



Effect of Selected Yogic Practices on Eye Vision and Mental Well being among School Going Children

Dr. Deepak Raghav *

Prof. Rajendra Singh **

* Assistant Professor, Department Of Physical Education, Swami Vivekanand Subharti University Meerut.

** Professor, Department of Physical Education, A.M.U. Aligarh.

Abstract

The objectives of this study were to investigate the effect of yogic practices on eye vision and other on mental well being among school children. The subjects for the study were 80 male students (40 subjects were in Experimental group and 40 subjects were in Control group. Out of 40 subjects of Experimental group 20 subjects were kept in Eye Vision group and rest of the 20 subjects were kept in Mental Well Being group. The same division of subjects was followed with control group) from D.S.INTER COLLEGE, Aligarh. Age ranged the student between 14-17 years. Criterion measures for this study were different test items such as: eye vision by eye test (in visual acuity) and mental well beings by The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) (in rating) were administrated. To find out significant difference between two groups i.e. control and experimental groups in each variable and group (control group and experimental group), Paired sample t-test was employed. The result of the data reveals the significant difference was found in experimental group in each variable (Eye Vision and Mental Well Beings) and insignificant difference was found in control group.

Keywords: Eye vision, Mental Well Being, Experimental and Control.

INTRODUCTION

Yoga is essentially a spiritual discipline based on an extremely subtle science, which focuses on bringing harmony between mind and body. It is an art and science of healthy living. The word 'Yoga' is derived from the Sanskrit root 'Yuj', meaning 'to join' or 'to yoke' or 'to unite'. As per Yogic scriptures the practice of Yoga leads to the union of individual consciousness with that of the Universal Consciousness, indicating a perfect harmony between the mind and body, Man & Nature. According to modern scientists, everything in the universe is just a manifestation of the same quantum firmament. One who experiences this oneness of existence is said to be in yoga, and is termed as a yogi, having attained to a state of freedom referred to as mukti, nirvana or moksha. Thus the aim of Yoga is Self-realization, to overcome all kinds of sufferings leading to 'the state of liberation' (Moksha) or 'freedom' (Kaivalya). Living with freedom in all walks of life, health and harmony shall be the main objectives of Yoga practice."Yoga" also refers to an inner science comprising of a variety of methods through which human beings can realize this union and achieve mastery over their destiny **(Basavaraddi, 2015)**.

For many, the practice of yoga is restricted to Hatha Yoga and Asanas (postures). However, among the Yoga Sutras, just three sutras are dedicated to asanas. Fundamentally, Hatha yoga is a preparatory process so that the body can sustain higher levels of energy. The process begins with the body, then the breath, the mind, and the inner self **(Eliade, 2009)**.

Eye vision is the special sense by which the qualities of an object (such as color, luminosity, shape, and size) constituting its appearance are perceived through a process in which light rays entering the eye are transformed by the retina into electrical signals that are transmitted to the brain via the optic nerve **(Merriam-Webster, 2018)**

Finally, sight and vision keep our minds sharp and alert. It is important to maintain your eyesight, so that you may continue to connect with the world and make quick assessments of whatever situation comes your way. Frequent stimulation of the mind and philosophical interpretation of one's sense of vision helps with overall health and intelligence **(Molly Blakely 2015)**.

Many of the yogic exercises are aimed at improving the functioning of specific organs of the body. Yoga provides a series of eye exercises that improves the functioning of the eyes and helps to overcome various eye-related problems such as short sightedness and long sightedness.

Some of the yoga exercises are as simple as blinking, yet it is something so powerful. We forget to blink when browsing long hours on our phone / laptop. Blinking and other simple exercises for the eyes make them healthier and stronger and just take a few minutes. Palming, Blinking, Changing focus of eyes from side to side simultaneously, Changing focus of eyes forward and sideways simultaneously, Rotational viewing, Viewing upwards and down simultaneously, Preliminary nose tip gazing, Near and distant viewing. Regular practices of these yoga eye activities helps to relax eyesight and facilitate and normal functioning of our eyes. Before starting these activities, it is always recommended to splash our eyes with cold water a few times. Remember to keep the head and spine straight throughout the activities. **Vilcovsky, N. (2016)**.

Thus, we see that yogic exercises are helpful in improving the functioning of eyes and to overcome various eye related disorders by reducing the mental stress, tension in eye muscles and relaxing the eye muscles which result in a child's concentration, memory, study habits, academic performance and level of self satisfaction.

"Mental health is not just the absence of mental disorder. It is defined as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community." **TarynOzorio 2011**.

Yoga does not adhere to any particular religion, belief system or community; it has always been approached as a technology for inner wellbeing. Anyone who practices yoga with involvement can reap its benefits, irrespective of one's faith, ethnicity or culture. Traditional Schools of Yoga :These different Philosophies, Traditions, lineages and Guru-shishyaparamparas of Yoga lead to the emergence of different Traditional Schools of Yoga e.g. Jnana-yoga, Bhakti-yoga, Karma-yoga, Dhyana-yoga, Patanjala-yoga,

Kundalini-yoga, Hatha-yoga, Mantra-yoga, Laya-yoga, Raja-yoga, Jain-yoga, Bouddha-yoga etc. Each school has its own principles and practices leading to ultimate aim and objectives of Yoga (Van Twist, 2015).

Thus, we are able to conclude that height, eye vision and mental well-being of school going children is an important factor for their development and maturity. So the yoga might be use for improvement and growth of mentioned variables. The researcher felt the need for conduct this research for the improvement of height, eye vision and mental well being through yogic practices.

METHODOLOGY

The subjects of the study were selected randomly 80 students (40 subjects were kept on Experimental group and 40 subjects were kept in Control group. Out of 40 subjects of Experimental group 20 subjects were kept in Height/Mental well being and rest of the 20 subjects were kept in Eye vision. The same division of subjects was followed with control group) from D.S.INTER COLLEGE, Aligarh. Age ranged the student between 14-17 years. Necessary data were collected eye vision by eye test (in visual acuity) and mental well beings by The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) (in rating). To compare height, eye vision and mental well being in each group (control and experimental) of variables among school children, Paired sample t-test was computed. To find out the significant the level of significant was set at level of .05.

Training Programme

S. No.	Name of the activity	1 to 4 Weeks (REPITATION)	5 to 8 weeks (REPITATION)	9 to 12 Weeks (REPITATION)
1.	Trikonasana	2	3	4
2.	Ardhchandrakarasana	2	3	4
3.	Tadasana	3	5	7
4.	Veerbhdrasana	2	3	4
5.	Dhanurasana	2	3	5
6.	Chakrasana	2	3	5
7.	Paschimottanasana	2	3	5
8.	Suptavajrasana	1	2	3
9.	Pavanmuktasana	2	3	4
10.	Vajrasana	2	3	3
11.	Bhujangasana	2	3	4
12.	Kapalbhati	30stroke	50stroke	80stroke

13.	Modified trataka (gazing & pin pointing)	3 to 4 Min	4 to 6 Min	6 to 8 Min
14.	Jal- neti	30sec with each nostril	45sec with each nostril	60sec with each nostril
15.	Anulom- Vilom (Pranayama)	4	4	5
16.	Brahmari (Pranayama)	4	4	5
17.	Yog nidra	5mit	5mit	6mit

Training Schedule

Subjects were supposed to do practice of Asanas for forty minutes. The final posture of each asana was maintained according to the training program or as per the capacity of individual.

RESULTS OF THE STUDY

The data pertaining to the variables in this study were examined by using paired sample t-test to find out result in order to determine the differences if any among the pre and post test means. The level of significance was fixed at 0.05 level of confidence for all the cases.

Table-1

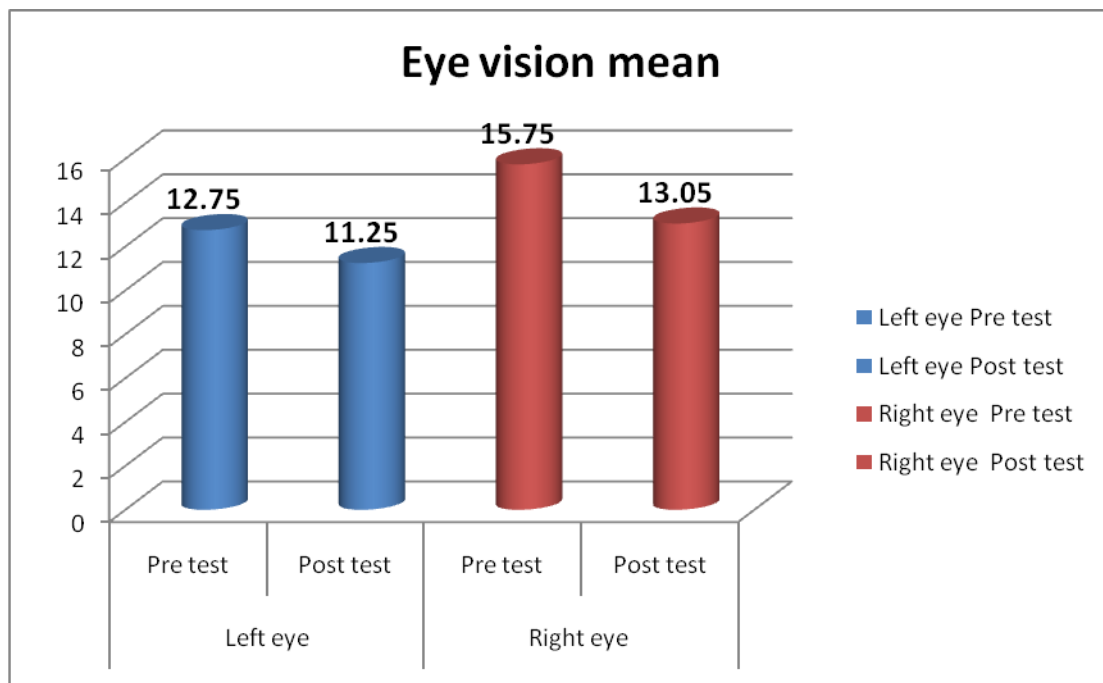
Pre- Test and post Test mean of control group on Eye vision

Eye vision		Mean	N	Std. Deviation	Std. Error Mean	Mean difference	t	p
Left eye	Pretest	12.75	20	11.346	2.537	1.500	1.248	.227
	Post test	11.25	20	6.223	1.391			
Right eye	Pretest	15.75	20	16.312	3.648	2.700	1.645	.116
	Post test	13.05	20	10.034	2.244			

*significant at 0.05 level, [tabulated value = 2.093, df =19]

Table 3 shows that the mean of left eye pre-test of control group and post-test of control group was 12.75 and 11.25, respectively, whereas the mean of right eye of pre-test of control and post-test of control group was 15.75 and 13.05. The paired sample “t” value in case of left eye control group was 1.248 and for right eye control group it was 1.645, the table value required for insignificant difference with df 19 at .05 level 2.093.

Figure-1



Difference between pre and post test mean of control group on Eye vision.

Table-2

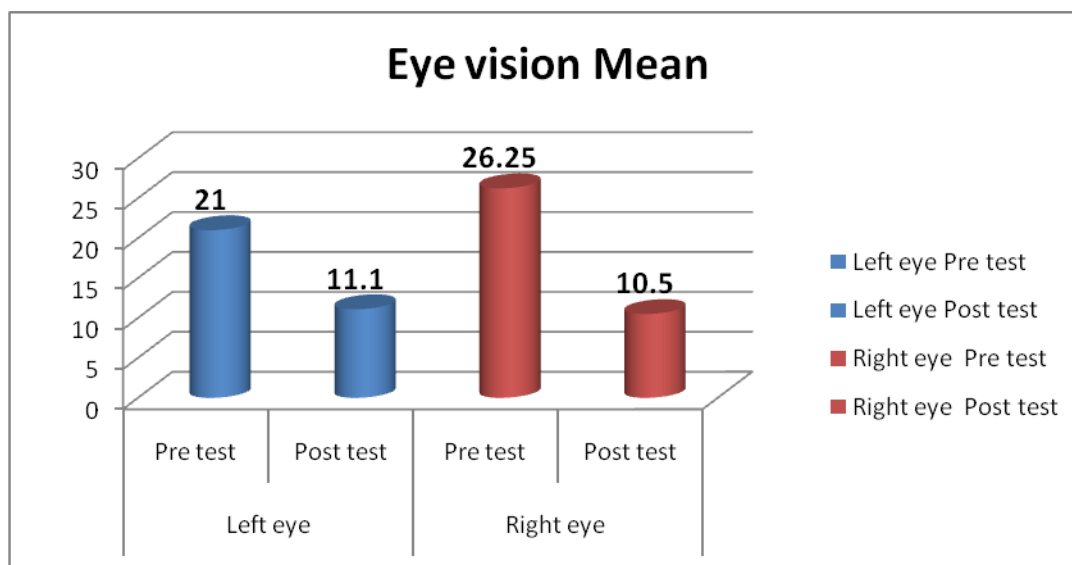
Pre- Test and post Test mean of experimental group on Eye vision

Eye vision		Mean	N	Std. Deviation	Std. Error Mean	Mean difference	t	p
Left eye	Pre test	21.00	20	11.558	2.584	9.900	5.249	.000*
	Post test	11.10	20	4.778	1.068			
Right eye	Pre test	26.25	20	12.871	2.878	15.750	6.873	.000*
	Post test	10.50	20	4.072	.910			

*significant at 0.05 level,[tabulated value = 2.093,df =19]

Table 4 shows that the mean of left eye pre-test of experimental group and post-test of experimental group was 21.00 and 11.10, respectively, whereas the mean of right eye of pre-test of experimental and post-test of experimental group was 26.25 and 10.50. The paired sample “t” value in case of left eye experimental group was 5.249 and for right eye experimental group it was 6.873, the table value required for significant difference with df 19 at .05 level 2.093.

Figure-2



Difference between pre and post test mean of experimental group on Eye vision.

Table-3

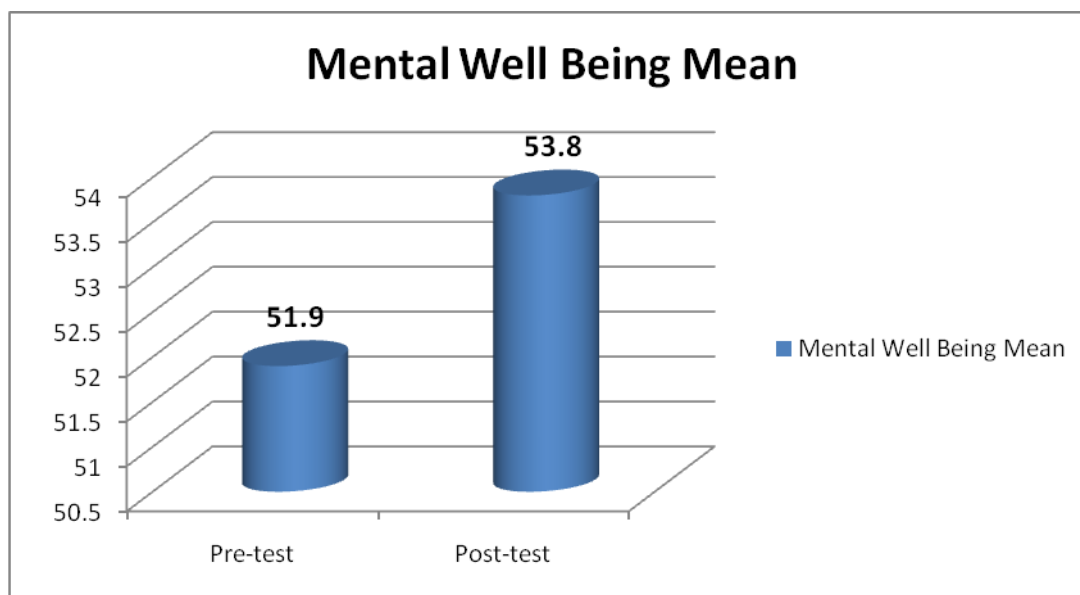
Pre- Test and post Test mean of Control group on Mental well being.

Mental well-being	Mean	N	Std. Deviation	Std. Error Mean	Mean difference	t	P
Pre-test	51.90	20	4.667	1.044	1.900	1.433	.168
Post-test	53.80	20	6.420	1.436			

*significant at 0.05 level,[tabulated value = 2.093,df =19]

Table 5 shows that the mean of mental Well being pre-test and post-test of Control group was 51.90 and 53.80, respectively, The paired sample “t” value in case of mental Well being Control group was 1.433, the table value required for insignificant difference with df 19 at .05 level 2.093 .

Figure-3



Difference between pre and post test mean of control group on Mental Well Being.

Table-4

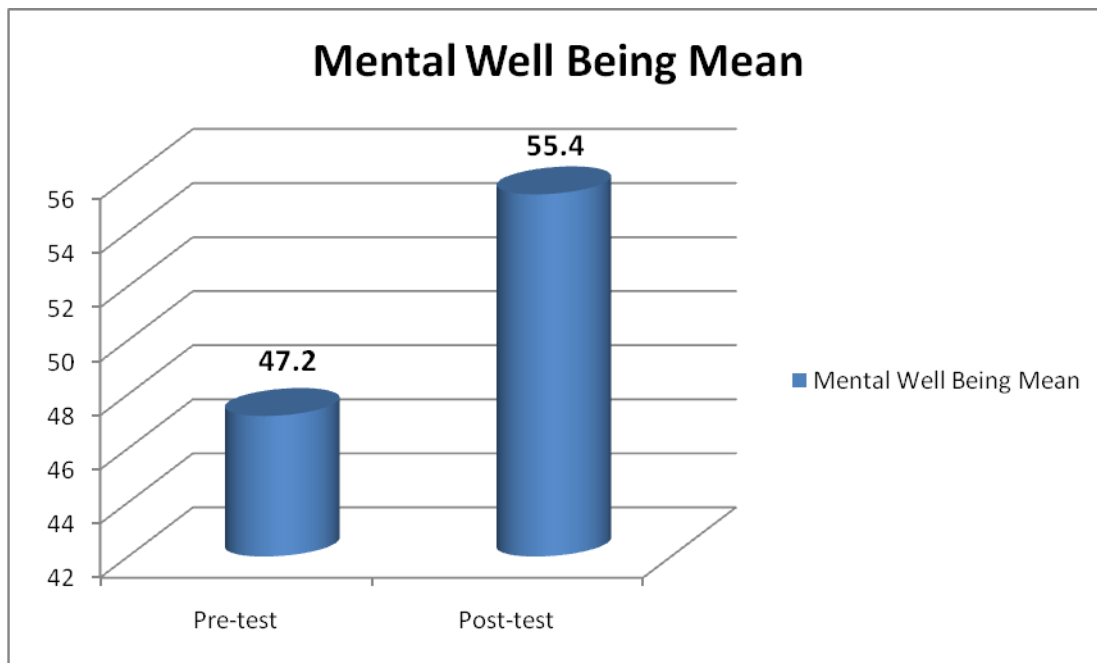
Pre- Test and post Test mean of Experimentalgroup on Mental well being.

Mental well-being	Mean	N	Std. Deviation	Std. Error Mean	Mean difference	t	p
Pre-test	47.20	20	6.748	1.509	8.200	5.619	.000*
Post-test	55.40	20	5.734	1.282			

*significant at 0.05 level, [tabulated value = 2.093,df =19 ,]

Table 6 shows that the mean of mental Well being pre-test and post-test of experimental group was 47.20 and 55.40, respectively, The paired sample “t” value in case of mental Well being experimental group was 5.619, the table value required for significant difference with df 19 at .05 level 2.093 .

Figure-4



Difference between pre and post test mean of experimental group on Mental Well Being.

DISCUSSION OF THE RESULTS

The present study was done to find out the effect of yogic practices on height, eye vision and mental well being among school going male students' age group 14-17 years. The analysis of data through paired sample t test shows that the 12 weeks yogic practices significantly improve in height, eye vision and mental well being.

Through yogic practice the perception of depth and distance can also be improved significantly. Poor eye vision in school going children is caused due to lack of nutrition diet, wrong lifestyle, constantly watching T.V, over using mobile phone, wrong reading habits and mental stress. Poor eye vision is due to refractive error and visual impairment which result in myopia and hyperopia. This is also shown by Maggie Fox and O'Donoghue in the experiment probably that is why the performance was found significant because the perception is the measure factor which may affect the eye-vision. **O'Donoghue et al.,(2010)** made a research work on Refractive error and visual impairment in school children in Northern Ireland Aims: To describe the prevalence of refractive error (myopia and hyperopia) and visual impairment in a representative sample of white school children.

In the present study the experimental group was provided Anulom-Vilom, Brahmari and Yog nidra which results to improve the mental well being of an individual, such as decrease the stress level, anxiety level, mental fatigue, stabilize emotional turmoil and secrete the feel good hormones like endorphins and encephalins. These feel good hormones make an individual feel better, pleasant and happy. This present study is supported by (Bhavanani, 2013). He concluded that yogic practise *Swadhyaya* (introspectional self analysis), *Pranayama* (breathing techniques for control of vital energy), *Pratyahara* (sensory withdrawal), *Dharana* (intense concentration), *Dhyana* (meditational oneness) and *Bhajana* (devotional music) bring an excellent sense of emotional balance in relation to the stress, mental fatigue and emotional turmoil i.e. vital for good health.

In the present study the experimental group was provided Anulom-Vilom, Brahmari and Yog nidra which results to improve the mental well being of an individual, such as decrease the stress level, anxiety level, mental fatigue, stabilize emotional turmoil and secrete the feel good hormones like endorphins and encephalins. These feel good hormones make an individual feel better, pleasant and happy. This present study is supported by (Bhavanani, 2013). He concluded that yogic practise *Swadhyaya* (introspectional self analysis), *Pranayama* (breathing techniques for control of vital energy), *Pratyahara* (sensory withdrawal), *Dharana* (intense concentration), *Dhyana* (meditational oneness) and *Bhajana* (devotional music) bring an excellent sense of emotional balance in relation to the stress, mental fatigue and emotional turmoil i.e. vital for good health.

Bhavanani 2008 said that we can facilitate our own healing when we are relaxed. Infact, we often unintentionally retard our inherent healing mechanisms when we are tense and uptight. (Giri, 1976).

BIBLIOGRAPHY

- A. MALATHI* AND A. DAMODARAN** STRESS DUE TO EXAMS IN MEDICAL STUDENTS - ROLE OF YOGA, *Indian J PhysiolPharmacol* 1999; 43 (2) : 218-224 *Department of Physiology, LokmanyaTilak Municipal Medical College &General Hospital, & Medical Division, BARC, Mumbai*
- Bhavanani, A. B. (2013). *Yoga Chikitsa: The application of Yoga as a therapy. Pondicherry, India: Dhivyananda Creations*
- Bhavanani, A. B. (2011). Yoga as a therapy: A perspective. *Yoga Mimamsa*, 42(4), 235-241.
- Chodzko-Zajko, W. J., Proctor, D. N., Singh, M. A. F., Minson, C. T., Nigg, C. R., Salem, G. J., & Skinner, J. S. (2009). Exercise and physical activity for older adults. *Medicine & science in sports & exercise*, 41(7), 1510-1530.
- Erickson, K. I., Voss, M. W., Prakash, R. S., Basak, C., Szabo, A., Chaddock, L., ... & Wojcicki, T. R. (2011). Exercise training increases size of hippocampus and improves memory. *Proceedings of the National Academy of Sciences*, 108(7), 3017-3022.
- Larsen RJ, Diever E, Emmons RA. An evaluation of subjective well-being measures. *Social Indicators Research* 1985; 17: 1-17.

Lesser, Dean Paul (1985). Yoga Asana and Self Actualization. A Western Psychology Perspective, Dissertation Abstracts International. 46/10, p. 2972.

O'Donoghue, L., McClelland, J. F., Logan, N. S., Rudnicka, A. R., Owen, C. G., & Saunders, K. J. (2010). Refractive error and visual impairment in school children in Northern Ireland. *British journal of ophthalmology*, bjo-2009.

Price, Beth; et al. (2009). *MathsWorld Year 8 VELS Edition*. Australia: *MacMillan*. p. 626.

Ray, U. S. et al. (2001). "Effects of yogic asanas and physical exercise on body flexibility in middle aged men". *Indian Journal of Physiology and Pharmacology*, Jan, 45(1):37-53.

Ross, Alyson M.S.N., R.N., and Thomas, Sue. F.A.A.N., Ph.D., R.N. (2010). "The Health Benefits of Yoga and Exercise" A Review of Comparison Studies". *The Journal of Alternative and Complementary Medicine*. Volume 16, pp. 3–12 Mary Ann Liebert, inc.

Van Twist, A. V. E. D. (2015). *Perfect children: growing up on the religious fringe*. Oxford University Press

Vinodet. al. (1984). Effect of Yogic Practices Performance on Adolescent Anxiety and Centcun Personality Trait: Yoga and Research International Conference Abstracts, Yoga Mimansa 28 (29); 33-34.

