

**THE INFLUENCE OF (SKY YOGA) EYE EXERCISE AND LAMP GAZING PRACTICE ON VISUAL FUNCTIONING AMONG COLLEGE STUDENTS**

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**ABSTRACT:**

The uses of technology across all the industries have advanced. Without the use of computers and smart phones, the world will not advance. As a result, digital tools can lead to a variety of eye-related problems, such as reading discomfort, weariness, blurred vision, headaches, sporadic double vision, and irritated eyes accompanied by pain. These common issues among the younger generation significantly reduce their academic performance, subsequently affecting their physical and mental health. Therefore, the study aimed to measure the influence of (SKY Yoga) Eye exercise and Lamp gazing Practice on visual functioning among College Students. Students from Nallamuthu Gounder Mahalingam College were randomly selected using the survey method. The study adopts an Experimental research design. The pre-test and post-test one-group designs were adopted to study the influence of (SKY Yoga) Eye exercise and Lamp gazing Practice on visual functioning among college students. The sample (N=237) was obtained from students at Nallamuthu Gounder Mahalingam College, Pollachi. The data were obtained and analyzed before - and - after the SKY yoga practice from the respondents concerned. Before practicing, the mean value of the visual functioning was found at 40.2110. After the intervention of SKY Yoga practice, the mean value of the visual functioning has increased up to 61.8143. The paired T-test value -108.713 has showed that there was a significant difference in the visual functioning before and after SKY Yoga practices. The study has identified that there was a significant improvement on visual functioning after the intervention of the SKY yoga practice. The study has concluded that the benefits of SKY Yoga practice have improved the visual functioning problems of the students. Thus, most of the study review reported that the regular practice of eye exercise and lamp gazing exercise can provide a better improvement for eye sight problems. Therefore, the study highly recommends that the SKY yoga (Simplified Kundalini Yoga) practice has to be performed on regular basis to have a healthy and clear vision. Ultimately, the study suggests that SKY yoga practice can support their physical and mental health so that they can have a healthy vision to attain the academic achievements and life goals.

Key words: Visual functioning, SKY yoga practice, Eye exercise and Lamp gazing practice

**INTRODUCTION**

Education system has transitioned into a digitalized form, allowing students to access a wide variety of study materials for their convenience. The digital format has led them to constantly engage with Smartphone and computers, resulting in significant impacts on student's physical and mental health.

Technology is being used more and more frequently, and its benefits include improved global communication, content understanding, and real-time information. Running a business, a transportation system, a facility, an agricultural sector, a medical sector, etc., all benefit from it. Nearly the entire globe is under the power of both computers and smart phones.

In addition, when young people abuse and overuse their smart phones and computers, there are more physical and mental health problems, especially among the younger generations. A disorder known as asthenopia (eye strain) causes generalized symptoms such as discomfort, weariness, blurred vision, headaches, sporadic double vision, and irritated eyes with pain in or around them. A typical VDT (Visual Display Terminal) is a smart phone or mobile phone, which is widely utilized by the general public. The majorities of people now use smart phones on a daily basis, even college students, simply because they

are convenient, portable, and can do numerous activities at once.(Mylona, I., Glynatsis, M. N, et al.,2023).According to a study report, closer viewing and eye strain symptoms are the primary causes of rising accommodative function issues and ocular symptoms, which are severely regarded as influencing variables leading to an eyesight issue. (Rosenfield, M. 2011).

According to the World Health Organization (WHO), 80% of vision impairment is either avoidable or treatable. This includes refractive errors that have not been corrected, some forms of childhood blindness, cataracts, the infections river blindness and trachoma, glaucoma, diabetic retinopathy, and other eye diseases. The use of assistive technologies, environment modifications, and vision rehabilitation programmes benefits a large number of persons with severe visual impairment.

Following a smart phone reading, there is a clearer viewing distance and eye fatigue symptoms. Long-term smart phone use appears to have significant effects on accommodative function, resulting in eye complaints that lower quality of life. There were 940 million people who had some level of eyesight loss as of 2015. 39 million people were blind, and 246 million had impaired eyesight. Over 50s make up the bulk of those with poor vision, who live in underdeveloped nations. (Issa LF, Alqurashi Ka et al.,2021).

Studies from all over the world have uncovered some startling statistics about Smartphone users. Globally, there will be 2.87 billion Smartphone users by 2020. By 2019, 38.3 million people are expected to own mobile phones, according to the Nepal Telecommunication Authority. In Canada, 85% of pupils privately own a Smartphone. It is 80% for Americans and Britons and 100% for university students in Saudi Arabia and South Korea. In India, 96% of pupils were found to have smartphones. A cross-sectional research in Nepal found that 36.8% of medical students had smartphone addictions. The smartphone is viewed at a closer distance when reading a text as compared to using a phone, where continuous use increases the accommodative and vergence demand, potentially exacerbating symptoms of digital eye strain. (Nayak, R., Sharma, A. K, et al., 2020)

Research has shown that the use of smartphones and computers among college students can have various psychological impacts. Constant exposure to social media on these devices can lead to feelings of inadequacy, low self-esteem, and social comparison, as individuals are constantly exposed to carefully curated online profiles (Vogel et al., 2014). Moreover, the constant connectivity and access to social media platforms can contribute to a fear of missing out (FOMO), causing anxiety and stress among students (Przybylski et al., 2013).

The anonymity and ease of communication online also make students more susceptible to cyber bullying and online harassment, leading to increased stress, anxiety, and even depression (Hinduja & Patchin, 2015). The constant use of smart phones and computers for academic purposes, socializing, and entertainment can result in digital fatigue and information overload, leading to mental exhaustion, difficulty concentrating, and decreased cognitive performance (Rosen et al., 2013).

Furthermore, the use of smart phones and computers before bed can disrupt students' sleep patterns due to the blue light emitted by screens. This can interfere with the production of melatonin, impacting sleep quality and leading to negative effects on mood, attention, memory, and overall mental well-being (Cain & Gradisar, 2010). Excessive use of these devices can also contribute to internet addiction, where students become compulsively reliant on them, neglecting other aspects of life and experiencing withdrawal symptoms and irritability (Kuss et al., 2013).

To mitigate these negative psychological effects, it is crucial for students to adopt a balanced approach to Smartphone and computer usage. Setting boundaries, practicing digital detox, engaging in offline activities, and seeking support when needed can help promote overall well-being and reduce the potential negative impacts of these devices (Billieux et al., 2015; Duke & Montag, 2017).

### **STATEMENT OF THE PROBLEM**

The aim of this study is to determine the degree of improvement in eyesight for individuals with nearsightedness and farsightedness, as this impacts their ability to carry out academic activities such as completing assignments, attending exams, and engaging in projects. Poor eyesight quality can hinder academic performance and interfere with daily activities, leading to increased stress levels among students. These issues can also cause students to feel inadequate compared to their peers, further impacting their ability to concentrate on studies and routine tasks. Previous studies have highlighted the need for more research on eyesight problems among college students, as their future success relies on their skills, academic achievements, and extracurricular activities. Therefore, it is essential for student communities to learn how to overcome their eyesight problems through eye exercises and lamp gazing exercises. Various studies on yoga practices have found significant improvements in eyesight after engaging in eye exercises and other forms of yoga, such as Nadhisudhi pranayama and meditation. The study recommends SKY Yoga practices to help students overcome nearsightedness and farsightedness leading to higher academic excellence.

### **OBJECTIVE**

- To study the influence of demographic variable on visual functioning.
- To study the difference in visual functioning before and after the SKY Yoga practice based on demographic variables
- To study the impact of eye exercise and lamp gazing practice on visual functioning.

### **METHODOLOGY**

The study was an Experimental research design. The pre-test and post-test one-group design was adopted to study the influence of (SKY Yoga) Eye exercise and Lamp gazing Practice on visual functioning among college students. The universe of the study was the College students who performed the SKY Yoga practices at Nallamuthu Gounder Mahaligam College, Pollachi. The sampling frames were the participants, who participated in the SKY Yoga practice during the month of March 2023. A total of 237 respondents were selected in the study through conducting a survey. The researcher used a set of questionnaire as a tool to collect the data from the respondents. The questionnaire consisted of two parts namely, Demographic profile and visual functioning questionnaires.

The pre-test and post-test was conducted before and after the intervention and the data were analyzed using simple percentage analysis, paired t-test and ANOVA to find out the result.

### **INTERVENTION PROCEDURE:**

The SKY yoga program includes Eye exercise, Lamp Gazing practice and Mediation practices. The SKY yoga practice was given to the participants on weekly two days. The duration of the practice covered up to 12 weeks. Before offering the questionnaire, the main purpose of the study was properly instructed to the participants concerned to clearly understand the meaning and purpose of the study. The pre-test data were collected from the college students before they underwent the SKY yoga practices. Total hours of the practice cover 1 and half hour per week over a period of three months (12 weeks). After completing the 12 weeks program, the post-test was collected from the concern participants. The practice procedure of Simplified Kundalini Yoga included the following yoga practices.

### **PRACTICE SCHEDULE:**

<b>S.No</b>	<b>Particulars</b>	<b>Time/Hours</b>
1.	NaddiSuddhi	5 Minutes
2.	Meditation	10 Minutes

3.	Eye exercise	30 minutes
4.	Lamp Gazing practice	30 minutes
5.	Discussion	15 minute

During the session SKY Yoga practices were instructed to the college students. In the beginning, Nadisuddhi pranayama practice was given to participants for 5 minutes to set their mind in a normal condition. After 5 minutes Mediation practice was given to them for 10 minutes to achieve a balanced state of mind. Then, the Eye exercise was given for 30 minutes to maintain the flexibility, relaxation and reduce the eye pressure. After 30 minutes, the Lamp gazing practice was given to strengthen the eye muscles and to reduce the eye sight problems. At the end of the session, 15 minutes was allotted for discussion where they can clarify their doubts and finally proper guidance was given to the participants to systematically perform the SKY yoga practices.

**Table – 1 Descriptive statistics of Impact of eye exercise and Lamp gazing practice**

Variables	Particulars	Before				After			
		N	Mean	Std. Dev	Test Value	N	Mean	Std. Dev	Test Value
Age	17	30	40.50	7.07	ANOVA (F=0.617 Sig=0.717)	30	61.10	8.96	ANOVA (F =0.248 Sig=0.960)
	18	72	41.30	8.07		72	62.50	10.23	
	19	60	39.43	7.1		60	61.30	8.42	
	20	55	39.98	5.74		55	62.00	7.56	
	21	15	38.53	6.13		15	60.93	7.34	
	22	4	38.75	8.26		4	61.75	8.65	
Gender	Male	92	39.75	7.17	T-test Value (F= 0.271 Sig= 0.603)	92	61.17	9.57	T-test Value (F= 2.432 Sig= 0.120)
	Female	145	40.50	7.00		145	62.22	8.22	
Far sight & Near sight	Far sight	190	39.97	7.19	T-test Value (F=0.891 Sig=0.346)	190	61.46	8.86	T-test Value (F=0.199 Sig=0.656)
	Near sight	47	41.17	6.47		47	63.21	8.31	

The ANOVA value showed (F=0.617 and sig = 0.717) and there was no significant difference in visual functioning before the SKY yoga practice between the different age groups. After the SKY yoga practice the ANOVA Value showed (F=0.248 and sig = 0.960)and there was no significant difference in visual functioning between the different age groups. The t-test value showed that (F=0.271 and sig = 0.603) and there was no significant difference in visual functioning before the SKY yoga practice among male and female. After the SKY yoga practice, the t-test value reported (F=2.432 and sig = 0.120)and there was no significant difference in visual functioning among male and female. The t-test value showed (F=0.891 and sig = 0.346) and there was no significant difference in visual functioning before the SKY yoga practice between far sight and near sight. After the SKY yoga practice, the t-test value reported (F=0.199 and sig = 0.656) and there was no significant difference in visual functioning between far sight and near sight.

**Table – 2 Descriptive statistics of impact of SKY Yoga on visual functioning**

Visual functioning	N	Mean	Std. Deviation	Std. Error Mean
Pre-test	237	40.2110	7.06371	.45884
Post-test	237	61.8143	8.76913	.56962

**Table- 3 Paired Sample Test**

	t	df	Sig.(2-tailed)
Pre test&Post test	-108.713	236	.000

The mean value of the visual functioning was found to be 40.2110 before the intervention of SKY yoga practice. After the study the mean value of the visual functioning has significantly improved up to 61.8143. Moreover, it is understood that there is a significant difference found in the mean values, but it needs to be scientifically proven for that the study conducted the T-test. The paired T-test value is -108.713 which showed that there was a significant difference in the visual functioning among students before and after the intervention of the SKY yoga practice which is evident from the mean value. Thus, from the mean value, it is concluded that after the SKY yoga practice there was a considerable improvement in visual functioning among the students community. Therefore, it is concluded that the SKY yoga practice improves or have significant impact on visual functioning.

**CONCLUSION:**

On the whole, the study has concluded that SKY Yoga practices have the influence on improving the visual functioning problems among the college students. Most of the studies have recommended that eye exercise and lamp gazing practices can provide significant outcomes for the far sight and near sight problems among the college students. After the intervention of SKY yoga practice most of the students got relieved from eye strain, head ache, blurred vision problems and irritation from their eyes. So, the studies highly recommend the SKY yoga practice particularly for the college students who are constantly engaging with Smartphone and computers. According to a study report, the *tratakaa* yogic practice supported to enhance the attention, cognitive flexibility, and response inhibition among the respondents.(Raghavendra, B. R., & Singh, P. 2015). Another study reported that eye exercise helps to tone up extra-ocular muscles, trend the mind to see the objects & improve central fixation. (Dhote, S. A. 2015). The SKY yoga practice supports to relieve from the eye strain through flexing, stretching and relaxing. As a result, eye can be protected and prevented from causing far sight and near sight problems. All kinds of institutions like, education sectors, private sectors and companies have to take effort in implementing the SKY yoga practice to attain the clear vision and to create a bright future among young generations in the society.

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