

**EFFECT OF NADI SUDDHI, BHRAMARI PRANAYAMA AND
YOGA NIDRA ON STRESS, SLEEP AND QUALITY OF LIFE
AMONG FEMALE SCHOOL TEACHERS**

Dissertation Submitted by
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CERTIFICATE

This to certify that Malathi Vivek who registered for the MSc degree at **Swāmī Vivekānanda Yoga Anusandhāna Samsthāna (S-VYASA University) Bengaluru**, under the division of yoga and life sciences, has completed the required training in acquiring the relevant knowledge of yoga therapy and rehabilitation and has successfully carried out the research project titled **“Effect of Nadi Suddhi, Bhramari Pranayama and Yoga Nidra on stress, sleep and quality of life among Female school teachers”** in partial fulfillment of the course as per the regulation of the university.

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DECLARATION

I, hereby declare that this study presented in this dissertation is done by me. The literary research and experimental research were done under the guidance of Dr.Satyapriya Maharana, Swami Vivekananda Yoga Anusandhana Samsthana, Bangalore.

I also declare that the subject matter of my dissertation entitled “**Effect of Nadi Suddhi, Bhramari Pranayama and Yoga Nidra on Stress, Sleep and Quality Of Life among Female School Teachers**” has not formed the basis of the award of any degree, diploma, associate-ship, fellowship or similar title previously.

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Date:

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Standard international transliteration code used to transliterate Sanskrit
words

a	=	अ	ña	=	ङ	pa	=	प
ā	=	आ	ca	=	च	pha	=	फ
i	=	इ	cha	=	छ	ba	=	ब
ī	=	ई	ja	=	ज	bha	=	भ
u	=	उ	jha	=	झ	ma	=	म
ū	=	ऊ	ñ	=	ञ	ya	=	य
ṛ	=	ऋ	ṭa	=	ट	ra	=	र
ṝ	=	ॠ	ṭha	=	ठ	la	=	ल
e	=	ए	ḍa	=	ड	va	=	व
ai	=	ऐ	ḍha	=	ढ	śa	=	श
o	=	ओ	ṇa	=	ण	ṣa	=	ष
au	=	औ	ta	=	त	sa	=	स
m̐	=	अ	tha	=	थ	ha	=	ह
ḥ	=	अः	da	=	द	kṣa	=	क्ष
ka	=	क	dha	=	ध	tr	=	त्र
kha	=	ख	na	=	न	jña	=	ज्ञ
ga	=	ग	gha	=	घ			

ABSTRACT

Background

As per the recent survey, nearly half of all workers suffer from moderate to severe stress while on the job. Job Stress on Teachers was having a negative impact on their wellbeing, with 64% feeling that their professional ability and confidence was being damaged. Even their relationships at home were suffering because of work demands. Everyday interactions with students, work situation is often unpredictable, bad behaviour and heavy workload unreasonable directed time budgets, excessive paperwork, unrealistic deadlines, and intimidating inspection regimes as key can trigger the experience of stress in teachers. The effects of stress are: irregular or rapid heart rate, speed breathing or held breath, slows or stops digestion, causes the brain to be more reactive/less thoughtful, increases perspiration, reduces immune system response, Tension headaches, neck/back/shoulder pain, tight jaw, sleeping problems, fatigue, loss of concentration, learning problems can increase, migraine headaches are the sources which triggers Stress in School Teachers.

Alternative treatments like yoga therapy are gaining popularity. Yoga offers a very cost effective method of treatment and it can be followed by people of all age group. The intervention is safe when compared to other complementary and alternative medicines. Earlier studies have reported that Yoga therapy is beneficial in stress related disorders by producing calming effect on nervous system.

Aim

The aim of the study is to see the effect of Nadi Suddhi, Bhramari Pranayama and Yoga Nidra on stress, sleep and quality of life among Female school teachers.

Methodology

Present study was carried out in, The Canadian Public school and Apollo Public School , Bangalore, Karnataka. 54 participants age range was from (22-60) years, were recruited for the study. Yoga Group (n=28) YG and Control Group (n=26) CG. YG was given 5 min of Nadi Suddhi, Bhramari Pranayama and Yoga Nidra relaxation for 20 min, 6 days a week for the duration of 3 weeks and CG group continued with their regular activities. Both groups had assessed the Perceived stress Scale (PSS), Pittsburgh Sleep Quality Index (PSQI), Quality of Life (QOL) Questionnaire then, following parameters were recorded at the baseline and after 3 weeks of training.

Results

Perceived Stress Scale (Pss) Reduced In Yoga Group (23%, $P < 0.001$) With Significant Difference Between Groups ($P < 0.001$). Pittsburgh Sleep Quality Index (Psqi) Improved (37%, $P < 0.001$) With Significant Difference between Groups ($P < 0.001$). Quality of life improved in Yoga Group. Physical Health (15%, $P < 0.001$) with significant difference between groups ($p < 0.001$) in control group by 1.5% with significant difference between groups ($p < 0.001$). Psychological Health (20%, $P < 0.001$) with significant difference between groups ($p < 0.001$) in control group by 5% with significant difference between groups ($p < 0.001$). Social Relation (26%, $P < 0.001$) with significant difference between groups ($p < 0.001$) in control group by 7% with significant difference between groups ($p < 0.001$). Environmental Health (25%, $P < 0.001$) with significant difference between groups ($p < 0.001$) in control group by 1.5% with significant difference between groups ($p < 0.001$).

Conclusion

Three weeks of intervention (Nadisuddhi, Bhramari & Yoga nidra) helps in reducing perceived stress, improved sleep & Quality of life among female school teacher.

Key Words

Stress, School Female Teachers, Yoganidra, Bhramari, Nadi suddhi Pranayama, PSS, PSQI, QOL (Brief).

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CHAPTER I

INTRODUCTION

Stress has been defined by different people differently. His model view stress as an internal response where continued and prolonged stress may result in fatigue and tension leading to depression and anxiety (Selye, 1976). Parkes (1989) stated that stress was a relationship between an individual and the environment where as Robbins (2001) defines stress as a dynamic condition in which the individual is confronted with an opportunity, constraint or demand related to what he or she desires and for which the outcome is perceived to be both uncertain and important. Stress can be caused by environmental, organizational and individual variables (Matteson, 1999 & Cook, 2001).

Intensity of stress varies in everyone's life due to a shift from traditional to modern lifestyle. Stress may be best defined as a psycho physiological process, usually experienced as a negative emotional state, resulting from physical or psychosocial demands (Agarwal, 2001). Stress can be categorized in several ways (Larzelere, 2008): acute/chronic, physical/psychological, and traumatic/daily hassles etc. Stress produces both adaptive and maladaptive effects on the physiological system. Chronic stress can cause inhibition of neurogenesis, disruption of neuronal plasticity, even neurotoxicity, changes in personal behavior causing wear and tear in the body (“allostatic load”), which in turn alters physical and mental health (McEwen, 2007).

Prevalence of Job Stress in the World:

A 1992 UN report termed Job Stress has been called the “health epidemic of the 21st century” by the World Health Organization - programs. Nearly half of all workers suffer from moderate to severe stress while on the job, according to a recent survey. And 66 percent of employees report that they have difficulty focusing on tasks at work because of stress, employees also said that stress was responsible for errors and/or missed deadlines (21 percent), trouble getting along with co-workers/superiors (15.5 percent), missed days (14.9 percent) and lateness (14.4 percent) difficulties with focusing on tasks at work, doctors suggest that stress is the causative factor of illness underlying more than 70 percent of all visits to the family doctor (Ned, 2012).

The American Psychological Association (APA) survey on work-related stress reveals that 54% of Americans are in stress in their everyday lives, with 30% considering their stress levels as “extreme”. THOR surveillance schemes of OPRA and SOSMI in Britain estimate 5,126 new cases of mental stress every year. Monster’s international Workplace Stress

study surveyed nearly 1,000. On the international front, employees in France and the UK experience the most workplace stress, with 48 percent (a 6 percent increase from U.S. respondents) reporting that they have left a job due to stress (China, 2014). 72 percent of people who have daily stress say it interferes with their lives at least moderately. 40 percent experience persistent stress or excessive anxiety in their daily lives. 30 percent with daily stress have taken prescription medication to manage stress, nervousness, emotional problems or lack of sleep. 28 percent have had an anxiety or panic attack (ADAA 2006).

Prevalence of Job Stress in India

According to Monster's international Workplace Stress study survey Employees in India are least likely to leave a job due to stress; with only 19 percent of respondents reporting that they have ever left a job because it was too stressful (China, 2014). According to a study by industry body ASSOCHAM study, 66 per cent CEOs in India are stressed out and 11 percent find it too much to handle (Kataki, 2015).

According to the inaugural Asia Pacific edition of the Staying @ Work survey conducted by global professional services company Towers Watson, while Indian employers lead their regional counterparts in developing strategies to manage work-related stress, only 38 percent identified improving the emotional/mental health of employees (i.e. lessening the stress and anxiety) as a top priority of their health and productivity programs (Times of India, 2014).

The Prevalence of Stress in the Teaching Profession

Prevalence of occupational stress in the teaching profession has been developed during the last twenty years. According to State of America's Schools survey, nearly 70 percent of teachers report not feeling engaged in their work and nearly half report experiencing job-related stress daily. Based on the responses of 70,000 U.S. employees, including 7,200 K-12 teachers, researchers classified 31 percent of teachers as "engaged" at work. Not satisfied teachers were 56 percent, when compared to other professions (Kassondra, 2014). According to The Washington Post, teacher satisfaction has been trending downward for some time. In 2013, the latest MetLife Survey of the American Teacher reported that teachers' level of satisfaction had dropped 23 percentage points since 2008. Only 39% reported being "very satisfied," the lowest level seen in 25 years (Dennis, 2013).

Association of Teachers and Lecturers (ATL's) survey of members' wellbeing were remarkably similar. 73% of those surveyed stated that their job was having a negative impact on their wellbeing, with 64% feeling that their professional ability and confidence was being damaged. Almost the same number believed their relationships at home were suffering because of work demands (Mary, 2013).

Stress factors in School Teachers

Health Information Publications (2005) defines stress as the emotional and physical strain caused by our response to pressure from the outside world (HIP, 2005). Furthermore, Dalloway describes stress as an automatic physical reaction to danger, demands or threat (Dalloway, 2007). Irani view stress as the individual's inability to cope with excessive workplace demand or job pressure (Irani, 2007), while Hartig et al. mentions stress as a process of responding to an imbalance between demand and resources (Hartig, 2007).

As per the International research literature shows that the extent to which teachers are satisfied with their jobs and working conditions is likely to have significant consequences for the retention of teachers within the profession, for their approach to teaching, for the creation of collegial relations within a school, and for student outcomes (Crossman, 2006).

Blase, on 1982 says Teachers play a vital role in the implementation of the education plans at school level which is challenged sometimes by the level of teachers' efficiency in work performance. Teachers face challenges of the optimal use of the available resources in the production of maximum output (Blase, 1982).

Teaching is often described as a vocation with the teacher's role being far more complex than merely transferring information effectively (Durka, 2002). Everyday interactions with students can trigger the experience of stress in teachers. The reality is that the teacher is normal but the work situation is often unpredictable and sometimes even abnormal from a professional point of view (Hayward, 1991). In addition to this, increasing in responsibilities in recent years has made the job of teachers more stressful (Sodoma, 2009).

The teaching profession is one of the helping professions in which practitioners are normally committed to giving their best for the welfare of the students. While the commitment is laudable, the consequences can be detrimental when the job demands overshadow the individual's coping resources, as well as the job rewards; thus leaving the practitioner feeling unhappy and unable to perform well (Hayward, 1991).

Stress can have detrimental effects on both the individual and the organisation (Hayward, 1993). The personnel in schools of industry experience stress due to a variety of stressors related to the job as well as external factors. How individuals perceive these stressors will determine the effects they will have, not only to the individual but also on the institution as a whole. Chaplain found differences in the way male and female teachers viewed disruptive behavior (Chaplain, 2008), and Kyriacou mentions bad behavior and heavy workload as key stressors for teachers (Kyriacou, 2001). Hans Selye et al describes stress as the body's non-

specific response to any demand. With teacher stress getting increased attention, it is important to understand what stress and teacher stress are (Hans Selye, 1976).

The difference in the definition of teacher stress is influenced by how that person is affected by their job demands, and their ability to cope with these demands (Blasé, 1982). The impact of teacher stress depends upon an individual's social support, personality characteristics, and job satisfaction (Guglielmi, 1998).

A teacher's personality is a factor when explaining the amount of stress that is present. Teachers' skills, motives, and perceptions of their work environment determine the amount of stress that may take place (Guglielmi, 1998). A teacher who does not have a conflict between personal values and those of educational authorities, has a high ambition to succeed professionally, and is not easily upset or excited; experiences less amount of stress (Bachkirova, 2005).

Organizational factors that contribute to teacher stress can include unreasonable directed time budgets, excessive paperwork, unrealistic deadlines, and intimidating inspection regimes (Hepburn, 2001).

Effects of Job stress in School Teachers.

The teaching related stress can affect a teacher's health, well-being, and performance (Larchick, 2004). Pervez in his study on female teachers concluded that stress manifestations could be physical, psychological, or emotional in nature (Pervez, 2003). Teachers stress is, experience of unpleasant emotions, such as tension, frustration, anxiety, anger, and depression, resulting from aspects of work as a teacher" (Brown, 1999). In recent years, steadily increasing costs and consequences of teacher stress has received growing concern. To reduce the negative effects of stress on teachers, more attention needs to be placed on this growing stress (Bachkirova, 2005).

Too much stress can contribute to health problems which also reduce the ability to perform at the highest levels (Chan, 1998). Teacher stress is caused by both environmental factors and an individual characteristic. Major environmental factors include poor working conditions, scarcity of resources, heavy workloads, and student behavior. Individual characteristics can include gender, age, personality, and the ability to cope (Guglielmi, 1998). Pervez describes on comparing stress manifestations between teachers of private and government schools, they found that the former had significantly more complaints with cardiovascular and gastronomical problems than those working in government schools (Pervez, 2003).

Guglielmi the negative effects of stress can impact negatively on performance and quality of life. In a UNESCO study, "Increasing Teacher Effectiveness," Lorin says students who are

assigned ineffective teachers have lower gains in academic achievement than those who are taught by a sequence of several highly effective teachers (Guglielmi, 1998).

Teacher stress is closely linked to strain and burnout. Strain is any unpleasant behavioral, psychological, or physiological outcome in a teacher (Sutton, 1984). In general, strain is the result of an interaction between a person and their environment. Research on shaping job satisfaction among teachers where teacher workloads are changing as a result of a number of factors, including the mainstreaming of pupils with special educational needs, greater ethnic diversity in classrooms and the increase in class sizes resulting from recent expenditure cuts. Also increasing pressures on school teachers are also likely to impact on their job satisfaction, some articles by Irish academics (Morgan, 2007 & O'Leary, 2004).

Complications of Stress among School Teachers

Findings from early studies on health related problems associated with teacher stress indicated that the negative effects of stress could range from minor physical symptoms such as mouth sores to more serious psychopathological symptoms like depression and suicidal ideations (Kyriacou, 1985 & Litt, 1985). The effects of stress are many, like increase heart rate, speed breathing or held breath, slows or stops digestion, causes the brain to be more reactive/less thoughtful, increases perspiration, reduces immune system response (Guglielmi, 1998). Tension headaches, neck/back/shoulder pain, tight jaw, sleeping problems, fatigue, loss of concentration, learning problems can increase, irregular or rapid heart rate, migraine headaches, poor circulation (Nyambongi 2013). Teacher stress results in such consequences as early retirement, long and excessive absences, new teachers leaving during training, and an increase in teachers leaving the profession within their first five years (Bachkirova, 2005). In recent years, professional satisfaction has been decreasing while job pressure has been on a steady rise for teacher's stress which affects the learning environment and prevents achievement of the teacher's educational goals leading to disinterest, negligence, bitterness, and absenteeism among teachers, and can result in teachers leaving the profession (Guglielmi, 1998). Health psychology assumes stress adversely affects physical, psychological and behavioral health. The occurrence of both concurrent and subsequent health problems such as flu, sore throat, headaches, and backaches (Nyambongi 2013). The relationship of daily stress to mood disturbance was more complex and daily stress was associated with health and mood across time. People with unsupportive social relationships and low self-esteem were more likely to experience an increase in psychological and somatic problems (Litt, 1985).

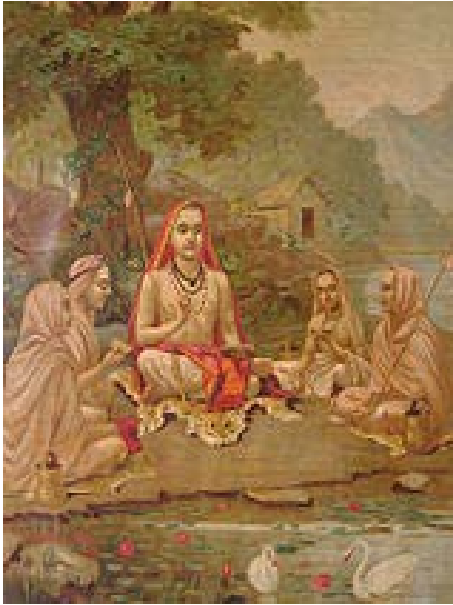
Teacher stress is an experiences of unpleasant, negative emotions, such as anger, frustration,

anxiety, depression and nervousness (Kyriacou, 2001), introduction of new teaching methods, changes in curriculum and courses, lack of pupil motivation, attention and interest, having to meet new teaching targets or student attainment levels, Poor planning, insufficient financial resources, excessive workload and hours of work, lack of time, inadequate salary, job insecurity, they are closely monitored by their own head teachers, Dr Eames says there has been a change in culture in recent years, which has turned pupils and students into consumers of educational services. If the exam results are not what are expected it is also the teacher's fault unnecessary deadlines, attempts to impress Principal, administrative tasks, conflicts in the school, attendances at meetings, implementation of new policy are causes for the stress (Sprenger, 2011).

CHAPTER II

Literary Review

Concept of Guru



Gurukula is type of school in India, residential in nature, with pupils (shishya) living near the guru, often within the same house. The word gurukula is a contraction of the Sanskrit guru (teacher or master) and kula (extended family).

In a gurukula, shishya live together as equals, irrespective of their social standing, learn from the guru and help the guru in his day-to-day life, including the carrying out of mundane chores such as washing clothes, cooking, etc. In a gurukul you receive a different kind of education. Typically, a guru does not

receive any fees from the shishya studying with him. At the end of his studies, a shishya offers the guru dakshina before leaving the gurukula or ashram. The gurudakshina is a traditional gesture of acknowledgment, respect and thanks to the guru, While living in a gurukula the students had to be away from his house and family completely. The guru didn't take any fees and so they had to serve the guru. (Swami Satyananda 1977).

Gradually the Gurukul , where disciples learnt at the feet of guru for long years became universities like Takshashila, Vikramashila and Nalanda .

In Upanishads, the guru-shishya means, "upa" (near), "ni" (down) and "śad" (to sit) — so it means "sitting down near" a spiritual teacher to receive instruction.

Eg: The relationship between Krishna and Arjuna in the Bhagavad Gita portion of the Mahabharata, and between Rama and Hanuman in the Ramayana

In the Vedas, the knowledge of Brahman (brahmavidya) is communicated from guru to shishya by oral lore.

Mundakya Upanishad says to realize the supreme godhead holding samidha grass in his hands one should surrender himself before the guru who knows the secrets of Vedas.

Kathopanishad too speaks of the guru as the preceptor who alone can guide the disciple on the spiritual path. (Gambhirananda, 1986)

Prayer to the Guru

गुरुर्ब्रह्मा गुरुर्विष्णुः गुरुर्देवो महेश्वरः ।

गुरुः साक्षात् परंब्रह्म तस्मै श्री गुरवे नमः ॥ गुरु गीत ॥ ३ ॥

gururbrahmā gururviṣṇuḥ gururdevo maheśvaraḥ ।

guruḥ sāksāāt paramaṁbrahma tasmai śrī gurave namaḥ ॥ guru gīta ॥ 3 ॥

Guru is the creator (Brahma); Guru is the preserver (Vishnu); Guru is the destroyer (Maheshvara); Guru is verily the Supreme Absolute. To that Guru we prostrate.

ध्यानमूलं गुरोर्मूर्तिः पूजामूलं गुरोर्पादम् ।

मन्त्रमूलं गुरोर्वाक्यं मोक्षमूलं गुरोर्कृपा ॥ गुरु गीत ॥ १४ ॥

dhyānamūolaṁ gurormoortiaḥ pūojāmūolaṁm guroarpdam ।

mantramūolaṁ gurorvākyaṁ mokṣamūlaṁ guroarkapā ॥ guru gīta ॥ 14 ॥

The Guru's form is the root of meditation; the Guru's feet are the root of worship; the Guru's word is the root of Mantra; the Guru's Grace is the root of liberation.

अज्ञानतिमिरान्धस्य ज्ञानाञ्जनशलाकया ।

चक्षुरुन्मीलितं येन तस्मै श्रीगुरवे नमः ॥ गुरु गीत ॥ २ ॥

ajñānatimirāndhasya jñānājjanaśalākayā ।

caḥsurunmīmitaṁ yena tasmai śrīgurave namaḥ ॥ guru gīta ॥ 2 ॥

"I was born in the darkest ignorance, and my guru, my spiritual master, opened my eyes with the torch of knowledge. I offer my respectful obeisance unto him."

Above slokas are taken from A Glimpse of Hindu Thought Hitokti Muktavalee , 2011 edition

Guru in Taitreya Upanishad

वैधुतः संधानम्। इत्यधिज्यौतिषम्। अथाधिविद्यम्। आचार्यः पूर्वरूपम्।

अन्तेवास्युत्तररूपम्। विद्या सन्धिः। प्रवचनं सन्धानम्। इत्यधिविद्यम्। अथाधिप्रजम्।

॥ तैत्तिरीयोपनिषत् ॥ ३ । २ ॥

vaidhutaḥ saṁdhānam | ityadhijyautiṣam | athādhividyam | ācāryaḥ pūrvarūpam
|
antovāsyuttararūpam | vidyā saṁdhiḥ | pravacanam saṁdhonam | ityadhividyam
| athādhiprajam | taittirīyopaniṣat | | 3 | 2 | |

Now as to knowledge: teacher is the prior - form, disciple the - posterior, knowledge the conjunction, teaching the medium. So far as regards knowledge.

Next as to the soul: lower lip the prior form, upper lip the posterior, speech the con-junction, tongue the medium. Thus far as regards the self.

वेदमनूच्याऽऽचार्योऽन्तेवासिनमनुशास्ति। सत्यं वद। धर्मञ्चर। स्वाध्यायान्मा प्रमदः। आचार्याय प्रियं
धनमाहुत्य प्रजातन्तुं मा व्यवच्छेत्सीः।

सत्यान्न प्रमदितव्यम्। धर्मन्न प्रमदितव्यम्। कुशलान्न प्रमदितव्यम्। भूत्यै न प्रमदितव्यम्।

स्वाध्यायप्रवचनाभ्यां न प्रमदितव्यम् ॥ तैत्तिरीयोपनिषत् ॥ ११ । १ ॥

vedamanūcyā" cāryo'ntevāsimnamanuśāsti | sathyam vada | dharmañcara |
svādhyāyānmā pramadaḥ | ācāryāyam priyam dhanamāhutyam prajātantuṁ mā
vyavacchatsiḥ |

satyāna pramaditavyam | dharmanna pramaditavyam | kuśalāna
praṁmaditavyam | bhūtyai na pramaditavyam | svādhyāyapracanā bhyām na
pramaditavyam | | taittirīyopaniṣat | | 11 | 1 | |

Having taught the Vedas the teacher exhorts the disciple, — "Speak the truth.

Perform Dharma. Swerve not from the study of the Scriptures. Having gathered for the teacher the wealth he desires, (thou) shouldst never cut the thread of progeny.

Never serve away from truth. Swerve not from Dharma. From the beneficial let thee

not deviate; and deviate not from prosperity. Let thee not stray away also from the study and teaching of the Vedas."

Guru in Brihadaranyaka Upanishad

यदैतमनुपश्यत्यात्मानं देवमञ्जसा ।

ईशानं भूतभव्यस्य न ततो विजुगुप्सते ॥ बृहदारन्यकोपनिषत् ॥ ४।४।१५ ॥

yadaitamanupaśyatyātmānaṁ devamajjasā ।
īśānaṁ bhūtabhavyasya na tato śijugupsate । । bṛhadāraṇyakopaniṣat 4 । 4 । 15 । ।

When a man after (receiving instructions from a teacher) directly realises this effulgent Self, the Lord of all that has been and will be, he no longer wishes to hide himself from it.

मनसैवानुद्रष्टव्यम् नेह नानास्ति किञ्चन ।

मृत्योः स मृत्युमाप्नोति य इह नानेव पश्यति ॥ बृहदारन्यकोपनिषत् ॥ ४।४।१९ ॥

manasaivānudraṣṭāvyam neha nānāsti kimcana ।
mṛtyoḥ sa mṛtyumāpnoti ya iha nāneva paśyati । । bṛhadāraṇyakopaniṣat 4 । 4 । 19 । ।

The means of the realisation of that Brahman is being described. Through the mind alone, purified by the knowledge of the supreme Truth, and in accordance with the instructions of the teacher, (It) is to be realised. There is no difference whatsoever in It, Brahman, the object of the realisation. Although That is to say, really there is no duality apart from the superimposition of ignorance.

तमेव धीरो विज्ञाय प्राज्ञं कुर्वित ब्राह्मणः ।

नानुध्यायबहूञ्छब्दान् वाचो विग्लापनं हि तत् ॥ इति ॥ बृहदारन्यकोपनिषत्

॥ ४।४।२१ ॥

tameva dhīro vijñāya prajñāṁ kurvita brāhmaṇaḥ ।

nānudhyāyadabahūñchabdān vāco viglāpanam hi tat || iti ||

bṛhadāranyakopaniṣat 4|4|21 ||

The intelligent aspirant after Brahman, knowing about this kind of Self alone, from the instructions of a teacher and from the scriptures, should attain intuitive knowledge of what has been taught by the teacher and the scriptures, so as to put an end to all questioning-to practise the means of this knowledge, viz. renunciation, calmness, self-control, withdrawal of the senses, fortitude and concentration.

Guru in Chhandogya Upanishad

तस्य यथभिनहनम् प्रमुच्य प्रब्रुयत् एतं दिशं गन्धरः एतं दिशं ब्रजेति स ग्रामद् ग्रामं पुच्छन् पण्डितो
मेधावी गन्धर एवोपसम्पधेत एवं एर्वाः आचार्यावन् पुरुषो वेदा तस्य तावदेव चिरं यावन् न विमोक्ष्ये
अथ सम्पत्स्य इति।

छान्दोग्योपनिषत् ॥ १४।१ ॥

tasya yathabhinahanam pramucya prabruyat etaṁ diśaṁ gandharaḥ eatam diśam
brajati sa grāmad grāmaṁ prucchan paṇḍito medhāvī gandharan evopasampadheta
evaṁ ervāḥcaryāvan puruṣo vedā tasya tāvadeva ciraṁ yavan na vimokṣye atha
sompatsya iti |

chāndogyopaniṣat || 14|1 ||

A person with eyes which can see the truth of things as they are is called an acharya, a spiritual master. He is the preceptor, he is the Guru. There is no way of escape from this muddle of life except through the guidance of a preceptor, a Guru, is one who has undergone these experiences of life. He has seen the tortures of existence, the sufferings, the winding path.

अथ यदि तस्य कर्ता भवति तथा एव सत्यम् आत्मानं कुरुते स सत्याभिसन्धः सत्येनात्मानं अन्तर्धाय
परषु तप्तं प्रतिगृह्णाति स न दह्यते अथ मुच्यते।

छान्दोग्योपनिषत् ॥ १६।२ ॥

atha yadi tasyakartā bhavati tathā eva satyam ātmānaṁ kurute sa styabhisandhaḥ
satyenātmānaṁ antardhāya parasam taptam pratigrhṇāti sa na dahyate atha

mucyate |

chāndogyopaniṣat | | 16 | 2 | |

The mind and the pranas are influenced tremendously by the activity of three elements,—fire, water and earth, It is the subtlest essence and It can be known only through the grace and guidance of one's own Guru or master

येनाश्रुतं श्रुतं भवत्यमतं मतमविज्ञातं विज्ञातमिति कथं

नु भगवः स आदेशो भवतीति ॥

छान्दोग्योपनिषत् ॥

६।३॥

yenāśrutaṁ śrutaṁ bhavatyamataṁ matamavijñātaṁ vijñātamiti katham

nu bhagavaḥ sa ādeśo bhavatīti | |

chāndogyopaniṣat | | 6 | 3 | |

“Do you know That, by knowing which, everything is known? Do you know That, by which the unheard becomes heard, the unthought becomes thought?” where guru has taught all the knowledge.

Guru in Katha Upanishad

न नरेणावरेण प्रोक्त एष

सुविज्ञेयो बहुधा चिन्त्यमानः ।

अनन्यप्रोक्ते गतिरत्र नास्ति

अणीयान् ह्यतर्क्यमणुप्रमाणात् ॥ कठोपनिषत् ॥ २।८॥

na nareṇāvareṇa prokta eṣa

suvijñeyo bahudhā cintyamānaḥ |

ananyaprokte gatiratra nāsti

aṇīyān jhatarkyamāṇupramāṇāt | | kaṭhopaniṣat | | 2 | 8 | |

Knowledge cannot be had by personal effort, or by reading book, The expert teacher is required , He is taught by one who knows Him as himself. Subtler than an atom is this truth.

वैश्वानरः प्रविशत्यतिथिर्ब्राह्मणो गृहान् ।

तस्यैतां शान्तिं कुर्वन्ति हर वैवस्वतोदकम् ॥ कठोपनिषत् ॥ १।७॥

vaiśvānaraḥ praviśatyatithirbrājhaṇo grhān |

tasyaitāṁ śāntim kurvanti hara vaivasvatodakam || kaṭhopeniṣat || 1|7||

When Nachiketas reached the abode of Yama, Lord Yama was not there. This is a very important stage in the seeker's life: when the disciple goes to the Guru, the latter often does not welcome him, but shows indifference.

तमब्रवित् प्रीयमाणो महात्मा

वरं तवेहाद्य ददामि भूयः ।

तवैव नाम्ना भविताऽयमग्निः

सृङ्गां चेमामनेकरुपां गृहाण ॥

कठोपनिषत् ॥ १।१६ ॥

tamabravit prīyamāṇo mahātma

varaṁ tavehādya dadāmi bhuyaḥ |

tavaiva nāmnā bhavitā'yamagniḥ

śṛṅkāṁ cemāmanekarupāṁ grhāṇa || kaṭhopeniṣat || 1|16||

“Yama was very pleased with his competence, I ordain that from now on this sacrifice will be called by your name instead of vaishvanara-agni. Take also this multi-coloured garland’ He is blessed with universal knowledge of the past, present and future, and of memory of previous births. Past and future become an eternal present. A Guru has to teach personally this meditation which gives the practitioner supernatural knowledge.

श्रवणायापि बहुभिर्यो न लभ्यः शृण्वन्तोऽपि बहवो यं न विद्युः ।

आश्चर्यो वक्ता कुशलोऽस्य लब्धा आश्चर्यो ज्ञाता कुशलानुशिष्टः ॥ कठोपनिषत् ॥ १।२।७॥

śravaṇāyāpi bahubhiryo na labhyaḥ śṛṇvanto'pi bahavo yaṁ na vidayuh |

āścaryo vakta kuśalo'sya labdhā āścaryo jñātā kuśalānuśiṣṭḥ | |

kaṭhopeniṣat | |

1|2|7||

He (the Self) of whom many are not even able to hear, whom many, even when they hear of him, do not comprehend; wonderful is a man, when found, who is able to teach the Self; wonderful is he who comprehends the Self, when taught by an able teacher.

Guru in Bagavadgita

In the Bhagavadgita Lord Sri Krishna, the original spiritual master, tells his disciple Arjuna, "The self-realized soul can impart knowledge unto you because he has seen the truth." In other words, a genuine guru must have realized the Absolute Truth, the Personality of Godhead, and he must be able to impart this truth to his disciple, thus freeing him (or her) from repeated birth and death.

मन्मना भव मद्भक्तो मद्याजि मां नमस्कुरु।

ममेवैष्यसि सत्यं ते प्रतिजाने प्रियोऽसि मे ॥ श्रीमद्भगवद्गीता ॥ १८। ६५ ॥

mānmana bhava madbhakto madyaji mam namaskuru।

namevaiśyasi satyam te pratijane priyosi me ॥ śrīmadbhagavadgītā ॥ 18। 65 ॥

Always think of me, be devoted to me, worship me, and offer obeisance to me. Doing so, you will certainly come to me. This is my pledge to you, for you are very dear to me.

एवं परम्पराप्राप्तमिमं राजर्षयो विदुः।

स कालेनेह महता योगो नष्टः परंतप ॥ श्रीमद्भगवद्गीता ॥ ४। २ ॥

evaṁ paramparāprāptamimam rājarṣayo viduḥ ।

sa kāleneha mahatā yogo naṣṭaḥ paramtapa ॥ १ ॥ श्रीमद्भगवद्गीता ॥ ४। २ ॥

"This supreme science was thus received through the chain of disciple succession, and the saintly kings understood it in that way. But in course of time the succession was broken, and therefore the science as it is appears to be lost."

तद्विद्धि प्रणिपातेन परिप्रश्नेन सेवया।

उपदेक्ष्यन्ति ते ज्ञानं ज्ञानिनस्तत्त्वदर्शिनः ॥ श्रीमद्भगवद्गीता ॥ ४। ३४ ॥

tadviddhi praṇipātena paripraśrena sevayā ।

upadekṣyanti te jñānaṁ jñānīnāstantvadarśinaḥ || śrīmadbhagavadgītā || 4 || 34 ||

"Just try to learn the truth by approaching a spiritual master. Inquire from him submissively and render service unto him. The self-realized soul can impart knowledge unto you because he has seen the truth."

CHAPTER III

Literature Review

Occupational Stress:

"Professional stress is often activated by developments and changes in the work environment over which the individual practitioner has little or no control. Schools have undergone various changes on different levels, ranging from financial structures to policy structures (Hayward, 1993). Like other forms of Job stress, it can affect the healthy functioning both individual and organisation in which the individual serves (Larchick, 2004). Environmental factors include poor working conditions, scarcity of resources, heavy workloads, and student behavior. Individual characteristics can include gender, age, personality, and the ability to cope (Guglielmi, 1998). The authors say that there is relationship between occupational stress and various factors that include strenuous working conditions, opportunities to practice different aspects of the professional role, and support from co-workers. Future studies are recommended on factors associated with occupational stress like workload, autonomy to make decisions, level of time-pressure demands (Sveinsdottir, 2006).

Teacher Stress, Strain, and Burnout

The teacher stress is also influenced by how that person is affected by their job demands, and their ability to cope with these demands (Blasé, 1982). The impact of teacher stress depends upon an individual's social support, personality characteristics, and job satisfaction (Guglielmi, 1998).

Travers & Cooper found that teachers mentions lack of government support, lack of information about changes, constant change and the demands of the National Curriculum as among their greatest sources of stress (Travers & Cooper, 1997). Teachers' skills, motives, and perceptions of their work environment determine the amount of stress that may take place (Guglielmi, 1998). A teacher who does not have a conflict between personal values and those of educational authorities, has a high ambition to succeed professionally, and is not easily upset or excited; tend to experience the least amount of stress (Bachkirova, 2005).

Psychological dysfunction refers to depression, anxiety, and negative effect towards life and job. Behavioral dysfunction explains any change in normal behavior (Sutton, 1984), burnout include social support, sense of control, and dietary habits (Guglielmi, 1998). Burnout occur when effort and coping resources fail to overcome stress, and cause an individual perception of a significant discrepancy between effort and reward (Farber, 1991). It is characterized by

depersonalization and a decline in personal achievement. A burnout begins when teachers show a decrease in effort, outcomes, and increased job strain.

Sutton states that there are two dysfunctional responses to burnout (Sutton, 1984). First, teachers feel forced to do low quality work or not finish their work at all which often leads to lower self-esteem, high blood pressure, and anxiety. Second, teachers may choose to keep up with the demand which often leads to family problems, and a lack of sleep and relaxation (Farber, 1991). Teachers are burned out if they show attitudes that depersonalize students, as well as exhibit low levels of personal accomplishments in their work (Hastings, 2003). Burnout can also be explained by ineffective performance with students which is a sign of a decreasing work satisfaction, involvement, motivation, and effort (Blasé, 1982). Burnout leads teachers to experience an increase in physical and mental problems, an increase in absenteeism, and desire to want to leave the job (Hastings, 2003).

Sources of Stress and Teacher Performance

Teaching profession is generally considered as a noble profession with lots of expectations from the parents towards their children's education and the development of their personalities. Teaching as a profession is progressively becoming a stressful occupation (Hepburn, 2001). Sources of teacher stress are varied (Dewe, 1986), some of the more common sources include the need to make adaptations to sudden curriculum changes and feeling of disempowerment (Brown, 2002 & Moriarty, 2001), unnecessary deadlines, attempts to impress Principal, administrative tasks, conflicts in the school, attendances at meetings, implementation of new policy, lack of breathing space between lessons, non-availability of time to wind down or relax and recuperate, management of finances, aspiration for greater achievement, overwork, emotional exhaustion, isolation, lack of workers' participation in decision making, poor communication, job insecurity, environmental pollution, large class-size, dealing with different needs of the students, disability and attention-deficit disorder, lack of financial support etc. (Gupta 1981 & Fields 2005). Teachers to cope with a number of competing roles within their job (Pithers, 1998), excessive overtime work (Cooper, 1993), and management problems associated with student misbehavior and large class sizes (Gordon, 2002).

Disruptive pupil behaviour (Boyle, 1995 & Feitler, 1986). Time pressures (Astin, 1993 & Dey, 1998) and high self expectations (Gmelch, 1986) are also the main sources of stress in teachers. Industrial action discussed issues like as low teacher morale, shortages of teachers, teacher salaries, high teacher resignation rates, and the quality of classroom teachers (Nadebaum, 1990). Hyde study revealed that teachers are devoting time both in and out of

school hours and in some cases their own resources, to assist students and their families in dealing with adverse economic and social circumstances (Hyde 1990).

Identifying possible stressors can help teachers choose positive coping strategies rather than negative strategies that may be unhealthy towards other aspects of life. If they can identify possible stressful situations, teachers can actively use coping strategies to deal with it, or even be able to avoid the situation altogether. Coping with stress is important for teachers so that their stress does not interfere with the achievement of their educational goals and they have better quality of life; both personally and professionally (Guglielmi, 1998).

Stress can have negative effects on teacher's mental and physical well-being. Knowing this, it is vital that teachers are able to recognize stress so that they can take the appropriate steps to deal with it in a positive manner (Sutton, 1984). It is essential that teachers are able to develop proper coping strategies for stress that are unique to their individual personalities. Everyone reacts to stressors differently. It is important to research and practice alternate coping strategies to find which will help them by allowing teachers to have a greater sense of purpose, motivation, and clarity about their own abilities (Bachkirova, 2005).

Organizational factors that contribute to teacher stress can include unreasonable directed time budgets, excessive paperwork, unrealistic deadlines, and intimidating inspection regimes (Hepburn, 2001).

Earlier study found a positive relationship exists between job satisfaction and stress coping skills and teachers who create a supportive organizational climate, enrich the design of tasks, reduce conflict, and are provided guidance tend to more satisfied and better equipped cope with stress (Bindu 2006).

Teacher stress resulting as early retirement, long and excessive absences, new teachers leaving during training, and an increase in teachers leaving the profession within their first five years (Bachkirova, 2005). Recently professional satisfaction has been decreasing while job pressure is rising in teachers which are also a part of stress (Guglielmi, 1998).

It has been reported that teacher stress affects the learning environment and ultimately prevents achievement of the teacher's educational goals. This leads to disinterest, negligence, bitterness, and absenteeism among teachers, and can result in teachers leaving the profession (Guglielmi, 1998). Teachers who resign each year leave the profession due to a career change, health, being dissatisfied with teaching and for unknown reasons (Annual Report of the Reasons Teachers Leave the Profession, 2007).

Stress coping strategies

Teaching is often described as a vocation (Durka, 2002), with the teacher's role being far more complex than merely transferring information effectively. Coping is defined as the effort to control situations of harm or any kind of challenge when automatic reaction is not possible (Monat, 1977). Coping does not require success but only effort, and forms the link between environmental stress and adjustment of the individual. Stresses such as this can adversely affect a teacher's emotional health and classroom effectiveness (Blasé, 1986 & Yoon, 2002). Much has been written about how teachers cope with stress (Dunham, 1992 & Rogers, 1996).

Dunham and Varma suggest that stress can be reduced by developing new skills or by diverting attention through humour or physical activity. To cope under difficult conditions, teachers require both organisational and personal support, including training in interpersonal problem solving and skills to deal with stress (Dunham & Varma 1998).

Common positive strategies teachers use to alleviate stress include exercise, social resources, avoidance, reading, hobbies, movement, and meditation (Gulwadi, 2006). These coping strategies used by teachers affect their outlook on the situation (Griffith, 1999). To alter the perception of stress, teachers may invoke inward or outward coping strategies. Inward strategies, such as concentrating on something narrow in the field of stimuli around oneself, include seeking stillness and focus (Mueller 2001) observes that Information and Electronic Technologies (IET) have been sources of great relief in various work places. Teachers' involvement in exercises and relaxation therapies which involve the use of appropriate IET is one of the best approaches to reducing stress in schools (Godfrey, 1990; Moore 2005).

Outward strategies, such as exercise, involve seeking connections, distractions, and movement (Gulwadi, 2006). Although there are many common coping strategies available, most teachers rely on social support, active planning, restorative experiences, and suppression of competing behaviors. Social support can reduce the impact of stressors on teachers' well-being, job satisfaction, and physical illness risk. Teachers seek support from family, friends, and colleagues in order to receive advice, discuss feelings, get emotional support, get sympathy and understanding, and to talk about their feelings. Teachers who have more support within their personal lives tend to experience less stress in the workplace (Griffith, 1999). Active planning, although a part of the normal workload, allows teachers to take their mind off stress and focus on their work which involves concentrating efforts, developing a plan, taking some action, coming up with strategies, trying to take steps, and doing what has to be done in order to keep their attention on the students rather than the stressor.

School psychologists are a great resource for promoting healthier schools by providing stress reduction programming for teachers. In the research of (Hemmings, 2002) mentioned various ways to cope with stress like Communications with others, relaxation,. fun and entertainment and there is a noticeable influence in self care (sport, eight hours of sleep a day, preserving a correct diet, applying relaxation techniques)reduces stress and improves the quality and enjoyment of life (McKay, 2008), on the reduction of stress and improvement in the quality of life (Yang, 2009).

Teachers who find it difficult to cope with the behavior of pupils take various measures to disregard it, either by concealing the problem and pushing it away (not telling anyone about it), self blame, worry and anxiety, development of eating and sleeping disorders, or even by becoming ill (Lewis, 2005).

Montgomery and Rupp say active coping strategies and passive coping strategies in his research. Active coping strategies can be cognitive strategies (changes in perspective, imposing self control, rational distancing of oneself); behavioral strategies (determining borderlines to the job, requesting advice from others, engaging in relaxation exercises); emotional strategies (remaining calm and quiet, thinking positively). On the other hand, passive coping strategies such as resignation, drinking, wishful thinking, and avoidance, are characterized by a lack of engagement with the stressful event (Montgomery, 2005).

Restorative coping experiences refer to teachers being able to release stress in places away from the school environment , places teachers choose most often make them feel better when stressed include home, nature related outdoor places, city places, churches, and cafes. These environments are helpful in relieving stress because they provide teachers with sensory conditions, social contact, props, and nature related environmental features (Gulwadi, 2006).

Some people, either intentionally or unintentionally, employ negative coping strategies to deal with stress. Negative coping strategies are common responses to stress and feelings of being overwhelmed. Although these strategies can provide temporary stress relief, they can cause more stress in the long run (Crisis Intervention & Suicide Prevention Centre of British Columbia, 2010). Negative coping strategies can include unhealthy behaviors, distractions, violence, and withdrawal. Unhealthy behaviors such as smoking, drinking alcohol, excessively over/under eating, and drug abuse are sometimes used to relieve stress. Violence such as angry outbursts, lashing out, and physical violence often come about if a situation becomes too stressful. Showing signs of withdrawal such as sleeping, procrastinating, and withdrawing from family, friends, and activities, and disengagement are ways in which people try to remove stress from their lives (Helpguide, 2010).

Stress Management Strategies

Stress is becoming part of life, recent lifestyle changes, growing demands on people to find suitable employment, rising cost of living, and growing competition in the market contribute to increase stress at the work place. It should be noted that stress management techniques are applicable not only to people who manifest a disease or disorder, but also to healthy people, when added to daily routine practice as an effective tool for health enhancement and protection over the life span, serving thus as a valuable intervention for the healthy population as well

(Liza, 2011). Health promotion Although stress has been found to have both positive and negative influences on the human mind and body, sustained or pervasive stress tends to have an illness producing effect on the individual especially if the person has a genetic predisposition or genetic vulnerability. However all persons may not be biologically and psychosocially adept at working in extremely challenging work set ups. The field of Stress Management in general has been rapidly expanding during the last three decades. There are many different stress reducing strategies available to prevent and cure the adverse health effects associated with occupational stress. These intervention strategies may focus on either at the individual, the organisation or the individual-organizational interface. Most stress interventions however focus on changing the worker instead of the work environment (Semmer, 2003). There are numerous stress management strategies are practiced and seen, these strategies are individually practiced and some of them are practiced with the help of the professionals and these some of the strategies are explained below:

Life-Style Changes to Reduce Stress

Teaching is a profession that often leaves one psychologically tired, although the body may not be. It is important therefore for teachers to exercise regularly, in order to balance mind and body. In addition, exercise is nature's best relaxer. The search for inner peace must be balanced by outer health and dynamism (this is true for students as well as for teachers). Consider some activities that have proved beneficial: stretching/yoga, jogging, walking, weight training, swimming, tennis, or aerobics.

Diet is extremely important. Stress-inducing foods such as coffee, sugar, tobacco, some seasonings, and foods that overly sensitive should be avoided.. We should feel relaxed, refreshed, and happy, not tired, depressed, or in anguish. Don't continually interrupt your bio-rhythms just to forget a stressful day or to have "fun." (Nathan, 1989).

Interventions at the organization level:

Task characteristics can be changed by designing jobs in the light of teacher's abilities and preferences, providing training programs so teachers can enhance their skills and individualizing the treatment of teachers. Newman et al mentioned that interventions directed at changing the organisational structure; changing organisational processes, such as reward systems, training and development systems, policies, etc.; the development of health services; and policies (Newman, 1993).

COMPLEMENTARY AND ALTERNATIVE THERAPY

Psychotherapy, counseling, physical activity, walking, behavior therapy, Music therapy, massage therapy, Massage Therapy , Naturopathy, Ayurveda, Travelling, Reiki and Pranic healing are the various methods used as stress reliever.

Progressive Muscle Relaxation (PMR):

Wolpe's initial modification of Jacobson's Original Progressive Relaxation Training became a standard tool among therapist of all types, especially those offering behavioural and cognitive-behavioural therapy. Through clinical and empirical evaluations its value as a component of a variety of treatment programs has been well established (Bernstein, 2000). Jacobson on 1976 explained that relaxation in any muscle means complete absence of all contractions. Jacobson discovered that systematic tensing and releasing dozens of muscle groups, learning to attend and discriminate between resulting sensation of tension and relaxation can help a person to completely eliminate muscle contractions and experience a feeling of deep relaxation. Jacobson suggested sixteen muscle groups for the sequential contraction and relaxation which will lead to complete deep relaxation (Nair, 2014)

Biofeedback:

It is a procedure to monitor and reduce the physiological aspects of stress by providing feedback about current physiological activity and is often accompanied by relaxation training. Biofeedback training involves three stages: developing an awareness of the particular physiological response, e.g. heart rate, learning ways of controlling that physiological response in quiet conditions; and transferring that control into the conditions of everyday life. In biofeedback training, a person is provided with feedback about the status of a physiological function. The intention of biofeedback is that over time a person learns to control the activity of that function (Murphy, 1996).

Cognitive-behavioral approaches:

Cognitive-behavioral approaches aim at changing cognitions and subsequently reinforcing

active coping skills, more effective when psychological outcomes, such as anxiety, irritability and depression, were evaluated, more effective than relaxation techniques and helped to improve perceived quality of work life and psychological response and resources. They also significantly reduced anxiety symptoms. (Van der Klink, 2001)

Psychological Relaxation/Meditation:

It is an active skill that reduces symptoms of stress and decreases the incidence of illnesses such as high blood pressure and heart disease. Usually relaxation starts from the lower part of the body and progresses up to the facial muscles in such a way that the whole body is relaxed. Deep breathing is used along with muscle relaxation to calm the mind and relax the body. The meditation consists of a sequence of learned techniques for refocusing of attention that brings about an altered state of consciousness. It involves such a thorough concentration that the meditator becomes unaware of any outside stimulation and reaches a different state of consciousness. It had positive effects on psychological and cognitive health outcomes and on job and organisational health outcomes. Meditation produced the most consistent results across outcome measures (Murphy 1996). Edwards & Burnard on 2003 reported positive effects of meditation and relaxation on coping with anxiety and stress (Edwards, 2003).

Mindfulness Meditation

Mindfulness has been described as “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment” (Kabat, 2003). Mindfulness meditation is a Buddhist practice, teachers of mindfulness in the West have adapted traditional mindful awareness Interest in the benefits of mindfulness practice has grown rapidly over the past 15 years. The effects of mindfulness on the mind, brain, body, and behavior by selecting, from hundreds of studies between 2003 and 2008 “mindfulness practice can influence the brain, the autonomic nervous system, stress hormones, the immune system, and health behaviors, including eating, sleeping, and substance use, in salutary ways” (Greeson ,2009).

YOGA NIDRA

Yoga Nidra, derived from the Tantras, derived from Sanskrit words, yoga meaning one-pointed awareness, and nidra means sleep. It is a powerful technique in which relaxation happens consciously. The essence of Yoga Nidra is awareness and a systematic method of inducing complete physical, mental and emotional relaxation.

It means psychic sleep, where conscious intellectual mind disappears, subconscious mind becomes active and unconscious mind merges with the subconscious, and there we have no concept of time and space. Rotating the awareness around the different parts of the body in turn, as we do in Yoga Nidra, stimulates the chakras in a fully balanced way. It is one aspect of Pratyahara which leads to higher states of concentration and Samadhi just like Pratyahara in Raja yoga from Patanjali (Swami Satyanada). During scientific experiments it has been seen that when you practice Yoga Nidra, α waves change immediately (Jitendra, 2011).

TABLE: Yoga Nidra Studies

Pranayama

Prana is the vital life force that acts as a catalyst in all our activities and *Ayama* the expansion or control of this force. Pranayama (breathing exercise) is known as a part of yogic techniques followed in ancient India. Pranayama is defined as a manipulation of breath movement. Different types of pranayamas produce different physiologic responses in people (Pramanik, 2010). Thus Pranayama can be defined as the science of controlled, conscious expansion of Prana in our energy body/sheath, the Pranamaya Kosha.

Pranayama has immense therapeutic potential in a wide range of psychosomatic disorders and can be used either as a monotherapy or in combination with Asanas and other aspects of Yoga. Pranayama produces an improvement of neural function at both central and peripheral levels of the nervous system and also produces a balance between the sympathetic and parasympathetic aspects of the autonomic nervous system. This homeostatic 'Samatvam' is of use to combat stress disorders that are the scourge of modern man. Pranayamas such as Nadi Shuddhi and Nadi Shodhdhana are important for cleansing the nervous system and it is said that Nadi Shuddhi can cleanse all the 72, 000 Nadis (Ananda, 2005)

Pranayama breathing has been shown to alter the autonomic activity. Pranayama breathing through right nostril results in increase in sympathetic activity whereas left nostril breathing reduces it. Pranayama (Nadishuddhi) increase parasympathetic activity they have useful implications in treating psycho physiological disorders associated with hemispheric and autonomic imbalance. There was a significant change in response after pranayama which show subjective improvement in perception of stress (Bhimani, 2010).

TABLE: Nadishodhana Pranayama

Sl. No.	Year/Author	Sample	Design	Intervention	Parameters Measurements	Result Conclusion
1	<u>Vivek Kumar Sharma, Madanmohan Trakroo, Ajit Sahai</u> /2013	N=90 12 weeks, 3 times a day , 30 min	Randomized control trial	Kapalabhati, Bhastrika pranayama, Nadishodhana, Pranav Pranayama.	Effect of fast and slow pranayama on perceived stress and cardiovascular parameters in young health-care students	Fast & slow pranayama helped in Sleep scale(PSS), more benefit was seen in reducing cardiovascular parameters after slow pranayama.
2.	Anuja, Kulshrestha A/ 2012	N=40, 30 min , morning , evening, 1 month	One group pre-post research design	Nadishodhana pranayama	Psychological well- being middle aged working women	t-test revealed significant improvement in Psychological well- being
3.	Anupkumar Dadarao Dhanvijay, Nitin dhokne/2015	N= 60 12-weeks	Hand grip test, Valsalva ratio,	Nadishodhana Pranayama on Females & males healthy adults	balances Autonomic function	parasympathetic dominance helps in reducing BP can be used in BP
4.	Dr Manoj Sharma A.B.B.U. Bhopal/2013	N=30 30 days	single group pre test-post test statistical analysis	nadishodhana pranayama	hypertension	manage the hypertension to a great level, get rid of medicines
5.	Fareedabanu, A. B.; Shetty, Darshit P/ 2012	N=50 Male & female	Comparative study	Nadi-shodhana pranayama (NP) & Suryanamaskar (SN)	Pulmonary Functions on young healthy students computerized spirometer	decrease in Respiratory rate , increasing respiratory muscle strength

TABLE: Bhramari Pranayama

Sl. No.	Year/Author	Sample	Design	Intervention	Parameters Measurements	Result Conclusion
1	Sasidharan K, Rajesh V, Ilavarasu Judu, 2014	N= 31 male students	randomized self as control within-subjects design, Paired sample t-tests	two different experimental conditions (Bhramari pranayama and deep breathing	response inhibition in healthy individuals.	Bhramari pranayama enhanced response inhibition and cognitive control in nonclinical participants.
2	Mooventhan A and Vitthal Khode/2014	N=41 2 weeks	Independent samples t-test and Student's paired t-test	Bhramari pranayama and OM chanting for the duration of 10 min	Bhramari pranayama and OM chanting on pulmonary function in healthy individuals.	improvement in slow vital capacity, reduction in weight & BMI, maximal voluntary ventilation, improvement in peak expiratory flow, effective in improving pulmonary function
3.	Charan D/2013	N=28 8 weeks	Randomized trial study design	Bhramari pranayama	pregnant women having cardiovascular hyper-reactivity	reduced the cardiovascular hyper-reactivity to cold stress
4.	Pramanik T, Pudasaini B, Prajapati, R / 2010	N=50 Female 25 and male 25	Student's t test	Bhramari pranayama, for 5 min	immediate effect of Bhramari pranayama, on heart rate and blood pressure in healthy subjects	There was a change in the heart rate & BP in both male & female subjects some felt calm; some felt sleepy; some felt very light and calm.

Yoga nidra is a practice which can be widely applied in the modern world to improve the quality and increase the happiness of human life. The word yoga means inner communion; it is the process that leads to this state. Nidra means sleep. Yoga nidra is the simple, yet profound technique of yogic sleep which has been found useful in the following areas:

1. Induces deep and permanent relaxation of the entire body, mind and personality.
2. Brings about the state of meditation.
3. Eradicates deep rooted psychological problems, complexes, neuroses, inhibitions, etc.
4. It helps to remove a vast number of psychosomatic ailments such as high blood pressure.
5. Acts as a non-chemical tranquilizer that quickly removes insomnia and induces deep sleep.

6. Rejuvenates the whole human organism on all levels- physical, pranic and mental.
7. Opens up the potential of the mind and awakens the faculty of intuition.
8. Increases the memory and learning capacity of students, brings extraordinary improvement in the absorption and retention of information from external sources as well as the internal knowledge within one's own mind.

Yoga nidra study was done on Stress and anxiety on college going students.

Result showed that there was significant change in the male and female student by reducing the stress. (Kumar, 2008).

TABLE: Yoga Nidra

Sl. No.	Year/Author	Sample	Design	Intervention	Parameters Measurements	Result Conclusion
1	Khushbu Rani, SC Tiwari, 2012	N= 65 for 6 months	Intervention group	Yoga Nidra as complementary treatment	anxiety and depressive symptoms in patients with menstrual disorders.	The patients with mild to moderate anxiety and depressive symptoms improve significantly, There is no significant improvement in the patients with severe anxiety and depressive symptoms.
2	Monika, Singh Uma, Ghildiya, 2012	N= 75 For 6 months	Randomized controlled trail	Yoga Nidra 35- 40 min	to see any effect on autonomic functions in patients of menstrual disturbances of reproductive age group	There were significant improvements in the blood pressure, postural hypotension and sustained hand grip, heart rate expiration inspiration ratio and 30:15 beat ratios of the subjects
3	Kumar, Kamakhya Pandya, Pranav/ 2012	N= 80 students, n=30 controlled 6 months	Intervention study	Yoga Nidra 30 min	on ESR (Erythrocyte Sedimentation Rate) on healthy subjects.	significant change on the ESR level of the normal persons , decreases the level of ESR in the male and female subjects both
4	Stankovic L/2011	N= 16 male military combat veterans 8 weeks	Intervention study	Yoga Nidra	posttraumatic stress disorder (PTSD)	Reduced rage, anxiety, and emotional reactivity, and increased feelings of relaxation, peace, self-awareness, and self-efficacy, despite challenges with mental focus, intrusive memories, and other concerns.
5.	Kumar Kamakhya / 2004	N=40, For six months	Intervention study	Yoga Nidra 30 min	Student's well being in healthy being	decrease the stress level of the subjects whereas no significant change seen in anxiety level. positively increase the general well being

The concept of stress according to Pantanjali Sutra

The notion of stress as we understand it today might best be understood as a phenomenon of the Rajasic qualities of the mind, its tendency to movement, agitation and emotion which is uncontrolled. It is this tendency to excess agitation that obscures the light of Purusha and is the major impediment to our ability to be aware of the state of samadhi which is present already in all of us, according to Vyasa's commentary on sutra 1.1. This quality of mind is a form of klesha or affliction. This affliction comprises more than just the list of five kleshas (avidya, asmita, raga, dvesha, abhinivesha in chapter two II.3). That list is not meant to be exclusive and may encompass any afflicted mental operation (klisha-vrtti) (Stephen, 2007).

Yoga / Mind –Body Therapy

The civilization of India has produced a great variety of systems of spiritual beliefs and practices. Ancient seers used yoga as a means to explore the exterior and interior world and, perhaps, ultimately to achieve wisdom and knowledge of the sacred Indian texts: the Vedas, Upanishads, and Shastras. These great teachers, or gurus, did not equate yoga with religion but more as an art of living at the highest level in attunement with the larger life–reality. The emphasis in yoga was on personal verification rather than on belief. The practice of yoga was a way to inner joy and outer harmony.

The Sanskrit word “yoga” comes from the root *yug* (to join), or yoke (to bind together or to concentrate). Essentially, however, the word “yoga” has come to describe a means of uniting or a method of discipline: to join the body to the mind and together join to the self (soul), or the union between the individual self and the transcendental self. Yoga comes from an oral tradition in which teaching was transmitted from teacher to student (Sharon, 2005).

The state of the mind and that of the body are intimately related. If the mind is relaxed, the muscles in the body will also be relaxed. Stress produces a state of physical and mental tension. Yoga, developed thousands of years ago, is recognized as a form of mind-body medicine. In yoga, physical postures and breathing exercises improve muscle strength, flexibility, blood circulation and oxygen uptake as well as hormone functions. In addition, the relaxation induced by meditation helps to stabilize the autonomic nervous system with a tendency towards parasympathetic dominance. (Parshad, 2004).

Yoga reduces stress by improving autonomic functions (Pallav,2012). Yoga has been found beneficial for overall personality development at physical, mental, emotional, intellectual and spiritual level. Yoga has been found useful for improving stress.

A study shows the effect of Yoga on different aspects of mental health. Somatization of stress, quality of life, self-related quality of sleep and discomfort were assessed. 140 subjects

were taken 70 subjects for Yoga group and 70 subjects for control group. Yoga group showed significant decrease in, somatization of stress, quality of life, quality of sleep and discomfort due to over breathing (Telles, 2012).

Need of the Study:

There are various studies on Nadi Suddhi, Bhramari Pranayama and Yoga Nidra and its effects studies have mentioned below:

Earlier studies on Nadi Suddhi shows that in reducing cardiovascular parameters , decrease in Sleep scale(PSS), (Vivek , 2013), improvement in Psychological well- being function(Anuja, 2012), decreases in BP (Anupkumar ,2015), decrease in Respiratory rate , increasing respiratory muscle strength (Fareedabanu, 2012).

Earlier studies on Bhramari shows that increase in response inhibition & cognitive control (Shashidharan, 2014), decrease in BMI, weight, increase in pulmonary function (Mooventhan, 2014), decreases in cardiovascular hyper reactivity (Charan, 2013), decreases in HR & BP (Pramanik, 2011).

Earlier studies on Yoga nidra shows that decrease in anxiety & depression symptoms, increases in BP (Khushbu, 2012), hand grip strength, HR Ratio (Monika,2012), decreases in ESR level & stress (Kamakhya, 2012), decreases in anxiety , emotional reactivity and increased feeling of relaxation (Stankovic,2011).

But there are lack studies on effect of Nadi Suddhi, Bhramari Pranayama and Yoga Nidra on stress, sleep and quality of life among female school teachers. Hence, the present study has been selected.

CHAPTER IV

AIMS AND OBJECTIVE

4.1. Aim of the study:

The aim of the study is to see the effect of Nadi Suddhi, Bhramari Pranayama and Yoga Nidra on stress, sleep and quality of life among Female school teachers.

4.2. Objectives of the study:

1. To assess school teachers Perceived stress level.
2. To find out the Quality of life among the School teachers.
3. To find out quality of sleep among the school teachers.

4.3. Motivation for the study:

The research student of this study has worked in the schools and she is been observing teachers stress, poor quality of life and other associated problems with related to work this motivated the student to take up this topic for the research.

4.4. Hypothesis:

Yoga nidra, Nadi shuddhi and Bhramari Pranayama has an effect on stress, sleep & Quality of life among School Teachers.

4.5. Null Hypothesis:

Yoga nidra, Nadi shuddhi and Bhramari Pranayama has no effect on stress, sleep & Quality of life among School Teachers.

CHAPTER V

METHODOLOGY

5. Subjects

5.1 Source of subjects

There are 66 teachers are working in The Canadian Public school and Apollo Public School, Peenya , Bangalore. Out of which 60 respondents were considered for the study.

5.2 Sample Size

The total number of participants for the study is 60 (n=60)

5.2 Inclusion Criteria:

- Female teachers with age ranged from 22-60 years.
- Subject with no known clinical health diseases with relevant regular medication.
- Subject who is willing to participate
- Subject are not exposed to yoga

5.3 Exclusion Criteria:

- Subjects with any medical illness.
- Subject with any psychiatric disorder.
- Subjects who had earlier exposed to yoga.
- Pregnant woman.
- Subjects who have underwent recent surgery.

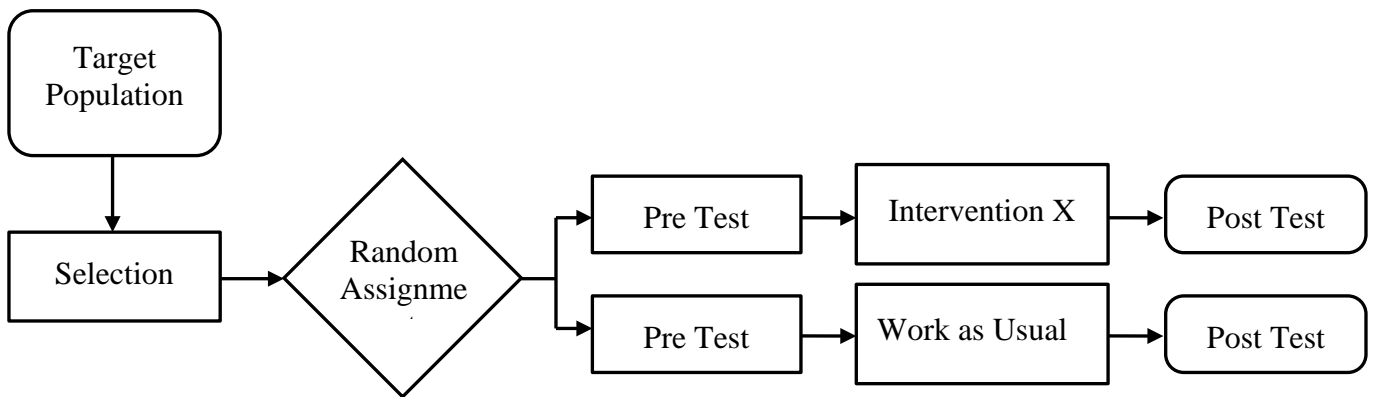
5.4. Informed consent

Informed signed consent was taken from all the participants at the commencement of the study. It was informed to the participants that the information they provide will be kept highly confidential.

5.5 Research Design:

An experimental single group pre post design.

5.6 Design of Study



5.7. Interventions:

Yoga Nidra

Yoga nidra, derived from the tantras, derived from 2 Sanskrit words, yoga meaning one-pointed awareness, and nidra means sleep. It is a powerful technique in which relaxation happens consciously. The essence of yoga nidra is awareness.(Swami Hridayananda 1979)

Yoga nidra is a systematic method of inducing complete physical, mental and emotional relaxation. In Yoga nidra the state of relaxation is reached by turning inwards, separated from external experiences and sleep. It is one aspect of pratyahara which leads to higher states of concentration and Samadhi just like pratyahara in Raja yoga from Patanjali (Swami Satyanada)

Yoga nidra is a practice which can be widely applied in the modern world to improve the quality and increase the happiness of human life. The word yoga means inner communion; it is the process that leads to this state. Nidra means sleep. Yoga nidra is the simple, yet profound technique of yogic sleep which has been found useful in the following areas:

The practice: Yoga nidra can be divided into the following nine stages:

1. Preliminary adjustment of the body
2. Preliminary relaxation of the whole body
3. Preliminary relaxation of the mind
4. Sankalpa or resolve, a short simple statement of your individual aim.
5. Rotation of awareness through all the parts of the body, external and internal
6. Visualization.
7. Return to external awareness.

Yoga nidra means sleep with a state of inner awareness. There is a big difference between ordinary sleep and psychic sleep in yoga nidra. In ordinary sleep there is no awareness, either internal or external. In yoga nidra, on the other hand, there is wakefulness to the internal environment (Swami Satyanada)

Pranayama:

Nadi Suddhi Pranayama

- Sitting in any meditative posture.
- Adopting Nasika Mudra
- Close the Right nostril with the right thumb and exhale completely through the left nostril. Then Inhale deeply through the same left nostril, exhale
- Close the left nostril with your ring finger of the Nasika Mudra, release the right nostril. Now exhale slowly and completely through the right nostril.
- Inhale deeply through right nostril. Then close the right nostril and exhale through left nostril. This is one round of Nadi Suddhi Pranayama.

Bhramari Pranayama

- Assume Cinmudra.
- Inhale deeply.
- Exhaling, produce a low pitched sound N- Kara resembling the humming of a female bee.
- Feel the vibrations in the entire head.
- This is one round.

Measurements (Variables)

1. Perceived Stress Scale (PSS)

The PSS is a widely used psychological instrument for perception of stress. Items were designed to determine how unpredictable, uncontrollable, and overloaded respondents find their lives. The scale also includes a number of direct queries about current levels of experienced stress. It has 10 questions about the feelings and thoughts during the past month (ref). Validity and reliability of the test has been documented in many studies (ref).

Scoring: PSS scores are obtained by reversing responses (e.g., 0 = 4, 1 = 3, 2 = 2, 3 = 1 & 4 = 0) to the four positively stated items (items 4, 5, 7, & 8) and then summing across all scale items. A short 4 item scale can be made from questions 2, 4, 5 and 10 of the PSS 10 item scale(Cohen,1993).

2. Quality of Life (WHQOL)

WHQOL-BREF is a standardized comprehensive instrument for assessment of Quality of life. It consisted of 28 items. This was developed by the World Health Organization. It measures an individual's perception of quality of life for the four domains: (1) Physical health (2) psychological health (3) social relationships and (4) environmental health. In addition, it also includes two questions for 'overall quality of life' and 'general health facets. The domain scores are scaled in a positive direction (i.e., higher scores denotes higher quality of life. The range of scores is 4-20 for each domain. The internal consistency of WHQOL-BREF ranged from 0.66-0.87(Chronbach's alpha co-efficient). The scale has been found to have good discriminate validity. It has good test retest reliability and is recommended for use in health surveys and to assess the efficacy of any intervention at suitable intervals to the need of the study. (Padmini, 2010)

3. Pittsburgh Sleep Quality Index

Pittsburgh is a self rated questionnaire which assesses sleep quality and disturbances over a one month time interval. Nineteen individual items generate seven 'components' scores: subjective sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbances, use of sleep medications, and daytime dysfunction. The sum of scores of all these seven components yields one global score. Clinical and clinometric properties of PSQI were assessed over an eighteen months period with "good" sleepers (healthy subjects n=52) and "poor" sleepers (depressed patients, n=54; sleep disorder patients n=62). Acceptable measure of interval homogeneity, consistency (test-retest reliability) and validity were obtained. A global PSQI score > 5 yielded a diagnostic sensitivity of 89.6 % (kappa=0.75, p<0.001) in distinguishing between good and bad sleepers (Daniel, 1998).

CHAPTER VI

DATA EXTRACTION AND DATA ANALYSIS

Statistical analysis was done using SPSS, version 10.0 (SPSS, Chicago, IL, USA). The values were checked for normal distribution by the Shapiro-Wilk test. As the data were not normally distributed, analyses of the data were done using Mann-Whitney and Wilcoxon Signed Ranked test within and between groups comparison.

CHAPTER VII

RESULTS

7.1. PERCEIVED STREE SCALE (PSS)

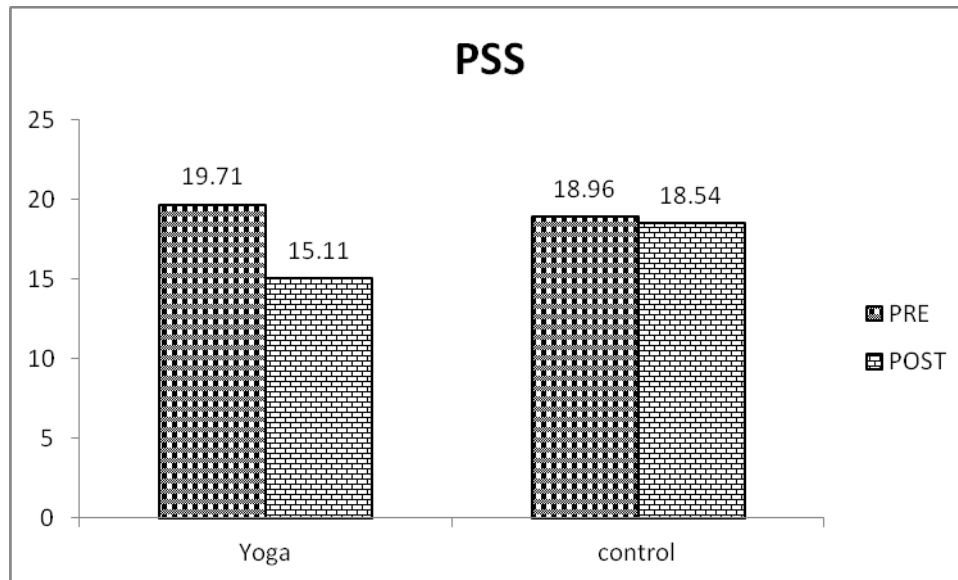
Perceived stress scale reduced (PSS) reduced in yoga group (23%, $p < 0.001$) with significant difference between groups ($P < 0.001$).

TABLE. Changes in PSS after intervention in both groups.

Variables	Group	PRE	POST	% change	Sig- P values		
					Within Gps (Wilcoxon)	Between Gps (Mann-whiney)	
					Pre/Post	Pre/pre	Post/post
PSS	Yoga N=28	19.71±4.39	15.11±3.15	23%	0.001	0.509	0.001
	Control N=26	18.96±4.42	18.54±3.96	2%	0.020		

Wilcoxon's signed ranks test (within groups); Mann Whitney U test (Between groups)
 Legend: There is significant difference between groups with better improvement in Yoga group.

GRAPH: 7.1. PERCEIVED STREE SCALE (PSS)



7.2. PITTSBURG SLEEP QUALITY INDEX (PSQI)

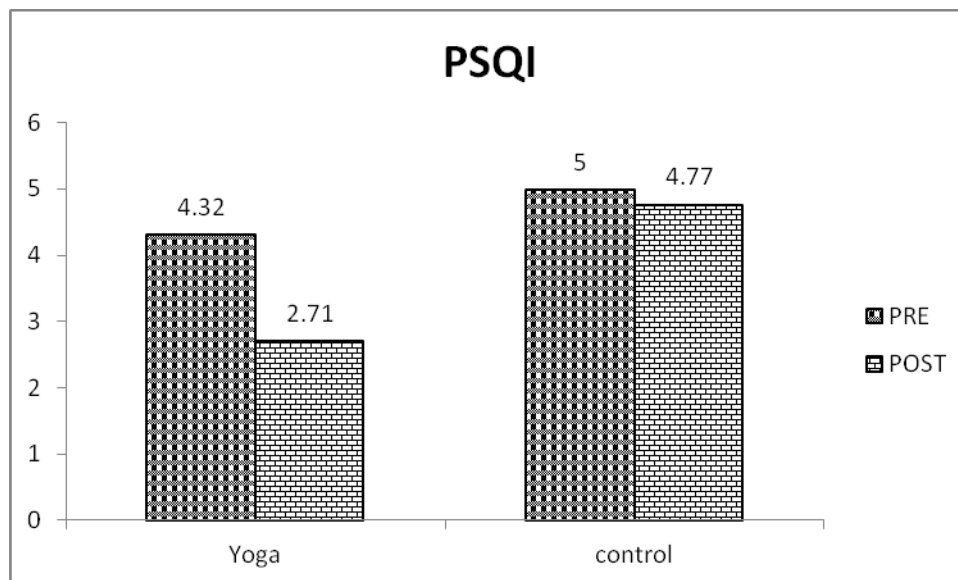
Pittsburg sleep quality index (PSQI) reduced in yoga group (37%, $p < 0.001$) with significant difference between groups ($P < 0.001$).

TABLE. Changes in PSQI after intervention in both groups.

Variables	Group	PRE	POST	% change	Sig- P values		
					Within Gps (Wilcoxon)		Between Gps (Mann-whiney)
					Pre/Post	Pre/pre	Post/post
PSQI	Yoga N=28	4.32±1.96	2.71±1.56	37%	0.001	0.648	0.017
	Control N=26	5.00±3.24	4.77±2.97	4%	0.014		

Wilcoxon's signed ranks test (within groups); Mann Whitney U test (Between groups)
 Legend: There is significant difference between groups with better improvement in Yoga group.

GRAPH: 7.2. PITTSBURG SLEEP QUALITY INDEX (PSQI)



7.3. QUALITY OF LIFE (QOL-Brief)

There is improvement in the Quality of Life in Yoga Group

Physical Health in yoga improved from (15%, $p < 0.001$) with significant difference between groups ($p < 0.001$) in control group by 1.5% with significant difference between groups ($p < 0.001$).

Psychological Health in yoga improved from (20%, $p < 0.001$) with significant difference between groups ($p < 0.001$) in control group by 5% with significant difference between groups ($p < 0.001$).

Social Relation in yoga improved from (26%, $p < 0.001$) with significant difference between groups ($p < 0.001$) in control group by 7% with significant difference between groups ($p < 0.001$).

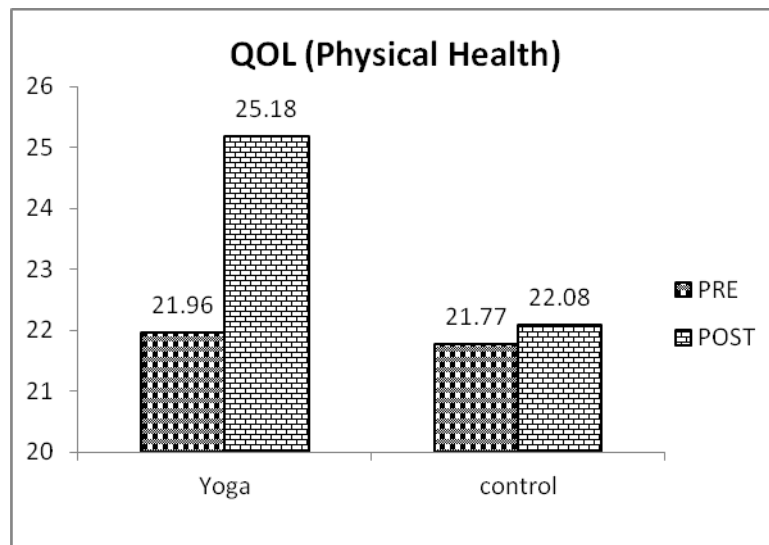
Environmental Health in yoga improved from (25%, $p < 0.001$) with significant difference between groups ($p < 0.001$) in control group by 1.5% with significant difference between groups ($p < 0.001$).

TABLE. Changes in QOL after intervention in both groups.

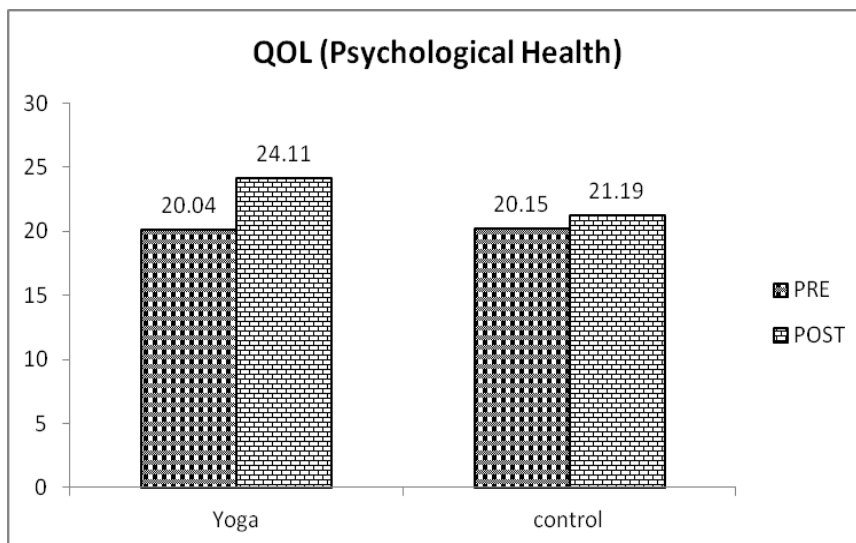
Variables	Group	PRE	POST	% change	Sig- P values			
					Within Gps (Wilcoxon)		Between Gps (Mann-whitney's)	
					Pre/Post	Pre/pre	Post/post	
QOL (Physical Health)	Yoga N=28	21.96±2.47	25.18±2.34	15%	0.001	0.786	0.001	
	Control N=26	21.77±2.70	22.08±2.21	1.5%	0.468			
QOL (Psychological Health)	Yoga N=28	20.04±2.33	24.11±0.74	20%	0.001	0.294	0.001	
	Control N=26	20.15±3.83	21.19±3.27	5%	0.017			
QOL (Social relation)	Yoga N=28	11.11±1.73	14.04±1.86	26%	0.001	0.629	0.001	
	Control N=26	11.35±2.04	12.15±1.26	7%	0.024			
QOL (Environmental)	Yoga N=28	27.36±5.28	28.07±5.84	25%	0.752	0.664	0.958	
	Control N=26	27.62±4.17	28.08±3.92	1.5%	0.172			

Wilcoxon's signed ranks test (within groups); Mann Whitney U test (Between groups)
Legend: There is significant difference between groups with better improvement in Yoga group.

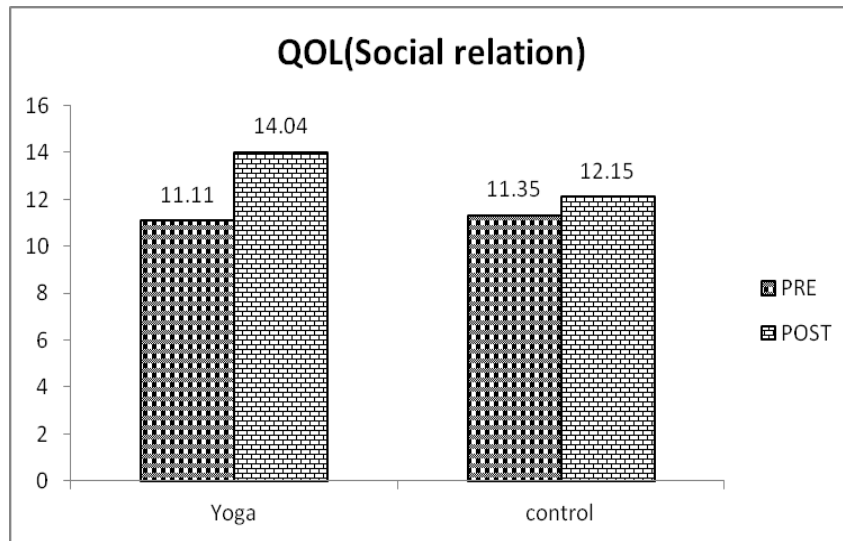
GRAPH: 7.2. QUALITY OF LIFE (Physical health)



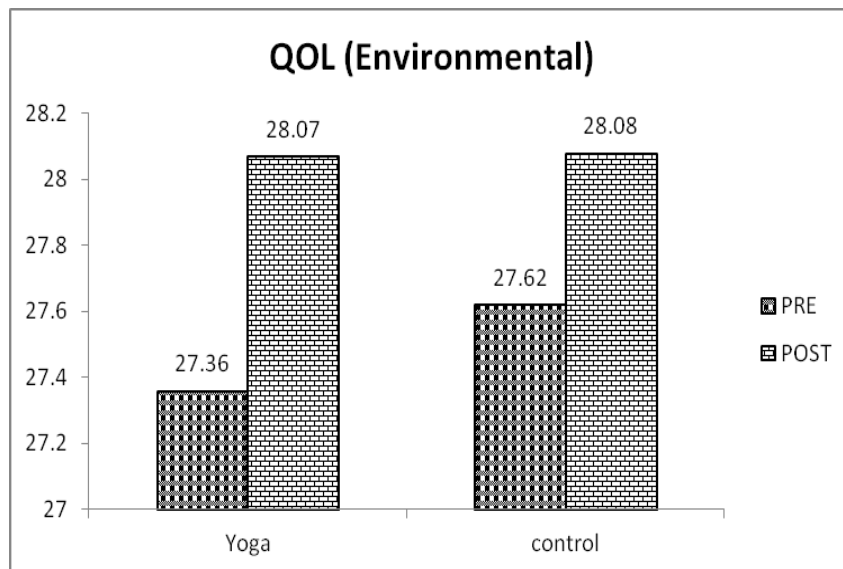
GRAPH: 7.2. QOLLITY OF LIFE (Psychological health)



GRAPH: 7.2. QOLLITY OF LIFE (Social relationship)



GRAPH: 7.2. QOLLITY OF LIFE (Environmental)



CHAPTER VIII

DISCUSSION

Comparison with earlier studies

1. Earlier studies using randomized control trial on the effects of Nadisuddhi pranayama on perceived stress and cardiovascular functions in young healthy students. With sample size of $n=30$ suggested that was given for 30 min, 3 times a week for the duration of 12 weeks There was a significant decrease in mean PSS difference of 4.67 and SD of 4.5 is 0.99 which shows sample size was adequate and strength of the study is good (Vivek, 2013).

2. Nadishuddhi Pranayama effect on autonomic functions on healthy volunteers females with sample size of $n=30$ for 12-weeks were studied in test and There was a significant decrease in female diastolic blood pressure response to isometric hand grip test was the significance level were fixed at $p < 0.05$.

3. Earlier studies on Bhramari pranayama and OM chanting on pulmonary function in healthy individuals with sample size of $n=30$ for the period of 6 days/week for 2 weeks result showed a significant improvement in slow vital capacity (SVC), forced vital capacity (FEC), along with peak expiratory flow (PEF), with a significant reduction in weight in independent sample *t*-test. Forced expiratory flow (FEF) and maximal voluntary ventilation (MVV); and significant reduction in weight and BMI in Student's paired *t*-test. $P < 0.05$ was considered as significant (A Moovenha, 2014).

4. Earlier studies on The impact on ESR (Erythrocyte Sedimentation Rate) level through yoga nidra on healthy subjects for 30 min for 6 months duration With sample size of 40 female suggested that, there is a significant reduction in ESR levels the significant level for observing the *t* value is 0.01 and shows the significant change in ESR level *t* value 2.82(Kamakhya, 2012).

5. Yoga nidra on stress, anxiety and general well being on college going students, Practice time was 30 minutes the duration was 6 months With sample size of $n=40$ suggested that, significant change positively decrease the stress level *t* value is 0.01 and it shows the significant

change in stress level as “t” value is 7.89. It is observed that in anxiety level there is no significant change on “t” value at 0.01 significant levels as it is 1.86 only(Kamakhyia, 2004)

Present Findings:

Perceived Stress Scale (PSS), Reduced In Yoga Group (23%, $P < 0.001$) With Significant Difference Between Groups ($P < 0.001$). Pittsburg Sleep Quality Index (PSQI) Improved (37%, $P < 0.001$) With Significant Difference between Groups ($P < 0.001$). Quality Of Life there is Improvement In The Quality Of Life In Yoga Group Physical Health (15%, $P < 0.001$) with significant difference between groups ($p < 0.001$) in control group by 1.5% with significant difference between groups ($p < 0.001$). Psychological Health (20%, $P < 0.001$) with significant difference between groups ($p < 0.001$) in control group by 5% with significant difference between groups ($p < 0.001$). Social Relation (26%, $P < 0.001$) with significant difference between groups ($p < 0.001$) in control group by 7% with significant difference between groups ($p < 0.001$). Environmental Health (25%, $P < 0.001$) with significant difference between groups ($p < 0.001$) in control group by 1.5% with significant difference between groups ($p < 0.001$).

CHAPTER – IX

CONCLUSION

Three weeks of intervention (Nadisuddhi, Bhramari & Yoga nidra) helps in reducing perceived stress, improved sleep & Quality of life among female school teacher.

CHAPTER – X

APPRAISAL

10.1 Strength of the study

- It was experimental single group Pre-Post design , This study encompasses the fields of yogic science and psychology therefore, it is a unique study
- This study utilizes the mindful practice of Nadisuddhi, Bhramari Pranayama and Yoga Nidra relaxation , to the beneficial effect on School Teachers, which is very important for mental health of our community.
- No earlier study was reported on effect of Yoga Nidra , Nadisuddhi and Bhramari Pranayama in School Teachers .

10.2 Limitations of the study

- Practice can be extended to more than 30 min
- To increase more Sample size

10.3 Scope for future studies

- Experimental single group pre post design with a large sample size should be performed.
- Apply this technique to various other Stress related disorders and compare the responses
- Compare the effect of Yoganidra with other mind-body relaxation techniques

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APPENDIX – 1

INFORMED CONSENT FORM

Title: Effect of Nadi Suddhi, Bhramari Pranayama and Yoga Nidra on stress, sleep and quality of life among Female school teachers.

Information to the participants:

We understand that you -. Studies show that the practice of yoga has a positive influence on the overall quality of life and in reducing stress, sleeping problems and anxiety.

Thus this study, conducted as a part of the Degree program, your consent is sought to take part in the study. If you consent to take part in this study, the investigator will interview you along with other participants. In this interview, the interviewer will ask you some demographic questions. The interview and the tests are expected not to cause any serious adverse effect on your physical or mental health. During the entire period of the study you will continue with your routine daily work activities.

Please note that you have a right to refuse to take part in the study at any time. Your refusal will not adversely affect your daily routine. Please also note that the information you are going to divulge to us will be kept in utmost confidentiality.

Undertaking by the investigator:

Your consent to participate in the above study is sought. You have a right to refuse consent or withdraw the same during any part of the study without giving any reason. I undertake to maintain complete confidentiality regarding the information obtained from you during the course of the study. If you have any doubts about the study, please feel free to clarify the same. Even during the study you are free to contact the investigator for clarifications if you so desire. The phone number of the investigator is given below:

Investigator Name	Phone Number
Name of the student	

Consent:

I have been informed about the procedures of the study. The possible risks too have been explained to me as stated in the information. I/ have understood that I/ have the right to refuse my consent or withdraw it any time during the study without adversely affecting me. I am aware that by subjecting to this investigation, I will have to give more time to assessments by the investigating team and that these assessments do not interfere with the benefits.

Signature of the Participant
(Name and Address)

Signature of the investigator
(Name and Designation)

Date:

Place:

APPENDIX II
DEMOGRAPHIC DETAILS OF THE PARTICIPANTS

Name:

Address:

Age:

Genders:

Education (Highest only):

Marital Status:

Type of family :

Name of the school:

Any Medical complications:

Signature of the participant

signature of the student

Date :

Place :

Appendix III

Measurements

PERCEIVED STRESS SCALE

The following questions ask about your feelings and thoughts during THE PAST MONTH. In each question, you will be asked HOW OFTEN you felt or thought a certain way. Although some of the questions are similar, there are small differences between them and you should treat each one as a separate question. The best approach is to answer fairly quickly. That is, don't try to Count up the exact number of times you felt a particular way, but tell me the answer that in eneral seems the best. For each statement, please tell me if you have had these thoughts or feelings: never, almost never, sometimes, fairly often, or very often. (Read all answer choices each time).

i) Never Almost, ii) Never, iii) Sometimes Fairly, iv) Often, v) Very Often

B.1. in the past month, how often Have you been upset because of? Something that happened unexpectedly?

0 1 2 3 4

B.2. in the past month, how often have you felt unable to control the Important things in your life?

0 1 2 3 4

B.3. in the past month, how often have you felt nervous or stressed?

0 1 2 3 4

B.4. in the past month, how often have you felt confident about your Ability to handle personal Problems?

0 1 2 3 4

B.5. in the past month, how often have you felt that things were going? Your way?

0 1 2 3 4

B.6. in the past month, how often have you found that you could not? Cope with all the things you had to do?

0 1 2 3 4

B.7. in the past month, how often have you been able to control?

Irritations in your life?

0 1 2 3 4

B.8. in the past month, how often have you felt that you were on top?

Of things?

0 1 2 3 4

B.9. in the past month, how often Have you been angry because of?

Things that happened that were Outside of your control?

0 1 2 3 4

B.10. in the past month, how often have you felt that difficulties were?

Piling up so high that you could not overcome them?

0 1 2 3 4

Perceived Stress Scale Scoring

Each item is rated on a 5-point scale ranging from never (0) to almost always (4). Positively worded items are reverse scored, and the ratings are summed, with Higher scores indicating more perceived stress.

PSS-10 scores are obtained by reversing the scores on the four positive items:

For example, 0=4, 1=3, 2=2, etc. and then summing across all 10 items.

Items 4, 5, 7, and 8 are the positively stated items.

Your Perceived Stress Level was _____

Scores around 13 are considered average. In our own research, we have found that high stress Groups usually have a stress score of around 20 points. Scores of 20 or higher are considered High stress, and if you are in this range, you might consider learning new stress reduction Techniques as well as increasing your exercise to at least three times a week. High psychological

Stress is associated with high blood pressure, higher BMI, larger waist to hip ratio, shorter Telomere length, higher cortisol levels, suppressed immune function, decreased sleep, and Increased alcohol consumption. These are all important risk factors for cardiovascular disease.

The Pittsburgh Sleep Quality Index (PSQI)

Instructions: The following questions relate to your usual sleep habits during the past month only. Your answers should indicate the most accurate reply for the majority of days and nights in the past month. Please answer all questions. During the past month,

1. When have you usually gone to bed?
2. How long (in minutes) has it taken you to fall asleep each night?
3. When have you usually gotten up in the morning?
4. How many hours of actual sleep do you get at night? (This may be different than the number of hours you spend in bed)

5. During the past month, how often have you had trouble sleeping because you...	Not during the past month (0)	Less than once a week (1)	Once or twice a week (2)	Three or more times week (3)
a. Cannot get to sleep within 30 minutes				
b. Wake up in the middle of the night or early morning				
c. Have to get up to use the bathroom				
d. Cannot breathe comfortably				
e. Cough or snore loudly				
f. Feel too cold				
g. Feel too hot				
h. Have bad dreams				
i. Have pain				
j. Other reason(s), please describe, including how often you have had trouble sleeping because of this reason(s):				
6. During the past month, how often have you taken medicine (prescribed or "over the counter") to help you sleep?				
7. During the past month, how often have you had trouble staying awake while driving, eating meals, or engaging in				
8. During the past month, how much of a problem has it been for you to keep up enthusiasm to get things done?				
	Very good (0)	Fairly good (1)	Fairly bad (2)	Very bad (3)
9. During the past month, how would you rate your sleep quality overall?				

Component 1	#9 Score.....	C1
Component 2	#2 Score (≤15min=0; 16-30 min=1; 31-60 min=2, >60 min=3) + #5a Score (if sum is equal 0=0; 1-2=1; 3-4=2; 5-6=3)	C2
Component 3	#4 Score (>7=0; 6-7=1; 5-6=2; <5=3)	C3
Component 4	(total # of hours asleep)/(total # of hours in bed) x 100 >85%=0, 75%-84%=1, 65%-74%=2, <65%=3	C4
Component 5	Sum of Scores #5b to #5j (0=0; 1-9=1; 10-18=2; 19-27=3).....	C5
Component 6	#6 Score	C6
Component 7	#7 Score + #8 Score (0=0; 1-2=1; 3-4=2; 5-6=3).....	C7
Add the seven component scores together		Global PSQI Score

Buysse, D.J., Reynolds III, C.F., Monk, T.H., Berman, S.R., & Kupfer, D.J. (1989). The Pittsburgh Sleep Quality Index: A new instrument for psychiatric practice and research. *Journal of Psychiatric Research*, 28(2), 193-213.

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WHOQOL - BREF



PROGRAMME ON MENTAL HEALTH
WORLD HEALTH ORGANIZATION
GENEVA

For office use only

	Equations for computing domain scores	Raw score	Transformed scores*	
Domain 1	$(6-Q3) + (6-Q4) + Q10 + Q15 + Q16 + Q17 + Q18$ $\square + \square + \square + \square + \square + \square + \square$	=	4-20	0-100
Domain 2	$Q5 + Q6 + Q7 + Q11 + Q19 + (6-Q26)$ $\square + \square + \square + \square + \square + \square$	=		
Domain 3	$Q20 + Q21 + Q22$ $\square + \square + \square$	=		
Domain 4	$Q8 + Q9 + Q12 + Q13 + Q14 + Q23 + Q24 + Q25$ $\square + \square + \square + \square + \square + \square + \square$	=		

* Please see Table 4 on page 10 of the manual, for converting raw scores to transformed scores.

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ID number

--	--	--	--	--	--

ABOUT YOU

Before you begin we would like to ask you to answer a few general questions about yourself: by circling the correct answer or by filling in the space provided.

What is your gender? Male Female
What is your date of birth? _____ / _____ / _____
Day / Month / Year

What is the highest education you received? None at all
Primary school
Secondary school
Tertiary

What is your marital status? Single Married Living as married Separated Divorced Widowed

Are you currently ill? Yes No

If something is wrong with your health what do you think it is? _____ illness/ problem

Instructions

This assessment asks how you feel about your quality of life, health, or other areas of your life. Please answer all the questions. If you are unsure about which response to give to a question, please choose the one that appears most appropriate. This can often be your first response.

Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life in the last two weeks. For example, thinking about the last two weeks, a question might ask:

	Do you get the kind of support from others that you need?	Not at all 1	Not much 2	Moderately 3	A great deal 4	Completely 5
--	---	-----------------	---------------	-----------------	-------------------	-----------------

You should circle the number that best fits how much support you got from others over the last two weeks. So you would circle the number 4 if you got a great deal of support from others as follows.

	Do you get the kind of support from others that you need?	Not at all 1	Not much 2	Moderately 3	A great deal 4	Completely 5
--	---	-----------------	---------------	-----------------	-------------------	-----------------

You would circle number 1 if you did not get any of the support that you needed from others in the last two weeks.

Please read each question, assess your feelings, and circle the number on the scale for each question that gives the best answer for you.

		Very poor	Poor	Neither poor nor good	Good	Very good
1(G1)	How would you rate your quality of life?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
2 (G4)	How satisfied are you with your health?	1	2	3	4	5

The following questions ask about how much you have experienced certain things in the last two weeks.

		Not at all	A little	A moderate amount	Very much	An extreme amount
3 (F1.4)	To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
4(F11.3)	How much do you need any medical treatment to function in your daily life?	1	2	3	4	5
5(F4.1)	How much do you enjoy life?	1	2	3	4	5
6(F24.2)	To what extent do you feel your life to be meaningful?	1	2	3	4	5

		Not at all	A little	A moderate amount	Very much	Extremely
7(F5.3)	How well are you able to concentrate?	1	2	3	4	5
8 (F16.1)	How safe do you feel in your daily life?	1	2	3	4	5
9 (F22.1)	How healthy is your physical environment?	1	2	3	4	5

The following questions ask about how completely you experience or were able to do certain things in the last two weeks.

		Not at all	A little	Moderately	Mostly	Completely
10 (F2.1)	Do you have enough energy for everyday life?	1	2	3	4	5
11 (F7.1)	Are you able to accept your bodily appearance?	1	2	3	4	5
12 (F18.1)	Have you enough money to meet your needs?	1	2	3	4	5
13 (F20.1)	How available to you is the information that you need in your day-to-day life?	1	2	3	4	5
14 (F21.1)	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5

		Very poor	Poor	Neither	Good	Very good

				poor nor good		
15 (F9.1)	How well are you able to get around?	1	2	3	4	5

The following questions ask you to say how good or satisfied you have felt about various aspects of your life over the last two weeks.

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
16 (F3.3)	How satisfied are you with your sleep?	1	2	3	4	5
17 (F10.3)	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18(F12.4)	How satisfied are you with your capacity for work?	1	2	3	4	5
19 (F6.3)	How satisfied are you with yourself?	1	2	3	4	5
20(F13.3)	How satisfied are you with your personal relationships?	1	2	3	4	5
21(F15.3)	How satisfied are you with your sex life?	1	2	3	4	5
22(F14.4)	How satisfied are you with the support you get from your friends?	1	2	3	4	5
23(F17.3)	How satisfied are you with the conditions of your living place?	1	2	3	4	5
24(F19.3)	How satisfied are you with your access to health services?	1	2	3	4	5
25(F23.3)	How satisfied are you with your transport?	1	2	3	4	5

The following question refers to how often you have felt or experienced certain things in the last two weeks.

		Never	Seldom	Quite often	Very often	Always
26 (F8.1)	How often do you have negative feelings such as blue mood, despair, anxiety, depression?	1	2	3	4	5

Did someone help you to fill out this form?.....

How long did it take to fill this form out?.....

Do you have any comments about the assessment?

.....

THANK YOU FOR YOUR HELP

RAW DATA

PSS

Sno	Name	age	Group	pss- pre	pss- post
1	Mamatha	35	1	22	16
2	Shobha Ramesh	58	1	20	15
3	Sarasa. K	46	1	18	14
4	Pavithra.J	29	1	17	14
5	Jemima suresh	31	1	18	15
6	Yeshoda	26	1	21	17
7	Padma	32	1	13	11
8	Usha .B	30	1	16	12
9	Harmeet Pannu	37	1	19	14
10	Lakshmi.B.M	29	1	18	12
11	Seethamma.v	27	1	28	22
12	Prabha V Kumar	50	1	22	18
13	Premakumari R	32	1	14	17
14	Rumina	37	1	20	18
15	Pramoda BM	26	1	19	16
16	Veena BS	36	1	29	15
17	Shobha S	46	1	17	14
18	Gayathri	45	1	16	15
19	Shilpa	32	1	23	18
20	Manjula v	38	1	28	22
21	Renuka KP	29	1	20	19
22	Vijaya NC	45	1	25	22
23	Shobha GK	44	1	15	10
24	Rehana s	34	1	26	23
25	Nagalakshmi A	41	1	21	19
26	Shylaja Kulkarni	46	1	17	16
27	G Indra	37	1	15	13
28	Namratha R	41	1	15	12
1	Radha BR	50	2	15	15
2	Anjan K	32	2	21	20
3	Sudha	40	2	30	28
4	V. Rajkumari	52	2	23	23
5	Mangala ML	46	2	20	20
6	Vani M	36	2	18	18
7	Anupama R	40	2	19	19
8	Akhila S	31	2	20	18
9	Jagadeeshwari DC	46	2	14	14
10	Kusuma R	32	2	16	16
11	Sandya N	39	2	20	18
12	Rajalakshmi R	28	2	17	17

13	Vijayakumari Y	43	2	18	16
14	Varshini	35	2	22	20
15	Ratnamma S	42	2	22	20
16	Farida Farooq	50	2	15	15
17	Shubha R	43	2	15	15
18	Lekhana	34	2	26	22
19	Bharathi Dattatri	50	2	16	16
20	Kalpna Nagraj	27	2	14	14
21	Lakshmi Prerana	37	2	28	26
22	Shilpa LV	32	2	21	21
23	Mekhala N	34	2	13	13
24	Nethra C	28	2	14	14
25	Pallavi Prakash	35	2	20	18
26	Latha CS	25	2	16	16

PSQI

slno	Name	age	group	PSQIpre	PSQIpost
1	Mamatha	35	1	6	1
2	Shobha Ramesh	58	1	6	3
3	Sarasa. K	46	1	3	2
4	Pavithra.J	29	1	7	4
5	Jemima suresh	31	1	5	4
6	Yeshoda	26	1	1	1
7	Padma	32	1	2	2
8	Usha .B	30	1	4	1
9	Lakshmi.B.M	29	1	4	2
10	Seethamma.v	27	1	4	1
11	Prabha V Kumar	50	1	4	1
12	Premakumari R	32	1	3	1
13	Rumina	37	1	8	5
14	Pramoda BM	26	1	2	1
15	Shobha S	46	1	6	4
16	Deepa LV	35	1	2	2
17	Gayathri	45	1	0	0
18	Shilpa	32	1	4	3
19	Manjula v	38	1	7	4
20	Renuka KP	29	1	5	3
21	Vijaya NC	45	1	4	4
22	Shobha GK	44	1	4	3
23	Rehana s	34	1	4	3
24	Nagalakshmi Ana	41	1	4	3
25	Shylaja Kulkarn	46	1	8	6
26	G Indra	37	1	6	6

27	Namratha R	41	1	4	3
28	Nalini K	39	1	4	3
1	Radha BR	50	2	9	9
2	Anjan K	32	2	9	8
3	Sudha	40	2	9	9
4	V. Rajkumari	52	2	5	5
5	Mangala ML	46	2	4	4
6	Vani M	36	2	9	9
7	Anupama R	40	2	7	7
8	Akhila S	31	2	6	6
9	Jagadeeshwari D	46	2	9	8
10	Kusuma R	32	2	2	2
11	Sandya N	39	2	9	8
12	Rajalakshmi R	28	2	4	4
13	Vijayakumari Y	43	2	2	2
14	Varshini	35	2	1	1
15	Ratnamma S	42	2	4	4
16	Farida Farooq	50	2	1	1
17	Shubha R	43	2	3	3
18	Lekhana	34	2	9	8
19	Bharathi Dattat	50	2	2	2
20	Kalpana Nagraj	27	2	2	2
21	Lakshmi Prerana	37	2	9	8
22	Shilpa LV	32	2	3	3
23	Mekhala N	34	2	8	7
24	Nethra C	28	2	1	1
25	Pallavi Prakash	35	2	1	1
26	Latha CS	25	2	2	2

QOL (BRIEF)

slno	Name	age	Group	QOL-1pre	QOL-1post	QOL-2pre	QOL-2post	QOL-3pre	QOL-3post	QOL-4pre	QOL-4post
1	Mamatha	35	1	24	28	18	22	10	16	24	23
2	Shobha R	58	1	23	28	21	24	12	12	33	32
3	Sarasa. K	46	1	22	22	20	24	12	15	24	25
4	Pavithra.J	29	1	19	23	19	24	12	16	29	29
5	Jemima suresh	31	1	15	20	19	24	10	14	27	28
6	Yeshoda	26	1	24	27	19	24	10	15	32	32
7	Padma	32	1	24	23	27	27	15	15	34	34
8	Usha .B	30	1	25	26	21	24	13	16	29	29
9	Harmeet P.	37	1	22	21	21	24	11	10	26	25
10	Lakshmi.B.M	29	1	23	24	20	24	13	13	28	37
11	Seethamma.v	27	1	22	25	20	24	7	16	23	21
12	Prabha V K	50	1	23	23	19	24	13	13	25	25

13	Premakumari R	32	1	23	22	21	24	11	15	26	25
14	Rumina	37	1	22	27	21	24	10	17	28	28
15	Pramoda BM	26	1	23	23	21	24	9	14	36	36
16	Veena BS	36	1	18	25	20	24	8	15	25	29
17	Shobha S	46	1	19	25	17	24	11	15	20	21
18	Deepa LV	35	1	25	28	24	24	13	12	33	31
19	Shilpa	32	1	21	27	21	24	12	15	29	38
20	Renuka KP	29	1	21	29	20	24	10	12	26	35
21	Vijaya NC	45	1	25	26	18	24	10	12	29	27
22	Shobha GK	44	1	18	27	16	25	10	16	20	20
23	Rehana s	34	1	23	26	17	24	11	14	20	20
24	Nagalakshmi A.	41	1	21	25	16	24	10	10	16	16
25	Shylaja Kulkarni	46	1	20	25	20	24	11	12	22	22
26	G Indra	37	1	21	26	20	24	11	13	30	30
27	Namratha R	41	1	25	28	22	24	13	15	37	33
28	Nalini K	39	1	24	26	23	25	13	15	35	35
1	Radha BR	50	2	21	20	17	17	10	10	20	20
2	Anjan K	32	2	21	20	18	18	12	12	24	24
3	Sudha	40	2	17	22	17	17	8	12	23	23
4	V. Rajkumari	52	2	21	19	22	22	10	10	24	24
5	Mangala ML	46	2	21	22	21	21	12	12	27	27
6	Vani M	36	2	23	20	15	15	9	12	28	26
7	Anupama R	40	2	23	22	21	21	10	10	27	27
8	Akhila S	31	2	17	20	15	15	12	12	30	28
9	Jagadeeshwari	46	2	18	20	22	22	12	12	30	30
10	Kusuma R	32	2	22	22	23	23	12	12	29	29
11	Sandya N	39	2	16	16	10	15	8	12	18	22
12	Rajalakshmi R	28	2	21	22	20	20	13	13	23	23
13	Vijayakumari Y	43	2	22	22	23	23	12	12	29	29
14	Varshini	35	2	25	26	23	23	14	14	32	30
15	Ratnamma S	42	2	19	22	16	20	8	12	20	25
16	Farida Farooq	50	2	25	23	21	21	10	10	30	30
17	Shubha R	43	2	23	23	20	22	12	12	29	29
18	Lekhana	34	2	20	22	14	22	9	12	27	27
19	Bharathi D.	50	2	23	23	21	21	12	12	30	34
20	Kalpana Nagraj	27	2	24	22	25	25	13	13	30	30
21	Lakshmi P.	37	2	26	23	23	23	14	14	30	35
22	Shilpa LV	32	2	21	24	21	25	12	12	32	32
23	Mekhala N	34	2	24	24	23	25	13	13	33	33
24	Nethra C	28	2	25	25	26	26	15	15	32	32
25	Pallavi Prakash	35	2	24	26	23	25	14	14	28	28
26	Latha CS	25	2	24	24	24	24	9	12	33	33

INTERVENTION PICTURES

