17	0.014		

*Significant at 0.05 level

Table 2 revealed that the F value 41.28 was significant at 0.05 level of significance as the obtained p-value 0.00 was less than 0.05.

2. Left Eyesight

Table 3

Descriptive Statistics of Both the Groups for Left Eyesight

Groups	N	Pre-Data		Post-Data		Adjusted*	
		Mean	SD	Mean	SD	Marginal Mean	SE
Shatkriyas and Micro Exercises Group	10	-0.47	0.17	-0.21	0.16	-0.20	0.04
Control Group	10	-0.55	0.19	-0.54	0.20	-0.51	0.04

*Covariates appearing in the model are evaluated at the following values: pre data =.495

Table 3 indicated the descriptive statistics of both the groups for left eyesight. The mean and SD of pre-data for both the groups i.e. Shatkriyas and micro exercises group, and control group were -0.47 ± 0.17 and -0.55 ± 0.19 respectively. The mean and SD of post data for both the groups i.e. Shatkriyas and micro

exercises group, and control group were -0.21 ± 0.16 and -0.54 ± 0.20 respectively. The adjusted mean for both the groups i.e. Shatkriyas and micro exercises group, and control group were -0.22 and -0.51 respectively. Whereas covariates appearing in the model are evaluated at the pre data is -0.495 .

Figure 2

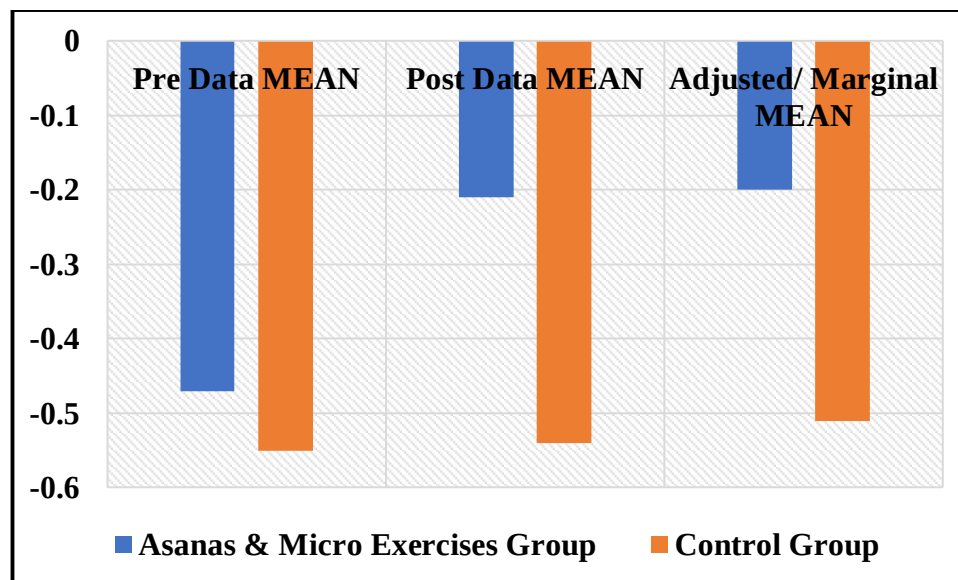


Figure 2: Mean and Adjusted Mean of Both the Groups for Left Eyesight

Table 4

ANCOVA Table of Left Eyesight

Sources of Variation	Sum of Squares	DF	Mean Square	F	P-Value
Between Group	0.565	1	0.565	37.66*	0.00
Error	0.258	17	0.015		

***Significant at 0.05 level**

Table 4 revealed that the F value 37.66 was significant at 0.05 level of significance as the obtained p-value 0.00 was less than 0.05.

CONCLUSION

It was concluded that a significant difference was found between both the groups for both right and left eyesight. A significant effect of yoga training on eyesight was found. Shatkriyas and micro exercises have better responses after eight weeks training for both right and left eyesight.

RECOMMENDATION

1. This study may be conducted with various aspects of yoga i.e. Shatkriyas and micro exercises etc.
2. Similar type of study can be conducted with various health problems i.e. Eyesight, screen users etc.
3. This study may be conducted on subjects of different age category.
4. This study may be conducted with the different variables.

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