

# EFFECT OF YOGA BASED LIFESTYLE INTERVENTION ON EMOTIONAL STABILITY AND MEMORY IN SCHOOL CHILDREN

Dissertation submitted by

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Under the guidance of

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Towards the partial fulfilment of

Master of Science in Yoga (M.Sc.Yoga Therapy)



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## **CERTIFICATE**

This is to certify that Shweta Solanki is submitting this Research on “EFFECT OF INTEGRATED APPROACH OF YOGA THERAPY (IAYT) ON EMOTIONAL STABILITY & MEMORY IN ADOLSCENTS” towards partial fulfilment of the requirement for the Master of Science (Yoga Therapy), conferred by Swami Vivekananda Yoga Anusandhäna Samsthäna (S-VYASA), Bangalore. This is a record of the original work carried out by her in this institution and has not previously formed the basis for the award of any degree

Date:

Place: Bangalore

Guide: Dr. Saubhagyalakshmi M.Sc., PhD

## **DECLARATION**

I, hereby declare that work presented in this dissertation is done by me. This experimental research was carried out under the guidance of Saubhagyalakshmi M.Sc., Ph.D, Swami Vivekananda Yoga Anusandhäna Samsthäna (SVYASA), Bangalore

I also declare that the subject matter of my dissertation entitled “EFFECT OF INTEGRATED APPROACH OF YOGA THERAPY” has not previously formed the basis of the award of any diploma, degree, associate-ship, fellowship or other similar titles.

Date:

Place: Bangalore

Shweta solanki

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**STANDARD INTERNATIONAL TRANSLITERATION CODEUSED TO  
TRANSLITERATE SANĀKRIT WORDS**

a	=	A	ia	=	'	pa	=	p
ä	=	Aa	ca	=	c	pha	=	)
i	=	#	cha	=	D	ba	=	b
é	=	\$	ja	=	j	bha	=	É
u	=	%	jha	=	H	ma	=	m
ü	=	^	ï	=		ya	=	y
â	=	\	öa	=	q	ra	=	r
è	=	§	öha	=	Q	la	=	l
e	=	@	òa	=	f	va	=	v
ai	=	@e	òha	=	F	ça	=	z
o	=	Aae	ëa	=	[	ña	=	;
au	=	AaE	ta	=	t	sa	=	s
à	=	A	tha	=	w	ha	=	h
ù	=	A>	da	=	d	kña	=	]
ka	=	k	dha	=	x	tr	=	Ç
kha	=	o	na	=	n	jia	=	}
		ga	=	g	gha	=	"	

## **Abstract**

**Introduction:** Emotional stability it means a person's "ability to remain calm or even keel when faced with pressure or stress." And it was revealed as a significant predictor of career concerns. Furthermore, a moderating effect of gender and a mediating role of career decision self-efficacy were revealed in this context for adolescents. It's very crucial because at this age they face lot of changes in their life. They must be capable for taking the decisions for their career and should be able to improve their social behaviour which leads to the good confidence level.

**Methods and materials:** In the present study, 60 participants with age ranged between (8-14 years) was taken from personality development camp (PDC) at swami Vivekananda yoga Anusandhana Samsthana (S-VYASA) Bangalore. PDC participants were undergone for 10-day yoga based life style intervention program and compared their emotional stability and memory before starting their session and after completing their session.

60 participants underwent yoga training i.e., Integrated approach of yoga therapy, (IAYT) everyday, 2 hour for 10 day. The variables like quality of life, emotional stability, memory and self monitoring level were recorded before and after the intervention.

**Result:** significant were found in Self monitoring scale, Emotional regulation questionnaire but it did not found in the Everyday memory test

**Conclusion:** :Complete (IAYT) practice, spiritual lectures, other curriculum activities influence their emotional level, good memory in adolescents they felt some little change in their life and also stability.

**Key words:** emotional stability, memory, Self Monitoring, Personality Development

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# CHAPTER 1

## INTRODUCTION

### 1.0 Emotion

Emotion is a strong feeling. It adds colour and spice to our life. Emotions cause both positive & negative effects depending upon the type of emotion. Hence regulating emotion is very important. Indian scriptures have given us enormous knowledge regarding how to regulate emotions. One among them is Patanjali yoga sutras; the purpose of this study is to know the concept of emotion regulation according to Maharishi Patanjali & in brief according to modern psychology.

### 1.1 Kinds of emotions

Researchers on emotions state that there are two types of human emotions: positive and negative emotions. The following are the list of emotions

- **Positive emotions:**

The pleasant emotions like affection, love, amusement, curiosity & happiness which are very helpful & essential for normal development are termed as positive emotions. Eg- Love, appreciation happiness, hope, enthusiasm, vitality, confidence, gratitude, patience, trust, optimistic & appreciation (Mangal, 2005).

- **Negative emotions:**

Unpleasant emotions like fear, anger & jealousy which are harmful to the individual's development are termed as negative emotions. eg- fear, guilt, anger, depression, pride, jealousy, self-pity, anxiety, resentment, envy, frustration, shame, denial, offended, negative , regret, resentful, sad, worried & grief (Mangal,2005).

### 1.2 Importance of children's social needs

One of the strongest social needs during childhood appears to be a desire for social approval. This is a social world, and there is ample evidence that, other things being equal, man is best satisfied when his behaviour is approved of by his peers. Although the research literature on the effects of praise and blame on children's behaviour is far from clear-cut (Hurlock; chase, hunnicut, 1924), there is substantial evidence that children seek the social approval of their

parents, teachers, and peers. There is also the additional finding that children who typically are not able to secure social approval are likely to underrate their effectiveness (sears, 86, 1940) and to have lower evaluations of their personal effectiveness and worth whileness.

A wise parent or teacher who realizes the potency of the child's need for social approval can do much to control his behaviour. Children who have become negativistic or aggressive under excessive disapproval often blossom under appropriate and sincere administrations of social approval.

Children also appear to have different needs for dependence, autonomy, achievements, defence, and so on. The motivation-needs systems of children are complex, are intimately tied up with prior learning, and be used effectively by adults in planning the present and future learning experiences of children.

### **1.3 Relationship between intelligence & memory**

The more intelligent the child, the better he usually does in his school work. A large number of research reports support this generalisation. Bryan (12, 1934) has conducted an investigation that throws some interesting light on the obtained relationship between memory and intelligence during childhood. Two hundred children between five and six years of age were given 11 tests of memory for various types of material, a vocabulary test, and the Stanford-Benet test of intelligence. The result revealed that the role memory in children is much more highly related to general intelligence than it is in adults. Memory appears, indeed, to play a significant role in the early adjustments of the child.

### **1.4 Emotional strength impact on human health**

As we all know that emotions play a very crucial role on physical health. It can change it also (Schacter et.al., 2011) explain that to motivate the adaptive behaviours significantly added to the survival of humans were the primary role of emotions. News in health stated that studies open a link between positive emotional states and improve health. The presence of emotion when turn into strength can affect the recovery of the patient (Cabalsa 2011).

### **1.5 How yoga helps to improve emotional stability**

Basically emotional stability refers to the ability to modulate one or stable and a set of emotions (i.e., the ability to control and influence the emotions we feel, when we are in the circle of emotions and when we feel them , then what we experience and how express them;

(Gross,1998).Practice of yoga asana decreases fatigue and changes the mood status, great impact on emotional well-being, (Nagpal&Sell,1985) and improving stability of life. It improved emotional function and decreased emotional irritability, decreased tiredness, and increased energy. supervised studies showed that asana, breathing, and meditation practices significantly decreased anxiety, depression, and perceived stress. Several studies reported that Integrated Yoga and Hatha Yoga (Pol & Dattaram,2009) increased satisfaction in life. found that breath control and asana practice produced a marked increase in alertness and enthusiasm. These practices positively change one's personality. A recent study found that Hatha Yoga practice “brings a positive transformation in the personality traits, especially thoroughness (Gobec,Travis, 2018).

In this study lot of yoga asana practices, which included at least some degree of effort, Maharishi Yoga Asana are practiced in a slow and comfortable moving, with no strain required. The aim of Maharishi Yoga Asana is to turn the attention. Maharishi Yoga Asana are considered to be preparation for Transcendental Meditation (TM) practice, which follows (Gobec,Travis, 2018).

In the present article, we clearing the potential of yoga for developing emotional stability and skills. In addition to being an ancient Indian practice that seeks to foster spiritual development (Telles& Raghavendra, 2011), we all know the benefits of yoga that its very helpful for stability our mind and it was naturally born as a means to cease mental fluctuation and instability (Taimini, 2006). Hence, yoga considered the only path to balancing emotions and homeostasis.

With regard to yoga practice frequency, previous yoga intervention studies have mostly focused on three different types of yoga practitioners: 1–3-times-weekly practice (Brisbon ,Lowery,2011 ), >3-times-weekly practice (Gootjes, Franken, 2011) or previously yoga-naïve subjects exposed to 1–3-times-weekly yoga practice (Mackenzie, Streeter ,2013). These more recreational practice frequencies are in strong disparity to how yoga is traditionally practiced, that is, a daily practice in the morning. This type of frequent practice is advocated to facilitate psychological and physiological health most effectively (Smith, Pukall 2009;Steiner, Sanchez . 2016).

Few prior studies have examined change in emotional health of high school students in a rural context. Considering the multifaceted nature of emotional health, and stability this research aims to identify the patterns and spread the changes and stability of the emotional

health of rural Pennsylvania youth. It also investigates the impact of family, peers, school, and the community environment on rural adolescents' emotional health (Wang,Hageddorn,2018).

## **FINDINGS:**

According to 4 recognizably different subgroups of rural adolescents were identified. Among them 50% of the adolescents from the sample felt emotionally strong, or positive, in both 9<sup>th</sup> and 11<sup>th</sup> grades. Roughly 60% of rural youth remained in the same emotional health category from 9<sup>th</sup> to 11<sup>th</sup> grade, but a substantial minority experienced change in emotional health. One-fifth reported lower emotional health status in 11<sup>th</sup> grade, and one-fifth indicated more positive emotions in 11<sup>th</sup> than in 9<sup>th</sup> grade. We found strong proof of family, school, community, and peer impact on the emotional health of rural youth in 9<sup>th</sup> grade (Wang , Hagedorn , 2018).

### **1.6 Stability level in adolescents**

Stability shows and explains the level of a person presents to be emotionally stable under various conditions and not risky to anger, panic, depression, and/or other types of high emotional ups and downs (Cheng,Furnham, 2016). Similarly, emotional stability as a personality trait is expected to vary due to different contextual (i.e., classroom) effects (Wood,Denissen,2015). It has been found that an individual's behaviours and personality traits are calibrated by functionality requirements, which initiate as conditional adaptations that become more permanent the longer the person is exposed to the effects of a specific context (Wood, Giudice ,2011). Some contextual effects (i.e., schools) on levels of emotional stability could influence its association with OCS during late adolescence and, therefore, need to be controlled/addressed by the conducted analyses (i.e., in the present study random effects due to the classroom of the participants were controlled at level 3) (Vasillis, Kathleen,et.al., 2017 ).

### **1.7Adolescents**

It is the mid part of the childhood and teenager (12-18 years), children's ability to modulate their emotions induces, and emotional decisions become more differentiated as a function of motivation, emotion type, and social-contextual factors (Gnepp, Zeeman, 1986). . Adolescents' raises awareness of the interpersonal consequences for a particular display of emotion and changing social relationships with parents versus peers influences their decisions

to express certain emotions to particular individuals (Fuchus, Zeeman, 1989). For i.e, adolescents are more likely to express emotions when a supportive reaction is expected. (Fuchus, Zeeman, 1989). Interestingly, eight g-grade adolescents compared with other age groups report altering their emotional expressions more to their mothers than other family members or peers (Shipman, Zeeman, 1998). Finally, although social or self-conscious emotions such as shame and pride have already emerged, these emotional experiences may induces in intensity or frequency in adolescence given adolescents' heightened sensitivity to the evaluations of others (Zeeman, Cassano 2006).

### **1.8 Other benefits of yoga on adolescents**

There are at least 2 tools by which the practice of yoga may improve cognitive ability. Both may serve to improve mood and reduce stress which helps the adolescents to stable in life. Hath yoga has been reported to gives improvements in mood swings ,memory problem as compare to aerobic exercise (Berger & Owner, 1992) so this is one process of mechanism. As an extra, the practice of yoga give an special importance to body awareness and indulges focusing one's attention on breathing or specific muscles or p-arts of body. It is not a far leap from yoga sutra (1, 2), says that yoga is the control of the moving of the mind (*cīttah*),” to consider attention focus as a major aspect of yoga practice. It is unknown whether the attention practice in yoga would generalize to conventionally assessed attention function. (James, 1890).So basically later it improves their emotional stability due to it they can easily cope with all future coming hurdles in their life.

### **Need of the study**

However, the changes that actual happens at their emotional stability & memory related performance of the children undergoing any kind of yoga intervention have not been done. Hence, the present study has been designed to assess the efficacy of P.D.C on memory and emotional stability in school children. We are designed this study with the interest and focus on this segment so that the student can get the benefits of this emotional stability technique which will help them how to modulate emotional responses.

## CHAPTER 2

### REVIEW OF ANCIENT LITERATURE

**TITLE-** Concept of emotional stability according to ancient scripture

#### 2.1 Introduction

Emotions from the central organizing dynamic of the mind, which seeks to know the phenomenal world. Emotions activate mental activity & shape the formation of events in the mind important clusters of events that contribute to a sense of self.

Yoga has to say about controlling the emotions control the mind, the seat of all emotions, says Raja yoga. Think of others before you think of yourself, says karma yoga. Realize that you are not in this mind, says jnana yoga. Sublimate them by surrendering yourselves to the lord, says bhakti yoga.

Emotional stability in yoga is tied to stilling the mind & not identifying with this mental/emotional process. The yogi has developed skills derived from yogic practice & emotions are present without being lost in them. This is essentially what patanjali states as the goal of yoga in sutra2:”*Yogas’ cittavrittinirodhah*”. Yoga is the stilling of the whirlpools of the mind.

In yoga psychology, emotions correspond most closely to patanjali concept of *citta vratti* “whirlpools” of thought, feeling, sensation and action that seek to know & participate in prakriti the material world.

#### 2.1 Aim

To find out the concept of emotional stability, memory power according to ancient scriptures.

#### 2.2 Objectives

1. Understand the concept of the emotions, memory, monitoring power according to ancient scriptures.
2. Acknowledge the consequences of emotional stability according to ancient scriptures.
3. To find out the process of emotional stability according to ancient scriptures.

### 2.3 Textual Resources

- Patanjali yoga sutra
- Bhagwad gita

Concept of emotion according to Patanjali Yoga Sutra:

Our Indian scriptures also explain in detail regarding different types of emotions

- ❖ The following sutra from Patanjali yoga sutra explains the two types of emotions in chapter two

सुखानुशयि रागः ।

दुःखानुशयि द्वेषः ॥

*sukhanuśayi rāgaḥ*

*dukhanuśayi dveśaḥ*

Attachment can be defined as absorption in the pleasures of the world. Aversion can be defined as repulsion for the things of the world. Likes and dislikes lead to conflict and unhappiness in life. *Rāga* and *dveśaḥ* are opposite feelings, two sides of mind.

Likes and dislikes bind us to lower level of consciousness. *Rāga* accompanies pleasure (Attachment) and *dveśaḥ* accompany pain/ repulsion (Aversion). Whenever there is an object of pleasure and the mind runs after it, wishing to have the pleasurable experience again and again, this is called *Rāga*. One can eliminate *Rāga* from one's personality with little effort. *dveṣaḥ* is the opposite *Rāga* and *dveśaḥ* bind us down to the lower levels of consciousness. So long as they are there the mind cannot be raised to spiritual heights *dveṣaḥ* should be removed first and then *raga* will also go. When *dveśaḥ* is removed, meditation becomes deeper and then *raga* can be given up.

When we practice yoga regularly all our mental modifications can be changed. Our mind will be free from all *kleiśāḥ*.

Patanjali clearly understood the concept that each individual is unique, according to their

predominance/ specific characteristics he designed specific yoga path, Bhakti yoga for those who are emotionally & devotionally inclined.

Unhappiness is the universal problem of man-kind. Patanjali yoga aims to enable an individual to explore all layers of the mind to bring about self realization perfect freedom.

॥ते हृदपरितपफलह् पुन्यपुन्यहेतुत्वत ॥

*te hradaparitapaphalah punyapunyahetutvat*

(Acc. to B.G)

Happiness & suffering depend upon the kind of acts done in the past. Act of punya (merit) will give happiness and act of apunya (demerit) will cause sadness/misery.

This law is universal in action & in application. The effects of karma are mathematically obtained and thus we get various fruits in the form of birth, span of life & experience, which may be enjoyable or distressing.

॥वृत्तयः पन्चतय्यःक्लिष्टाऽक्लिष्टाः ॥

*vrttayah pancatayyah klistā'klistāh*

Acc to (P.Y.S 1/5)

This verse from chapter one, talks about modifications of mind ; they are painful or not painful in nature. When we are worried, anxious or full of passion or full of grief, jealousy, compassion, love for fellow humans or love for god, this is also one of the patterns of mind modification. This particular modification is called as *vrtti*.



**Smriti according to Bhagvad Gita:**

ध्यायतो विषयान् पुंसः संगस्तेषुपजायते ।

संगात् संजायते कामः कामात् क्रोधोभिजायत् ॥

*dhyāyato viṣayān puṁsah saṅgasteṣupajāyate*  
*saṅgāt sañjāyate kāmaḥ kāmāt krodhobhijāyat*

Memory is the base of imagination and thoughts . man is thought to be intellectual due to the power of remembrance as the old experiences remain with him as impression . lack of memory leads to loss of knowledge (*Buddhi*) which may destroy the individual.

॥क्रोधद्भवति सम्मोहाः सम्मोहत्स्मृतविभ्र ।

स्मिभ्रम्सद् बुद्धनसो बुद्धिनसत्प्रनस्यती ॥

*krodhadbhavati sammohāḥ sammohatsmrtivibhra*  
*smribhramsad buddhanaso buddhinasatpranasyatī*

The man dwelling on sense objects develops attachment for them; from attachment springs up desire which in turn gives birth to anger. From anger arises infatuation; infatuation leads to confusion of memory; from confusion of memory, loss of reason finally leading mental illness and complete ruin.

मय्यावेश्यमनो ये मां नित्ययुक्ता उपासते ।

श्रद्धया परयोपेतास्ते मे युक्ततमा मताः ॥

*mayyāveśyamano ye māṁ nityayuktā upāsate*  
*śradghayā parayopetāste me yuktatamā matāḥ*

Sri Bhagvan said : I consider them to be the best yogis , who endowed with supreme faith , and ever united through meditation with me, worship Me with the mind centered on me.

Like the celebrated cowherd damsels of vraja , a devotee has his mind absorbed in God Almighty , who is the supreme object of love and is ever engaged in loving meditation on his virtues , glory and essence even while attending to his daily round of activities.

Accepting with reverence as more than evident , the existence of God , his various descents , his utterances , power , virtues , glory , sports and greatness etc is what is supreme faith and he who cultivates absolute dependence on God like the great prahlada is said to be endowed with supreme faith . The term yuktatamah is a synonym of the word yogavittamah (knower's of yoga) is present in the verse of which Arjuna uses in verse one.

॥मय्येव मन आधत्स्व मयी बुधि निवेशय ।

निवसिष्यसि मय्येव अत ऊर्ध्वं न संशयः ॥

*mayyeva mana ādhatsva mayī budhi niveśaya*

*nivasiṣyasi mayyeva ata ūrdhvaṁ na saṁśayaḥ*

(B.G)

Therefore, fix your mind on me , and establish your intellect in me alone; thereafter you will abide solely in me; there is no doubt about it. Pervading the whole universe consisting of animate and inanimate beings , god is enshrined in the heart of all . He is an ocean of countless virtues like compassion, omniscience , amiability and cordiality etc And he who , having wholly withdrawn his attachment from everything else than his most beloved purusottama or God , merges his mind in him alone and remains constantly engaged in his thought in the aforesaid manner is said to have fixed his mind on God thus one can fix his/her mind or intellect on the divine and their emotions can be changed and it relates to *bhakti* and to worship God.

॥देशबन्धश्चित्तस्य धारणा ॥

*deśabandhaścittasya dhāraṇā*

(P.Y.S. 3/1)

### **Meaning**

Once mastery of the five stages of yoga from yama to pratyahara is achieved, the art of focusing the mind and consciousness is undertaken. *Dharna* is established when the mind learns to remain steady on its own, or hold on to an unmoving object.

*Dharna* is the art of reducing the interruptions of the mind and ultimately eliminating them completely, so that the knower and the known becomes one. *Dharana* may be focused on external or internal objects. External objects should be auspicious and associated with purity. Internally, the mind penetrates to the soul, the core of once being the object is, in reality, pure existence.

.तत्र प्रत्ययेकतानता ध्यानम ॥

*tatra pratyayaikatānatādhyānam*

[P.Y.S., Vibhuti pada ]

A steady, continuous flow of attention directed towards the same point or region is meditation (*dhyanam*). The characteristic feature of meditation (*dhyana*) is maintenance of an uninterrupted flow of attention on the fixed point or region , without intervention or interruption. In dhyana, psychological and chronological time come to a standstill as the mind observes its own behaviour. The intensity of attention in the field of consciousness neither alters nor wavers, remaining as stable, smooth and constant as oil pouring from a jug, maintaining the same intensity of awareness.

### **Summary**

Emotion is different from the deattachment, emotional awareness ,stability including the ability to identity your own emotion and though of others, the ability of harness emotion and apply them to tasks like thinking, problem solving our strong likes and dislikes, our hatred

and obsession our fears and moods all vanish when we surrender totally Bhagwad Gita teaches us how to contrpol our emotion. The goal of bhakti yoga in beautifully enunuciated below as' Ap prayer for the good of all , health and absence of misery and illness of all to reach divinity itself.

## CHAPTER– 3

### SCIENTIFIC LITERATURE REVIEW

#### **Yoga for cognitive functions in children memory**

Remarkable effect of relaxation techniques on memory level ,stability, removes anger,anxiety and all are measured by the Digit –Letter Substitution Task (DLST), because of practice cyclic meditation (CM), a yoga relaxation technique, as equal to Supine Rest (SR). Sample was 253 school students, 156 boys, 97 girls, in age range is 13–16 years .They were attended the 10 day yoga camp where they experience criticality of yoga. After intervention they were assessed by the DLST worksheet consists of an 8 rows × 12 columns array of random digits 1–9. Subjects are seated with the worksheet upside down until the start of the test. The result shows the good changes in their stability, attention, memory (Pradhan & Negendra, 2009).

#### **Other mental health**

A study provided the evidence that a relatively brief yoga intervention to the 150 students assessed by the questionnaire and computer tests so the outcome was associated with a number of psychological benefits for boys and girls, such as improved frustration tolerance, focus, self-acceptance and awareness, as well as increased patience & stability (Galen,2009).

Another study on 450 participants, were taught integrated yoga module up to 60 days assessment were taken after the 60 day intervention. The result showed reduction of negative emotions and enhancement in positive emotions (Nagendra, Telles 1999).

#### **Modern methods to develop memory**

Yoga plays very crucial role for increasing and improving the memory also helps to gives monitoring power .there is research on it. for this study they took 198 samples from the high school in age range of (11 to 17) they attended a short tem yoga camp for 4 weeks only where they practice all the dynamic exercise of hatha yoga which stimulates their brain cells and after that they assessed by the automated Operational Span Task) and self-report measures of perceived stress (Perceived Stress Scale) and anxiety Screen for Childhood Anxiety Related Emotional Disorders which shows the great result which influence their emotional level ,memory improvement, reduction of anxiety (Telles,1999).

## **Yoga and adolescents**

The majority of available studies with children and adolescents suggest benefits to using yoga as a therapeutic intervention and show very few adverse effects. These results must be interpreted as preliminary findings because many of the studies have methodological limitations that prevent strong conclusions from being drawn. Yoga appears promising as a complementary therapy for children and adolescents. Further information about how to apply it most effectively and more coordinated research efforts are needed (Kaley-Isley, Lisa, 2010).

## **Yoga and emotional stability**

Yoga improves the emotional stability and reduces the negative thoughts in the mind (Smith et al., 2011). Yoga is the only formal practice of mental health significantly related to increases in nonjudgmental thoughts (Carmody & Baer, 2008). Research has found yoga based programs may have potential to increase subjective well-being and foster resiliency toward mental health in this study they took 200 students from the schools for the 60 days yoga camp and assess them through self monitoring test, computer test. Which shows the big change in their life after the practice they acknowledge their stability, improving memory, decision making (Baer, 2008; Gard, et al, 2012).

Yoga has been shown to increase quality of life, mindfulness, and self compassion and decreases stress (Gard, et al., 2012). Compassion is also a key component that can be learned from yoga. Self-compassion predicts stress and relates positively to mental and physical health (Gard, et al., 2012).

## **Importance of emotional stability in children**

Ability to monitor & control our own emotions Cash (1999) or self-regulation does not come easily to everyone and students with certain disabilities, emotional unstable that impact their social understanding it can be incredibly difficult and sometimes painful. The control of emotions and behaviours is crucial to success in all facets of life for the bright future of adolescents. Self-regulation also means altering them in accordance with the demands of the situation. Whether academic, athletic, social, etc., and knowing how and acting to improve in these areas. For social situations self-regulation is vital, especially during adolescence where friendships are of the utmost importance. If self regulatory behaviours are not ingrained by the time of the transition to college, the adolescent could be alienated and withdraw,

impacting his or her academic success as well (Zelazo and Lyons 2012) provide a more concise definition with self regulation being the ability for self-control over thought, feeling, and behaviour. They randomly selected 145 adolescents aged 13 to 18 for their 2 months yoga intervention afterwards they assessed them through computer test and logical questionnaire so this research shows the vitality of yoga that it induces or active our memory also helps to balancing our life and emotions

Mounting evidence suggests that emotional stability, works on other physiological functions of the body that tend to deteriorate, is often well-conserved even with aging (Charles, Scheibes, 2016). This general agreement regarding the conservation of emotional stability despite aging suggests a paradox to our understanding of aging. 286 healthy subjects aged (11 to 19) were selected for measuring their memory strength, assessment was taken after the 6 months intervention through, using the emotion recognition task (ERT) and resting-state functional brain magnetic resonance imaging (fMRI) afterwards founded that a great result it increases their monitoring power, self control, other effects (Ruffman, Goh, 2011).

**TABLE: LITERATURE REVIEW**

S.NO.	AUTHOR AND YEAR	S.S.	INTERVENTION PERIOD	ASSESSMENT TOOL	RESULT
1.	Das ,Madhusudhan,(2016)	210 children	10 day of yoga group	Through 2 questionnaire (TMT), (SET)	Yogā practices improves emotional stability, self monitoring and with fine mind and mental coordination, planning ability and cognitive performance.
2.	Leslie A. Daly Sara C. Haden,2015	120 participants from high schools (randomly selected)	16 week of yoga practices	Questionnaire of measuring their stability	yoga enhances the memory power strong the emotional level, enlargement of the capacities of adolescents to stable in their life.
3.	Naomi et al.,2012	160 children in 4 <sup>th</sup> & 5 <sup>th</sup> grade (age 8 to 11)	2 yoga sessions per week during the school day for 3 months.	Behaviour assessment scale teacher rating scale-child, the Swanson, kotkin,agler, m-flynn pelhan rating scale (SKAMP)	Teachers reported improved stability and attention in class & adaptive skills reduced depressive symptoms & internalizing symptoms also in the students.
4.	Pradhan and Nagendra ,2010	650 school students, age 13 to 16yrs	Yoga based relaxation techniques.	six letter cancellation task (SLCT)	The net score change in the CM session was significantly larger than the change in the SR
5	Kortterink JJ, Ockeloen LE, 2016	69 patients, ages 8 to 18 yrs.	10 weeks of yoga therapy (YT) and standard medical care. once a week	YT is a mixture of yoga poses, meditation,	Significant result for the standard medical care (SMC) but in yoga therapy give



			in group sessions	and relaxation exercises.	more reduction of instability of mind it shows much more effective than the SMC.
6	Quach D , Jastrowski Mano K, 2015	198 adolescents from a large public middle school	4 weeks (short term mindfulness, memory improving practices)	Automated Operational Span Task, Perceived Stress Scale and anxiety Screen for Childhood .	Participants in the mindfulness meditation condition showed significant improvements in working memory capacity, whereas those in the hatha yoga and waitlist control groups did not.
7	ButzerB, LoRusso, 2017	16 students were Randomly selected from the yoga condition	4 months yoga intervention	using mini-laptop computers equipped with REDCap survey software Each participant was provided with a separate mini-laptop computer for the duration of the testing session in order to privately complete the outcome measures.	Both positive and negative opinions of yoga, direct comparisons between yoga and physical education. Students had positive opinions regarding the beneficial effects of yoga on stress, sleep, stability, relaxation.
8	Manjunath, N. K.Telles, 2004.	16 students btwn the age of (11 to 18)	yoga for approximately 8 hours a day, for 10 days.	The verbal and spatial memory tests were assessed test material was projected on a screen, allowing 10 seconds for	data of yoga groups found to be normally increase in spatial memory scores. It shows that they are more stable and their

				each slide. After the 10 slides were shown.	cognitive power increases.
<b>9</b>	R Rangan, HR Nagendra, (2009).	49 boys of ages(11- 13yrs) selected from middle school.	10day yoga camp (asanas , pranayama, tratka)	Assessed by (spatial and verbal memory tests) applicable to Indian conditions before and after an academic year.	The test comparing the pre-post values within group showed that improvements in both groups. The GES boys showed highly significant greater improvements in memory than MES boys
<b>10</b>	H Nagendra, M. chaya.2012	200 school children from Bangalore	after 3 months of yoga intervention, and later at a 3- month follow-up.	using an Indian adaptation of the Wechsler Intelligence Scale for Children	There were no significant differences in cognitive performance between the two study groups (yoga versus physical activity) .but memory power was little improved.
<b>11</b>	S.Telles,N.Singh, 2013	98 school children (11 to16) randomly selected	Only 3 months	(i) Flamingo balance test (ii) Plate tapping test and some questionnaire test.	Impressive improvement in both groups in emotional stability, behavior with friends and behavior with teachers.

## **CHAPTER 4**

### **AIM AND OBJECTIVES**

#### **4.1 Aim**

The present study was aimed at assessing student's emotional stability following a residential yoga based lifestyle intervention.

#### **4.2 Objective**

The current study was planned with the objectives

- To study the emotional level in adolescents.
- To study the memory level in adolescents.
- To study the self monitoring quality in adolescents.

Following the practice of Integrated Approach of Yoga therapy (IAYT)

#### **4.3 Research question:**

- Will short duration of IAYT improve the Emotional stability in adolescents?
- Will short duration of IAYT improve memory in adolescents?
- Will short duration of IAYT improve self-monitoring in adolescents?

#### **4.4 Hypothesis**

The IAYT practices may bring positive outcome in Emotional stability.

The IAYT practices may bring positive outcome in self-monitoring.

The IAYT practices may bring positive outcome in memory in adolescents.

#### **4.5 Null hypothesis:**

- The IAYT may not effect in yielding good outcome in emotional stability in adolescents.
- Not effect in memory power in adolescents.
- Not effect on their self monitoring quality in adolescents.

## **CHAPTER 5**

### **MATERIALS AND METHODS**

#### **Methods**

##### **5.1 Sample size**

G-power was used to estimate sample size with effect size = 0.66;  $\alpha$ -value = 0.05 and power = 0.95; estimated sample size was 32 on the basis of emotional stability (Madhusudhan et al., 2016).

##### **5.2 Source of Sample**

In the present study, 60 participants with age ranged between (8-14 years) were taken from personality development camp (PDC) at swami Vivekananda yoga Anusandhana Samsthana (S-VYASA) Bangalore. PDC participants were undergone for 10-day yoga based life style intervention program and compared their emotional stability and memory before starting their session and after completing their session. How they feel that they are emotionally stable and after completing their session they are more stable. This 10-day practice really affects their personality or not.

##### **5.2 Inclusion criteria**

Following criteria were advocated to include the subjects for the study

- a. Adolescents between the age of 11 to 18
- b. No prior exposure to yoga
- c. Students those who are keen in taking part in the trial

##### **5.3 Exclusion criteria**

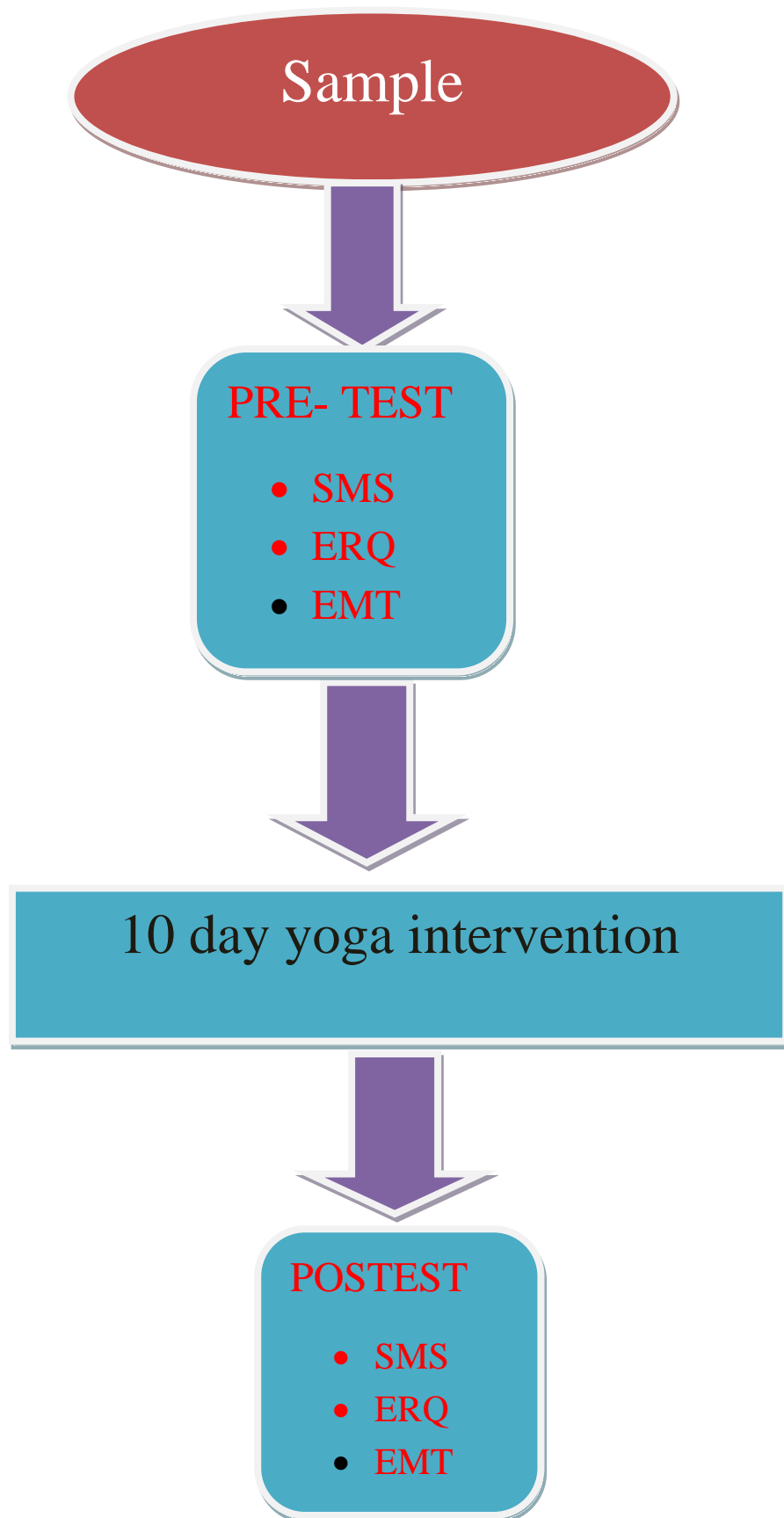
Following criteria were taken into consideration to exclude subjects

- a. Those who were under medication
- b. Those who don't know proficient English
- c. Those who had any neurological problem.

##### **5.4 Consent form**

The signed informed consent was obtained from the course coordinator of P.D.C.

## 5.5 Design of the study



## 5.6 Intervention

10-day Personality Development Camp (PDC) will have component of yoga lifestyle intervention will be given to all senior children. The PDC is consisting of yoga postures, breathing practices, spiritual lectures.

S.NO.	PRACTICE	TIME(IN MIN)
1	Starting prayer	2
2	Breathing practices, loosening exercise, yoga postures (IAYT).	48
3	DRT	8
4	Closing prayer	2
Total duration: 1 hour		

## **5.7 ASSESSMENT TOOL**

For 10 –day yoga based life style intervention effect will be assessing using state emotional stability and memory working questionnaires. The immediate effect of IAYT on emotional stability and working memory will be measured before and after practice.

- **Self- Monitoring Scale-{SMS}**

In this scale total 25 questions it was concerned their personal reactions how they are monitoring itself basically how they observe their regular activity day to day life style. It is a true false type test. In this test they have to answer very frankly and honestly and they can also able to observe their activity with awareness what they are doing wrong or Wright (Mark Snyder, 1974).

- **Emotion regulation questionnaire {ERQ}**

The emotion regulation questionnaire is designed to assess individual difference in the habitual use of two emotion regulation strategies: cognitive reappraisal and expressive suppression. Basically how to control regulate, manage their emotions. In this test there is total 10 questions. In test there is options like 1strongly disagree 4neutral 7strongly agree with help of this test they can judge thyselves properly (Garnefski et al, 2007).

- **Everyday Memory Questionnaire {EMT}**

In this test there is 28 statements based on their memory what kind of memory they have like they forget their belongings most of the times & they find difficulty to found their things, they cannot remember the things which happened in yesterday. In this test we are using following scale like 0= not at all, 1= about once, 2= more than once, but less than once a month etc (Lincoln, 2008).

## **CHAPTER 6**

### **DATA EXTRACTION AND ANALYSIS**

#### **6.1 Data extraction**

The data was collected from all participants using questionnaires and scoring was done using standard operated procedures suggested by respective assessment questionnaire.

#### **6.2 Data Analysis**

The scores obtained from questionnaires Self Monitoring Scale, Everyday Memory test, Emotional Regulation questionnaire were tabulated and inspected for extreme values and found two values in data. Mean and standard deviation was calculated using r studio.

Data was tested for normal distribution using Shapiro wilcoxon test and found it was not normally distributed, then for within group analysis was done using wilcoxon sign rank test.



## CHAPTER 7

### RESULTS

Shapiro wilcoxon test was conducted and found data was not normally distributed and hence non-parametric test wilcoxon test was done. Result showed changes in pre and post collections.

**With-in group analysis** is done using wilcoxon sign rank test

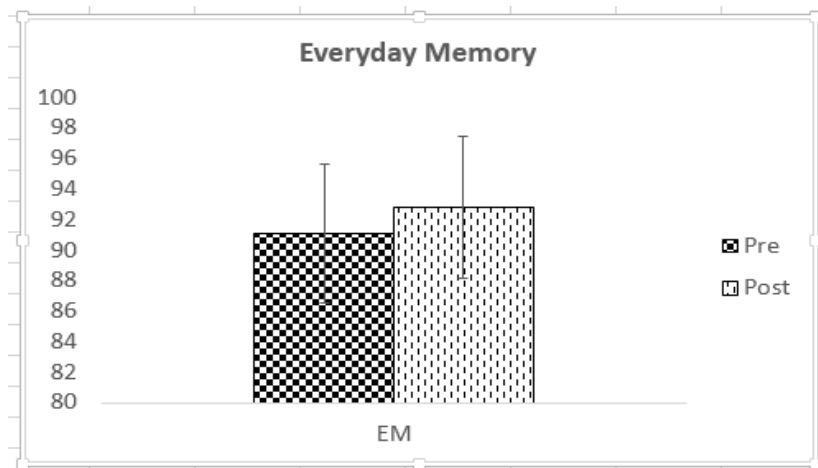
This was a single group study with pre post design. Sixty adolescent were selected based on inclusion criteria. Integrated Approach of Yoga Therapy (IAYT) for 10 days and 3 hour in a day was given to participants. Assessments were collected at first and last day of intervention. Emotional stability and memory was measured using questionnaire of emotional regulation test (ERT), to measure their emotional stability and everyday memory test (EMT), self - monitoring scale (SMS), to measure their working memory.

**Table-:** Table showing the Mean SD, % change,of yoga group of (IAYT) practice

s.no.	Variable	Pre Mean±SD	Post Mean±SD	% change	p-value
1	EMOTIONAL REGULATION TEST	33.93182± 6.028	34.97± 6.80	3.065	0.04
2	EVERYDAY MEMORY TEST	91.45± 10.47	92.77± 9.68	1.445	0.03
3	SELF MONITORING SCALE	15.04545 ± 2.940926	15.5± 1.976	3.065	0.35

The mean and SD of emotional regulation was 33.93 & 6.028 respectively which is changed to 34.97 & 6.80 with % change of 3.065 and with p-value 0.04 (<0.05); mean & SD of everyday memory test was 91.45 & 10.47 which is changed to 92.77 & 9.68 with p-value 0.03 (<0.05), and mean and SD of the last one is self monitoring scale was 15.04 & 2.9 which is changed to 15.5 & 1.976 with p-value 0.35.

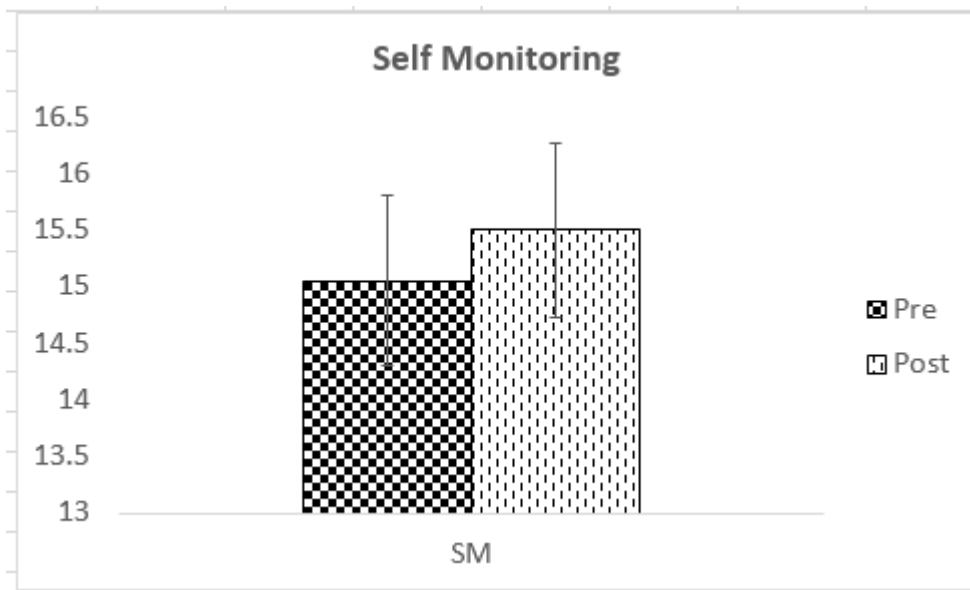
**Fig:1** Shows the graphical value of everyday memory test



**Fig:2** Shows the graphical value of emotional regulation test



**Fig:3** Shows the graphical value of self monitoring test



## **CHAPTER 8**

### **DISCUSSION**

#### **Summary of the result**

This study hypothesised that after 10 days yoga based personality Development Camp the emotion regulation, memory and self-monitoring will improve in the participants. The result of this study showed that emotion regulation ( $P=0.04$ ) and memory ( $P=0.03$ ) increased significantly whereas self-monitoring ( $P=0.35$ ) did not exhibit any significant improvement.

#### **Compare with previous study:**

These findings support those of the previous studies who observed improvement in emotional level, memory problems after yoga based intervention (Smitha&Hancock,2007, Dehghan&Adib, 2011). In this direction, another study found Integrated approach of yoga therapy (IAYT), to be a better intervention for mild instability and depressive symptoms but did not produce any effect to the patients with severe instability and poor attention patients (Telles, Singh, 2013). IAYT balances our mind and physical body, enhances the stability and the motor functions (Leslie, Sara, 2015) and maintain the physical and psychological fitness in Adolescence (Madhusudhan, 2016). Ten days of integrated approach of yoga therapy reduced the memory weakness, suppression of emotions, instability better than physical exercise ( Kaley-Isley, Lisa ,2010).

#### **Mechanism:**

Yoga reduces the sympathetic activity and helps in down modulation of HPA axis, which reduces the hyper activity of the mind. The practice of yoga in group improves the social interaction of the subjects. Further, study shows yoga based intervention improved trait mindfulness (Shelov,Suchday,2009) which may be a preventive method for the later development of negative emotional mood states which in turn enhanced mental wellbeing.

## **CHAPTER 9**

### **Appraisal**

#### **9.1 Strength of the study**

- Yoga practice was provided in a residential set up.
- All the students are regular and supportive.

#### **9.2 Limitation of the study**

- Less intervention time.
- No control group.
- Questionnaire based study and no apparatus is used.

#### **9.3 Scope for future study**

- Study with more clinical parameters can be planned.
- Intervention time can be increased.
- Sample size can be increased.
- Future research could include additional forms of assessment that extend and strengthen the self-report measures used in the current study.

## **CHAPTER 10**

### **CONCLUSION**

The ability to modulate and stable the emotions shapes the mind & directs it towards healthy way of living. Participants deeply observe their stability and check their memory power through different types of questionnaire they can easily get to know about themselves. 10 day of yoga practices gives them improvement on their emotional level and memory, monitoring power.

The present study shows that there are significant changes in reducing the parameters unstability, memory weakness, monitoring quality etc., and providing an evidence that rhythmic and daily practice of Yoga for particular period time can bring about remarkable changes in leading stable life and hence can be concluded saying that yogic practices may have ability to tranquil mind and reduce emotional problems.

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## CHAPTER 11

### APPENDIX

#### Consent form:



#### INFORMED CONSENT TO PARTICIPATE IN RESEARCH

#### SWAMI VIVEKANANDA YOGA ANUSANDHANA SAMSTHANA

Vivekananda Road, Kallabalu Post, Anekkal Taluk, Jigani, Bengaluru

[research@svyasa.org](mailto:research@svyasa.org); Phone: 080-22639983

**Title of the Project:** EFFECT OF INTEGRATED APPROACH OF YOGA THERAPY ON EMOTIONAL STABILITY AND MEMORY

**Principal investigator:** Shweta Solanki

**Organization:** Swami Vivekananda Yoga Anusandhana Samsthana

**This informed consent has two parts:**

- Information sheet (to share information about the research)
- Certificate of Consent (for signature if you allow to conduct the study)

**You will be given a copy of fully informed consent form.**

Your institution is being invited to participate in a research study. This form is designed to provide you with information about this study. The principal investigator or representative will describe this study to you and answer any of the questions. If you have any questions or complaints about the informed consent process or the research study.

There may be some words that you do not understand. Please ask the Principal investigator or the representative to stop as you go through the information in case of any doubts. If you have questions later you can ask during the study.

#### **Purpose of the Research:**

- Aim of this study is to assess the emotional stability and memory in the adolescents

#### **Participant selection:**

- Children between the age group of 13 to 19, and those who are willing to participate in the study. From the study children who are having any serious illness or under medication will be excluded.

**What will be the children asked to do if I agree to do the study?**

- Children will be in to yoga practices. Children will be asked to fill 3 sets of questionnaires before and 3 sets of questionnaire after intervention. Yoga will be taught to the experimental group for 10 days 120 minutes per day, and Data will be collected from experimental group.

**Are there any benefits for taking part in this research study?**

- This research study does not have any financial binding. All benefits out of the practice of yoga will be there.

**What are the dangers?**

- There are no potential dangers by participating in the study. You are free to withdraw from the study at any point of time.

**How will you keep he information confidential?**

- The assessment sheets will be coded with a number. Code number will be kept confidentially with the principal investigator .All information obtained in this study will be kept confidential unless disclosure is required by law.

**What if anyone want to leave the study?**

- Participants have the right to withdraw from the study at any point of time, without penalty.

**Details of intervention**

Experimental group:

S.NO.	PRACTICE	TIME (IN MIN.)
1	Starting prayer and preparation	2
2	Breathing practices, loosening , yoga postures	48
3	DRT	8
4	Closing prayer	2

**Whom to contact:**

- If you have any questions, you may ask them now or later, even after the study has started. If you wish to ask the questions later, you may contact

Researcher – Shwetasolanki

Mobile: 8861481165

Email- [shwetasolanki61@yahoo.in](mailto:shwetasolanki61@yahoo.in)

Guide - Dr. Soubhagyalakshmi

Mobile:

### **Voluntary consent by the head of the organization**

By signing this consent form, I am agreeing that I have read, or it has been read to me and I fully understand the contents of this document and I am openly willing to consent to conduct this study in our organization. In case of any problem or clarification, I may contact the above mentioned persons.

I agree            I do not agree

Name of the head of the institution:

Signature of the head of the institution:

Date:

### **Statement by the researcher/person taking consent:**

I have accurately read out the information sheet to the head of the organization, and to the best of my ability made sure that he understands that the following will be done:

1. Fill in 3 questionnaires before the intervention
2. Fill in 3 questionnaires after the intervention

I confirm that the head of the institution was given an opportunity to ask questions about the study, and all the questions have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this ICF has been provided to the head of the institution.

Name of Researcher/person taking the consent:

Signature of Researcher /person taking the consent:

Date:

Raw data

chandra	age	gender	SM_pre	SM_post	ER Pre	ER_Post	EMTPre	EMTPost
vishakha	11	F	17	18	37	32	85	96
anil	12	M	10	12	32	36	98	98
tabassum	14	F	15	12	40	36	83	86
ravi	11	M	17	18	39	39	99	99
kavitha	12	F	14	15	45	35	88	85
renuka	13	F	10	16	36	40	83	83
vijay	13	M	7	13	35	42	81	81
subudra	12	M	15	16	36	46	86	86
rudra	11	M	13	19	36	36	101	101
kirthi	15	F	15	16	39	39	106	106
gopalam	12	M	16	14	39	36	90	90
gautam	14	M	17	17	34	35	56	56
prince	15	M	15	15	37	37	105	105
karuna	14	F	19	19	35	36	123	123
jagrithi	14	F	14	14	36	39	155	155
niranjan	11	M	13	13	39	41	86	95
shikha	12	F	12	14	39	39	82	82
shruthi	15	F	16	16	35	35	84	86
madhu	12	M	10	12	38	40	86	99
rajni	12	F	20	15	41	45	96	96
naresh	10	M	21	16	43	49	56	68
kushagra	11	M	14	16	27	29	102	95
vishal	14	M	20	15	30	36	103	96
aparna	12	F	16	14	29	35	109	109
vidya	13	F	19	13	25	29	96	96
kumund	13	F	15	16	36	40	93	93
jai	15	M	13	18	35	39	95	95
ramu	14	M	19	16	26	26	96	96
nakul	12	M	15	19	28	28	85	86
pulkit	10	M	16	16	22	22	65	70
vaishali	11	F	19	13	19	19	90	90
ruhika	16	F	14	16	25	25	95	95
puneet	14	M	17	18	26	26	83	83
shaourya	12	M	18	18	41	41	80	80
rudraksh	13	M	17	17	43	46	73	73
vedant	13	M	14	14	36	37	105	105
hiranya	11	F	15	15	35	39	99	99
khushi	12	F	13	14	37	40	86	86
gayathri	11	F	15	15	37	26	83	83
padma	13	M	16	17	40	45	99	99
manav	13	M	12	13	30	39	100	100
bina	15	F	19	18	25	25	86	96
chandra	14	M	16	16	26	25	96	94
devendra	15	M	17	17	29	26	83	86
rohit	13	M	16	16	35	34	88	95
shreya	16	F	13	14	36	36	86	96
	12	F	10	15	37	36	86	89

## Self-Monitoring Scale

### INSTRUCTIONS

The statements below concern your personal reactions to a number of situations. No two statements are exactly alike, so consider each statement carefully before answering. If a statement is true or mostly true as applied to you, mark T as your answer. If a statement is false or not usually true as applied to you, mark F as your answer. It is important that you answer as frankly and as honestly as you can. Record your responses in the spaces provided on the left.

### THE SCALE

- ~~F~~ 1 I find it hard to imitate the behavior of other people.  
~~F~~ 2 My behavior is usually an expression of my true inner feelings, attitudes, and beliefs.  
~~F~~ 3 At parties and social gatherings, I do not attempt to do or say things that others will like.  
~~F~~ 4 I can only argue for ideas I already believe.  
~~F~~ 5 I can make impromptu speeches even on topics about which I have almost no information.  
~~F~~ 6 I guess I put on a show to impress or entertain people.  
T 7 When I am uncertain how to act in a social situation, I look to the behavior of others for cues.  
T 8 I would probably make a good actor.  
T 9 I rarely need the advice of my friends to choose movies, books, or music.  
T 10 I sometimes appear to others to be experiencing deeper emotions than I actually am.  
~~F~~ 11 I laugh more when I watch a comedy with others than when alone.  
~~F~~ 12 In a group of people I am rarely the center of attention.  
T 13 In different situations and with different people, I often act like very different persons.  
~~F~~ 14 I am not particularly good at making other people like me.  
T 15 Even if I am not enjoying myself, I often pretend to be having a good time.  
T 16 I'm not always the person I appear to be.  
~~F~~ 17 I would not change my opinions (or the way I do things) in order to please someone else or win their favor.  
T 18 I have considered being an entertainer.  
~~F~~ 19 In order to get along and be liked, I tend to be what people expect me to be rather than anything else.  
T 20 I have never been good at games like charades or improvisational acting.  
T 21 I have trouble changing my behavior to suit different people and different situations.  
T 22 At a party, I let others keep the jokes and stories going.  
~~F~~ 23 I feel a bit awkward in company and do not show up quite so well as I should.  
T 24 I can look anyone in the eye and tell a lie with a straight face (if for a right end).  
~~F~~ 25 I may deceive people by being friendly when I really dislike them.

### SCORING THE SCALE

The scoring key is reproduced below. You should circle your response of true or false each time it corresponds to the keyed response below. Add up the number of responses you circle. This total is your score on the Self-Monitoring Scale. Record your score below.

1. False    2. False    3. False    4. False    5. True    6. True    7. True    8. True    9. False    10. True  
11. True    12. False    13. True    14. False    15. True    16. True    17. False    18. True    19. True    20. False  
21. False    22. False    23. False    24. True    25. True

MY SCORE 17

Source: Snyder, 1974

KA Rishi Kumar

## Emotion regulation Questionnaire (ERQ)

Gross and John

9/03

The Emotion Regulation Questionnaire is designed to assess individual differences in the habitual use of two emotion regulation strategies: cognitive reappraisal and expressive suppression.

### Citation

Gross J J and John O P (2003) Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85, 348-362.

### Instructions and Items

We would like to ask you some questions about your emotional life, in particular, how you control (that is, regulate and manage) your emotions. The questions below involve two distinct aspects of your emotional life. One is your **emotional experience**, or what you feel like inside. The other is your **emotional expression**, or how you show your emotions in the way you talk, gesture, or behave. Although some of the following questions may seem similar to one another, they differ in important ways. For each item, please answer using the following scale:

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

- When I want to feel more *positive* emotion (such as joy or amusement), I *change what I'm thinking about*.
- I keep my emotions to myself.
- When I want to feel less *negative* emotion (such as sadness or anger), I *change what I'm thinking about*.
- When I am feeling *positive* emotions, I am careful not to express them.
- When I'm faced with a stressful situation, I make myself *think about it* in a way that helps me stay calm.
- I control my emotions by *not expressing them*.
- When I want to feel more *positive* emotion, I *change the way I'm thinking about the situation*.
- I control my emotions by changing the way I think about the situation I'm in.
- When I am feeling *negative* emotions, I make sure not to express them.
- When I want to feel less *negative* emotion, I *change the way I'm thinking about the situation*.

### Note

Do not change item order, as items 1 and 3 at the beginning of the questionnaire define the terms "positive emotion" and "negative emotion".

### Scoring (no reversals)

Reappraisal Items: 1, 3, 5, 7, 8, 10; Suppression Items: 2, 4, 6, 9.

Reference: Gross J J and John O P (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85, 348-362.

Research in Practice Scoring standardised measures - Emotion Regulation Questionnaire



## EVERYDAY MEMORY QUESTIONNAIRE

Instructions. The 28 statements set out below are about forgetting things, something everyone does to an extent. Please indicate how frequently the examples given have happened to you, (or to the patient) over the last 3 months, using the following scale:

- |   |   |
|---|---|
| 0 = Not at all  | 5 = About once a week                               |
| 1 = About once  | 6 = More than once a week, but less than once a day |
| 2 = More than once, but less than once a month        | 7 = About once a day                                |
| 3 = About once a month                                | 8 = More than once a day                            |
| 4 = More than once a month, but less than once a week |   |

- 1 8 Forgetting where you have put something. Losing things around the house.
- 2 0 Failing to recognize places that you are told you have been to before.
- 3 2 Finding a television story difficult to follow.
- 4 1 Not remembering changes in you daily routine, such as a change in the place where something is kept or a change in the time something happens. Following your old routine by mistake.
- 5 3 Having to go back to check whether you have done something you meant to do.
- 6 4 Forgetting when it was that something happened; for example, whether it was yesterday or last week.
- 7 2 Completely forgetting to take things with you, or leaving things behind and having to go back and fetch them.
- 8 2 Forgetting you were told something yesterday or a few days ago, and maybe having to be reminded about it.
- 9 1 Starting to read something (a book or an article in a newspaper or magazine) without realizing you have already read it before.
- 10 2 Letting yourself ramble on, to speak about unimportant or irrelevant things.
- 11 7 Failing to recognize, by sight, close friends or relatives whom you meet frequently.
- 12 6 Having difficulty in picking up a new skill; for example, finding it hard to learn a new game, or to work some new gadget after you have practised it once or twice.
- 13 2 Finding that a word is 'on the tip of your tongue'. You know what it is but cannot quite find it.
- 14 5 Completely forgetting to do things you said you would do and you planned to do.
- 15 4 Forgetting important details of what you did or what happened to you the day before.
- 16 1 When talking to someone, forgetting what you have just said. Maybe saying, "What was I just talking about?"
- 17 2 When reading a newspaper or magazine being unable to follow the thread of a story; losing track of what is about.
- 18 2 Forgetting to tell someone something important. Perhaps forgetting to pass on a message or remind someone of something.

Please turn over