

PART-I
BHĀVANĀTAŚCITTAPRASĀDANAM AND MENTAL HEALTH
PROMOTION ACCORDING TO PATAÑJALI YOGA

PART-II
EFFECT OF INTEGRATED YOGA MODULE ON
EMOTIONAL INTELLIGENCE IN NORMAL HEALTHY
VOLUNTEERS

Dissertation submitted by

Sasmita Dash

Under the guidance of

H R Nagendra

Tikhe Sham Ganpat



Towards Partial fulfilment of
Master of Science (Yoga & Education)

TO

Swami Vivekananda Yoga Anusandhana Samsthana (SVYASA)

(Declared as Deemed-to-be University Under Section 3 of the UGC Act, 1956)

#19, Eknath Bhavan, Gavipuram Circle, Kempgowda Nagar,
Bengaluru,

Pin-560019, India



CERTIFICATE

This is to certify that Sasmita Dash is submitting this literature review, **‘Bhāvanātaścittaprasādanam and mental health promotion according to Patañjali Yoga’** and experimental research on **“Effect of integrated yoga module on emotional intelligence in normal healthy volunteers”** in partial fulfillment of the requirements for Master of Science (Yoga & Education) with effect from January 12th 2010 to December 31st 2011 by SWAMI VIVEKANANDA YOGA ANUSANDHANA SAMSTHANA (SVYASA) under the Division of Yoga-Spirituality and this is record carried out by him in this University.

Date- 31st December 2011

Dr. H R Nagendra
(Vice-chancellor, SVYASA)
Guide

Dr. Tikhe Sham Ganpat
(Lecturer, Division of Yoga and Management)
Co-Guide

DECLARATION

I Sasmita Dash, declare that this study was conducted by me at SWAMI VIVEKANANDA YOGA ANUSANDHANA SAMSTHANA (SVYASA), Bengaluru, under the guidance of Dr. H R Nagendra, Vice-chancellor, SWAMI VIVEKANANDA YOGA ANUSANDHANA SAMSTHANA & Dr. Tikhe Sham Ganpat, Lecturer, Division of Yoga and Management, SWAMI VIVEKANANDA YOGA ANUSANDHANA SAMSTHANA, the University, Bengaluru. I also declare that this work entitled:

PART I

BHĀVANĀTAŚCITTAPRASĀDANAM AND MENTAL HEALTH PROMOTION ACCORDING TO PĀTAÑJALI YOGA

PART II

EFFECT OF INTEGRATED YOGA MODULE ON EMOTIONAL INTELLIGENCE IN NORMAL HEALTHY VOLUNTEERS

This work has not previously formed the basis of any degree, diploma, membership or similar titles.

Place: Praśānti Kuṭīram

Sasmita Dash

Date-31st December 2011

सस्मिता दाश

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- Sasmita Dash

TRANSLITERATION CODES WITH DIACRITICAL SYMBOLS

अ आ इ ई उ ऊ ऋ ॠ

a ā i ī u ū ṛ ṝ

ऌ ए ऐ ओ औ अं अः

ḷṛ e ai o au am aḥ

क ख ग घ ङ

ka kha ga gha ṅa

च छ ज झ ञ

ca cha ja jha ṅa

ट ठ ड ढ ण

ṭa ṭha ḍa ḍha ṇa

त थ द ध न

ta tha da dha na

प फ ब भ म

pa pha ba bha ma

य र ल व श ष स ह

ya ra la va śa ṣa sa ha

क्ष त्र ज्ञ ॐ

kṣa tra jña om

ABSTRACT

Background

Students need emotional intelligence (EI) for their better academic excellence. Three important psychological dimensions of EI are emotional sensitivity (ES), emotional maturity (EM) and emotional competency (EC) which motivate students to recognize truthfully, interpret honestly and handle tactfully the dynamics of their behavioral pattern.

Objective

To assess EI in students undergoing Integrated Yoga Module (IYM).

Materials and Methods

184 YIC students with 25.77 ± 4.85 years of mean age participated in this study with single group pre-post design. The EI data was collected before (pre) and after (post) IYM using Emotional Quotient (EQ) Test developed by Dr Dalip Singh and Dr N K Chadha.

Statistical Analysis

Means, standard deviations, Kolmogorov-Smirnov test, and Wilcoxon signed rank test were used for analyzing the data with the help of SPSS 16.

Results

The data analysis showed 3.63% significant increase ($P=0.01$) in ES, 3.54% significant increase ($P=0.002$) in EM, 5.18% significant increase ($P<0.001$) in EC and 4.60% significant increase ($P<0.001$) in EI

Conclusion

The present study suggests that IYM module can result in improvement of SE among university students, thus paving the way for their academic excellence.

Key Words

Emotional sensitivity, academic excellence, Integrated Yoga Module

PART 1

**BHĀVANĀTAŚCITTAPRASĀDANAM AND MENTAL HEALTH
PROMOTION ACCORDING TO PATAÑJALI YOGA**

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Chapter -1

INTRODUCTION

There is a tendency among people, including mental health professionals, to take the state of mental health of individuals for granted. In human life, miseries and illnesses are inevitable ^[1] and in order to terminate miseries and illnesses,

mental health has to be seen in its cultural context. The uniqueness of psychiatry as a medical specialty lies in the fact that there is a biological and psychological dichotomy. To understand the phenomenon of mental illness, it is necessary to appreciate that psychiatry has close proximity with the social sciences and cultural issues. ^[2]

History is a kind of screen in which the past lightens the present and the present brightens the future. ^[2] James Mills, ^[3] a historian, states that ‘a concern with mental health has long been a part of Indian culture which evolved a variety of ways of attempting to understand and negotiate psychological disorder’. The ancient Indian concepts and paradigms relating to mind and mental health are holistic and cover aspects that have been neglected by the modern mental health literature. In this context, Shamsundar (2008) suggested serious study of ancient Indian concepts relevant to mind and mental health and incorporate them into body of knowledge of mental health profession. ^[4] Some of the psychotherapeutic techniques described in ancient Indian literature have clearly distinct and well- defined approaches for use in various psychic disorders. A systemic comparison between these ancient methods and current psychotherapeutic techniques would be enriching to both and further enhance their applicability and acceptability. ^[2] Therefore, an effort was made to connect, correlate and compare the contributions of psychology with that of the system of yoga to understand the genesis of mental disorders and suggest

certain remedial paradigms to achieve holistic mental health. The theme of this work applies equally well to mental health professionals in general as psychiatrists suffer professional stress. ^[5] This work briefly overviews the topic, poses few questions, and suggests certain remedial paradigms.

Chapter -2

PATAÑJALI YOGA

Yoga is a widely practiced activity thought to benefit various conditions, including psychiatric disorders.^[10] Intensive Yoga has been reported in the management of altered perceptions and full-blown psychotic episodes.^{[11],[12],[13]} Yoga is assuming importance in improving mental health and quality of life in the treatment of a number of psychiatric and psychosomatic disorders.^[14] Yoga is an ancient system of holistic living. It is one among the six systems of Indian Philosophy known as the ‘Ṣaḍ Darśanas’. Patañjali, the foremost exponent of Yoga compiled the essential features and principles of Yoga (which were earlier interspersed in different yoga scriptures) in the form of aphorisms known as ‘*Sutras*’. In his 196 aphorisms^[15] divided into 4 chapters, Patañjali gives the systematic process to achieve the holistic mental health. Patañjali defines Yoga in his very second aphorism of the first chapter as ‘Citta vṛitti nirodha’. Citta is mind. vṛittis are whirlpools in the mind. Nirodha signifies control or restraint. The main purpose of Yoga, therefore, is to control the mind and keep it in a state of peace and tranquillity.^[16]

Patañjali realized the value of concentration and looked upon it as the means for the perception of the ultimate truth. Yoga dealt in depth with both the theory and practice as applicable to mental health. It is now universally well-known technique that forms a part of many psychotherapeutic practices.^[2] It provides

insights into concepts of personality types, causation of mental illness and its treatment.^[17]

Chapter -3

CONCEPT OF MENTAL HEALTH IN PSYCHIATRY

The modern world is quite curious about understanding mind and related phenomenon. Psychiatry is a field of medicine focused specifically on the mind, aiming to study, prevent, and treat mental disorders in humans.^[6] Philip Campbell, the Editor of the journal Nature, has dubbed the 10-year period of 2010-2019 to be the “decade for psychiatric disorders,”^[7] referring to the point that research on mental illness has, at long last, reached an inflection point at which insights gained from genetics and neuroscience would transform the understanding of psychiatric illnesses.^[8] The esteemed Journal of the American Medical Association (JAMA) has also devoted its May 19, 2010 issue to the theme of mental health,^[9] testifying to the central importance of mental disorders and mental health in medical practice. Thus, psychiatry has emerged as one of the most important necessary studies and treatment of mental disorders of the current world.

Chapter -4

HOLISTIC MENTAL HEALTH

Psychiatry has moved from mental hospitals to community, resulting in increasing awareness regarding mental health. ^[18] Schizophrenia, which used to occupy a major part of psychiatrist's work, has been surpassed by other types of mental disorders particularly mood disorders and anxiety disorders. Stress-related mental disorders and adjustment disorders are increasingly managed by the psychiatrist. Awareness about child and women's mental health are gaining more importance. ^[19] In 1982, the Government of India adopted the 'National Mental Health Policy', which aims to ensure availability and accessibility of minimum mental health care for all in the foreseeable future as well as integrating mental health with general health. It recommended the promotion of 'self help' among the patients with psychological conflicts. In order to achieve this, innovative approaches to mental health care has been suggested. ^[20] There was another suggestion that the mentally ill can be managed with alternate systems of medicine like yoga and other traditional methods of treatment in addition to drugs and psychotherapy, as well as conduct mental health camps and to take up other mental services at the community level. ^[21] In such a scenario, it becomes equally important to look back to ancient Indian systems & scriptures in the light of modern psychiatry.

An ancient Indian thoughts are the storehouse of rich psychological insights elucidating explicit and subtle nuances of processes and constructs such as mental health and illness, cognition, emotion, attention, motivation, perception, self and personality, psychopathology and its treatment. ^[22]

Chapter -5

COPING STRATEGIES FOR MENTAL HEALTH

The ten needs, as set out by Horney^[23], known as **coping strategies for mental health** are as follows:

Moving Toward People

1. The need for affection and approval; pleasing others and being liked by them.
2. The need for a partner; one whom they can love and who will solve all problems.

Moving Against People

3. The need for power; the ability to bend will and achieve control over others—while most persons seek strength, the neurotic may be desperate for it.
4. The need to exploit others; to get the better of them. To become manipulative, fostering the belief that people are there simply to be used.
5. The need for social recognition; prestige and limelight.
6. The need for personal admiration; for both inner and outer qualities—to be valued.

7. The need for personal achievement; though virtually all persons wish to make achievements, as with No. 3, the neurotic may be desperate for achievement.

Moving Away from People

8. The need for self sufficiency and independence; while most desire some autonomy, the neurotic may simply wish to discard other individuals entirely.

9. The need for perfection; while many are driven to perfect their lives in the form of well-being, the neurotic may display a fear of being slightly flawed.

10. Lastly, the need to restrict life practices to within narrow borders; to live as inconspicuous a life as possible.

Chapter -6

BHĀVANĀTAŚCITTAPRASĀDANAM ACCORDING TO PATAÑJALI YOGA SUTRA

Patañjali also deals with attitudes of people in his aphorism 33 of first chapter.

He gives a method of cognitive behavioural transformation for people. He teaches how to move towards or against certain types of people. The aphorism is as follows:

मैत्रीकरुणामुदितोपेक्षाणां सुखदुःखपुण्यापुण्यविषयाणां भावनातश्चित्तप्रसादनम् । १ । ३३

Maitrīkaruṇāmuditopekṣāṇām Sukhaduḥkhapuṇyāpuṇyaviṣayāṇām

Bhāvanātaścittaprasādanam.

The meaning is that: “The mind becomes purified and peaceful by cultivating the attitudes of friendliness, compassion, gladness and indifference respectively towards happiness, misery, virtue and vice”.^[15]

Attitude	Towards	Personality
Friendliness	→	Happiness
Compassion	→	Misery
Gladness	→	Virtue
Indifference	→	Vice

Chapter -7

BHĀVANĀTAŚCITTAPRASĀDANAM FOR

COGNITIVE BEHAVIORAL TRANSFORMATION

Patañjali says that we should move towards some people and move away from some others. One has to move towards people with happiness by showing friendliness towards them, towards people in misery by showing compassion towards them and towards virtuous ones by showing gladness on their being virtuous. In a similar way, one has to move away from people who practice vice by showing indifference towards them. This matches with the ways suggested by Karen.

Patañjali suggests a suitable remedy to come out of the mental illness and obstacles to a state of complete mental wellbeing in following ways as given in Patañjali Yoga Aphorisms chapter I 32- 39:^[15]

1. For removing of those obstacles and accompanying symptoms, the practice of concentration on one principle is undertaken.
2. In relation to happiness, misery, virtue and vice, by cultivating the attitudes of friendliness, compassion, gladness and indifference respectively, the mind becomes purified and peaceful
3. Or by the expiration and retention of the breath one can control the mind
4. Or else the mind can be made steady by bringing it into activity through sense experience
5. Or the luminous state which is beyond sorrow can control the mind
6. Or else the mind can be brought under control by making passionless persons the object for concentrating the mind
7. Or else the mind can be made steady by giving it the knowledge of dream and sleep for support
8. Or else by any desired meditation, mind can be steadied

The ultimate goal of Yoga is to bring about the status of mental well-being by restraining mental modifications. Control over the mind's fluctuations comes from persevering practice and non-attachment. Repeating the sacred syllable and pondering its meaning lead to experience of the ultimate mental well-being.

Restraint (Yama), observance (Niyama), posture (Āsana), regulation of breath (Prāṇāyāma), withholding of senses (Pratyāhāra), fixity (Dhāraṇā), meditation (Dhyāna) and perfect concentration (Samadhi) are the eight means of attaining total mental spiritual health.^[15]

Chapter -8
RELEVANCE OF
BHĀVANĀTAŚCITTAPRASĀDANAM IN SPIRITUAL
SĀDHANĀ

The ultimate aim of Yoga is to attain total stress management through self-realization or salvation or Mokṣa or pure consciousness.^[24] Dean (1971) prefers to call it ‘metapsychiatry’.^[25] Understanding the self to the core and getting established in it is the quintessence of the yoga philosophy. The third aphorism of the first chapter of yoga conveys that the seer is established in his own essential and fundamental nature by the yogic process. By being established in

the self one goes to one's own very nature and is in ultimate freedom. At this higher level of consciousness, one can experience total understanding of the mechanisms and laws of creation and then the faith in these higher laws of creation becomes very spontaneous.^[26] "Nothing in life is more wonderful than faith- the one great moving force which we can neither weigh in the balance nor test in the crucible. Faith has always been an essential factor in the practice of medicine. Not a psychologist but an ordinary clinical physician concerned in making strong the weak in mind and body, the whole subject is of interest to me,"^[27] wrote Sir William Osler, in the British Medical Journal, about a century ago. The importance of faith in mental health was thus not unknown to the mental health practitioners. The practice of yoga develops this faith and provides the necessary skills to realize the ultimate truth or reality or pure consciousness by gaining mastery over the mind for total stress management.^[28]

Chapter -9

SUMMARY AND CONCLUSION

The ultimate purpose of all modes of treatments, practice or therapy including yoga, psychiatry or medicine^[29] is to assist all beings in experiencing a positive joyful and healthy life; to cure disease is the relative purpose. Here, an effort was made to connect, correlate and compare the contributions of psychology with that of the system of yoga to understand the genesis of mental disorders and suggests certain remedial paradigms to achieve an ideal mental health

which leads to a positive joyful and healthy life. Within the current paradigm, yoga would best be seen as exercises of body and mind enabling stress management, changing brain chemical and neurotransmitter structures to live longer and happier, and as an effective alternative medicine.^[22]

The ancient Indian concepts and paradigms relating to the study and treatment of mental disorders are holistic and cover aspects that have been neglected by the modern mental health literature. Some of the psychotherapeutic techniques described in ancient Indian literature have clearly distinct and well-defined approaches for use in various psychic disorders.

Yoga is an ancient Indian system of holistic living. A systemic comparison between current psychotherapeutic techniques and ancient Indian concepts would be enriching to both and further enhance their applicability and acceptability. In this study, an effort was made to connect, correlate and compare the contributions of Psychology with that of the system of yoga to understand the genesis of mental disorders and suggests certain remedial paradigms to achieve holistic mental health. The theme of this work applies equally well to mental health profession in general.

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PART 2

EFFECT OF INTEGRATED YOGA MODULE ON

EMOTIONAL INTELLIGENCE IN NORMAL HEALTHY VOLUNTEERS

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Chapter -1

INTRODUCTION

Today's students may be more concerned with the technical aspects of various professions and more emotionally immature compared to previous generations of learners. ^{[1], [2]} Emotional intelligence (EI) most commonly incorporates concepts of emotional expression and regulation, self-awareness, empathy. ^[3] Similarly, there are three important psychological dimensions of EI ^[4]: emotional sensitivity (ES), emotional maturity (EM) and emotional competency (EC) which motivate student to recognize truthfully, interpret honestly and handle tactfully the dynamics of their behavioural pattern.

Many corporations have examined and to some extent used EI as a measure of these concepts and domains, which some speculate are better predictors of educational and occupational performance. ^{[5],[6]} In the psychological sense, sensitivity means the characteristic of being peculiarly sensitive and judges the threshold for various types of stimulations, evoking sensations, feelings and emotions. The students may seek to evolve the EI characteristics in their

personality: understanding threshold of emotional arousal, empathy, improving inter-personal relations and communicability of emotions. ^[4]

However, the emotional changes that characterize the efficacy of Integrated Approach of Yoga Therapy (IAYT) for students have not been reported adequately. Hence, we have designed present study to assess the efficacy of twenty one days Integrated Yoga Module (IYM) module on ES in university students using Emotional Quotient (EQ) test.

Chapter -2

REVIEW OF LITERATURE ON EQ

2.1 LITERARY RESEARCH

EMOTIONAL INTELLIGENCE (EQ) ACCORDING TO BHAGAVAD GĪTĀ

The study of EQ has become a subject of increasing scientific interest and inquiry over the past three decades. [7], [8], [9], [10] The *Bhagavad Gītā* is a masterpiece and was discoursed centuries ago. The timeless lessons it teaches are very well related to the modern day business and management activities. The *Bhagavad Gītā* gives a distinctive flavour to the EQ and places itself so well in the current situations of turmoil and stress. [11]

The *Bhagavad Gītā* (literally meaning “The Song of the God or of the Divine One”) is a *Saṁskṛta* text from the epic *Mahābhārata*. Lord *Kṛṣṇa* as the narrator of the *Bhagavad Gītā*, is referred to as the *Bhagavān* (the God or the Divine One), and the verses themselves are written in a poetic form that is traditionally

chanted; hence the title. ^[12] The *Bhagavad Gītā* is revered as sacred by most *Hindu* traditions. ^{[13],[14]} The teachings of the *Bhagavad Gītā* are narrated as a conversation between Lord *Kṛṣṇa* and *Arjuna*, a warrior prince, taking place on the battlefield of *Kurukṣetra* just prior to the start of a climactic war. Responding to *Arjuna*'s confusion and moral dilemma about going to war with his evil cousins, *Kṛṣṇa* explains to *Arjuna* his duties as a warrior and a prince. He tells *Arjuna* that, however personally abhorrent it may be, it is his societal duty to fight with and defeat his cousins' army to ensure triumph of truth and freedom and well-being of common people. Importantly, *Kṛṣṇa* elaborates on a number of philosophical tenets for everyday living, with examples and analogies. This has led to the *Bhagavad Gītā*, which consists of 18 chapters, being described as a concise guide to *Hindu* philosophy and also as a practical, self-contained guide to life. In many ways seemingly a heterogeneous text, the *Bhagavad Gītā* reconciles many facets and schools of *Hindu* philosophy. The influence of the *Bhagavad Gītā* extends well beyond India and the *Hindu* religion. Based on the *Bhagavad Gītā*, specific models for administration, management, and leadership have been described. ^[15] A recent report in the *Business Week* magazine ^[16] suggests that, in the Western business community, the *Bhagavad Gītā* is replacing the influence of the "Art of War", an ancient

Chinese political text dated to approximately 500 BC that described how victory could be assured in war. ^[17]

Mind is very restless, forceful and strong; it is more difficult to control the mind than to control the wind. But if we can master the art of doing the same we will have all the joys in life and handle emotional upsets. This is the real mantra of *Bhagavad Gītā* for modern day managers. ^[18]

Integrated approach of Yoga for enhancing EQ

A well-integrated practice of *Yoga* includes *Kriyā* (cleansing techniques), *Sūkṣma Vyāyāma* (loosening and stretching practices), *Āsana* (postures), *Prāṇāyāma* (breathing), *Śīthilikaraṇa* (relaxation) and *Dhyāna* (meditation).

The practice of *Kriya*, *Sūkṣma Vyāyāma* and *Āsana* gives us a strong, flexible body, cleanses the system of toxins, improves the glandular functions and prepares us for a deeper *Yoga* experience. *Prāṇāyāma* helps with energizing and strengthening the nervous system, improving lung capacity and helping with emotions. *Śīthilikaraṇa* prepares us for *Dhyāna* (meditation) which is the key practice in finally stilling the mind so that the unnecessary chatter in the mind is subdued and we can make a connection with our true essence.

The *Prāṇāyāma* practice is supposed to be the best means of dealing with emotions. We all know that emotions can control our breathing pattern. For

example, when we are very angry or agitated, our breathing is very fast, uneven and uncontrolled. When we are feeling very sad, we might have uncontrolled sobbing breath. When we are calm and engrossed in some activity, our breathing is very gentle, even and soft. These examples tell us that our emotions can control the breathing pattern without any effort from our side.

As we know, breathing is perhaps one of the very few physiological functions which are both voluntary and involuntary. When we are not paying attention, breathing just happens. However, we do have the ability to change and control our breathing in many different ways. We can make the breathing slow, fast, forced, soft and subtle etc. These are some of the variables which have been used to devise a large number of *Prāṇāyāma* practices. While on the one hand, the emotions can control the breathing patterns, the Yogis tell us that the opposite is not only true but highly desirable. This means that by controlling our breath in different ways we can control our emotions and moods to a great deal. *Prāṇāyāma* is now routinely used for therapeutic benefits; some of the main benefits are controlling the blood pressure, calming the mind, developing deeper focus, cleansing purifying the nervous system etc. ^[19]

2.2 EQ ACCORDING TO SCIENTIFIC LITERATURE

Previous work on stress management educational program, reported significant improvement in the subjective well being inventory (SUBI) scores of the 77

subjects within a period of 10 days as compared to controls. These observations suggest that a short lifestyle modification and stress management educational program can make an appreciable contribution to primary prevention as well as management of lifestyle diseases.^[20] It was demonstrated that SMET decreases occupational stress levels and baseline autonomic arousal in managers, suggesting significant reduction in sympathetic activity^[21] and better emotional well-being in them.^[22] Persons with high EQ may strike a balance between emotion and reason, are aware of their own feelings, show empathy and compassion for others, and have high self-esteem which may be instrumental in many situations in the workplace and can help achieve managerial effectiveness.^[4] Recent research has shown a positive relationship between EQ and workplace success.^[23] Previous study on yoga reported enhanced EQ as a result of the practice of yoga way of life. The results indicate the importance of yoga as an integral element in improving managerial effectiveness in organizations.^[24]

Levels of emotional imbalance correlate with levels of autonomic imbalance; hence reducing autonomic imbalance will tend to bring emotional balance. Mastery over emotions by those who have developed greater EQ involves reduced physiological and psychological arousal, and increased awareness. If stresses are removed at physical, mental, and emotional levels by practice of Yoga techniques, including meditation, emotional and autonomic balance result,

there will be deeper awareness of feelings, and increased ability to handle them wisely.

Chapter -3

AIM AND OBJECTIVES

3.1 AIM

The aim of this study is to assess EQ in university students undergoing IYM module.

3.2 OBJECTIVES

The objective of the study was to assess EQ in university students through the assessment of EQ subscales: ES, EM, EC and EQ.

Chapter -4

METHODS

4.1 SUBJECTS

184 IYM students with 25.77 ± 4.85 years of mean age participated in this study.

4.2 INCLUSION CRITERIA

1. Age range 18 and 37 years and
2. Both male and females

4.3 EXCLUSION CRITERIA

1. Students with serious medical conditions,
2. Students taking medication
3. Using any other wellness strategy,
4. Students using psychiatric drugs, alcohol, or tobacco in any form.

4.4 SOURCE

Subjects for the present study were selected from Swami Vivekananda Yoga Anusandhana Samsthana (S-VYASA) University, Bangalore undergoing IYM module.

4.5 INFORMED CONSENT

An informed consent was obtained from all the participants. [Appendix 1]

4.6 DESIGN

A single group pre-post study PRE \Rightarrow 21 DAYS YIC MODULE \Rightarrow
POST

4.7 INTERVENTION

All the subjects participated in the Integrated Yoga Module (IYM) module.

[Table 1] This IYM module was based on Integrated Approach of Yoga Therapy (IAYT) to bring positive health.^[25] This IAYT is based on ancient Yoga texts^[26] which consisted of *Āsanas* (physical postures), *Kriyā* (Yogic purification processes), *Prāṇāyāma* (breathing techniques), *Kridā* Yoga (Yogic games), *Bhajan* (devotional sessions), meditation and a healthy yogic diet to

bring about a total personality development at physical, mental, emotional, social and spiritual levels.^[27]

4.8 ASSESSMENTS

In this study we have used the EQ test developed by Dr Dilip Singh and Dr N K Chadha.^{[4],[28]} The test has 22 real- life situations experienced by individuals in their day-to-day life based on 5- point scale rating and then finally obtained scores that was converted into percentile score. This test is useful to measure emotional dimensions like emotional competency, emotional maturity and emotional sensitivity. This test has been standardized for professional managers, businessmen, bureaucrats, artists, and graduate students and adolescent population. This EQ test has a test-retest and split-half reliability of 0.94 and 0.89 respectively and validity of 0.89.

4.9 RESEARCH QUESTION

Can a 21 days residential IYM bring about significant changes in EI as assessed EQ?

4.10 HYPOTHESIS

IYM brings about changes in EQ for enhancing academic performance.

4.11 NULL HYPOTHESIS

No change will take place in EQ of university students (normal healthy volunteers) undergoing IYM.

4.12 RATIONALE

i) Earlier studies reported efficacy of IYM in reducing stress, providing deeper rest than good sleep, improved sleep structure, cognitive responses as well as brain functioning.

ii) This study is to further understand the effect of IYM as a short residential program of 21 days for the university students in developing academic excellence.

iii) The rationale for the study is that an integrated yoga module works at all levels of human system- physical, mental, emotional intellectual and spiritual to build a comprehensive personality.

Chapter -5

DATA EXTRACTION AND ANALYSIS

5.1 DATA COLLECTION

The ES data was collected before (pre) and after (post) the 21 days IYM module.

5.2 DATA SCORING

The ES data scoring was based on interpretation of ES scores in percentile.

[Table 2]

5.3 DATA ANALYSIS

All statistical analysis was carried out using the version 16.0 of the Statistical Package for Social Sciences (SPSS) software. The Kolmogorov-Smirnov test showed that the data was not normally distributed. We used Wilcoxon signed rank test to compare means of the data.

Chapter -6

RESULTS

The data analysis showed 3.63% significant increase ($P=0.01$) in ES, 3.54% significant increase ($P=0.002$) in EM, 5.18% significant increase ($P<0.001$) in EC and 4.60% significant increase ($P<0.001$) in EI [**Table 3**]

Chapter -7

DISCUSSIONS

Yoga is thought to bring physical, psychological and spiritual benefits to practitioners and has been associated with reduced stress and pain.^[10] An extensive and standardized teacher-training program support reliability and safety of IYM module. Goleman^[11] claims that about 80% of a person's success in life depends on emotional competencies, emotional maturity and ES as measured by EQ. Previous report on a controlled study of 170 subjects assessed the effects of a six week part-time Self Management of Excessive Tension (SMET) program based on yogic principles revealed significant increase in EQ and thus strengthening the importance of yoga for increased ES.^{[12],[13]} Similarly, a study on yoga reported significant improvement EQ and other health variables indicating positive impact of yoga on emotional sensitivity. It also suggest that one way to understand yoga's strong positive effect on EQ is that it first increases alertness (exemplified by increases in sustained attention); next it erases negative influences on personality (exemplified by decreases in *Tamas* or dull personality trait); and finally this leads to increased sensitivity to others' feelings and emotions (exemplified by increases in *Sattva* or balanced personality trait).^[7] The present study is consistent with these findings, indicating that a systematic adoption of the IYM module can result in better ES among students for their "academic excellence." Therefore, we may conclude that IYM module may be recommended for academic excellence among student community.

Chapter -8

SUMMARY & CONCLUSIONS

8.1 SUMMARY

Background

Students need emotional intelligence (EI) for their better academic excellence. Three important psychological dimensions of EI are emotional sensitivity (ES), emotional maturity (EM) and emotional competency (EC) which motivate students to recognize truthfully, interpret honestly and handle tactfully the dynamics of their behavioral pattern.

Objective

To assess EI in students undergoing Integrated Yoga Module (IYM).

Materials and Methods

184 IYM students with 25.77 ± 4.85 years of mean age participated in this study with single group pre-post design. The EI data was collected before (pre) and after (post) IYM using Emotional Quotient (EQ) Test developed by Dr Dalip Singh and Dr N K Chadha.

Statistical Analysis

Means, standard deviations, Kolmogorov-Smirnov test, and Wilcoxon signed rank test were used for analyzing the data with the help of SPSS 16.

Results

The data analysis showed 3.63% significant increase ($P=0.01$) in ES, 3.54% significant increase ($P=0.002$) in EM, 5.18% significant increase ($P<0.001$) in EC and 4.60% significant increase ($P<0.001$) in EI

Conclusion

The present study suggests that IYM module can result in improvement of SE among university students, thus paving the way for their academic excellence.

8.2 IMPLICATIONS OF THE STUDY

An application of IYM for students to enhance better performance in an educational scenario.

8.3 SUGGESTIONS FOR THE FUTURE STUDY

- i) Randomize control studies.
- ii) Long term follow-up of IYM program.

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LIST OF TABLES

TABLE 1: SCHEDULE OF THE IYM PROGRAM

Time	Activity	Time	Activity
05.00 AM	Ablution	03.00 PM	SMET Lecture session 2
05.30 AM	Prayer (<i>Prātaḥsmaraṇa</i>)	04.00 PM	SMET practice (Cyclic Meditation)
06.00 AM	Asanas/Special Yoga Technique	05.00 PM	Tuning to Nature
07.15 AM	Friendship Meet (<i>Maitrī Milana</i>) <i>Bhagavad Gītā</i> <i>Śloka</i> Chanting and Discourse (Satsanga)	06.00 PM	Devotional Session (<i>Bhajan</i>)
		06.45 PM	MSRT (Mind Sound Resonance Technique)
08.00 AM	Breakfast	07.30 PM	Dinner
09.30 AM	SMET Lecture session 1 game	08.30 PM	Happy assembly
10.30 AM	SMET practice (Cyclic Meditation)		(yoga session)/cultural program
11.30 AM	Milk or Ayurvedic Tea (Malt)	09.15 PM	Group Discussion/Self Practice

12.05 PM	Special Yoga Techniques	10.00 PM	Lights Off
01.00 PM	Lunch and rest		

TABLE 2: INTERPRETATION OF EQ SCORES: (P-STANDS FOR PERCENTILE)

EQ DIMESIONS	P-90 (EXTREMELY HIGH EQ)	P-75 (HIGH EQ)	P-50 (MODERATE EQ)	P-40 (LOW EQ)	P-20 (TRY THE TEST SOME OTHER DAY)
SENSITIVITY (RANGE OF SCORE: 25-100)	91-100	81-90	56-80	31-55	< 30
MATURITY (RANGE OF SCORE: 35-140)	121-140	101-120	8-100	46-80	<45
COMPETENCY (RANGE OF SCORE: 50-200)	126-200	96-125	76-95	51-75	<50

TOTAL EQ (RANGE OF SCORE: 110-440)	311-440	271-310	201-270	126- 200	<125
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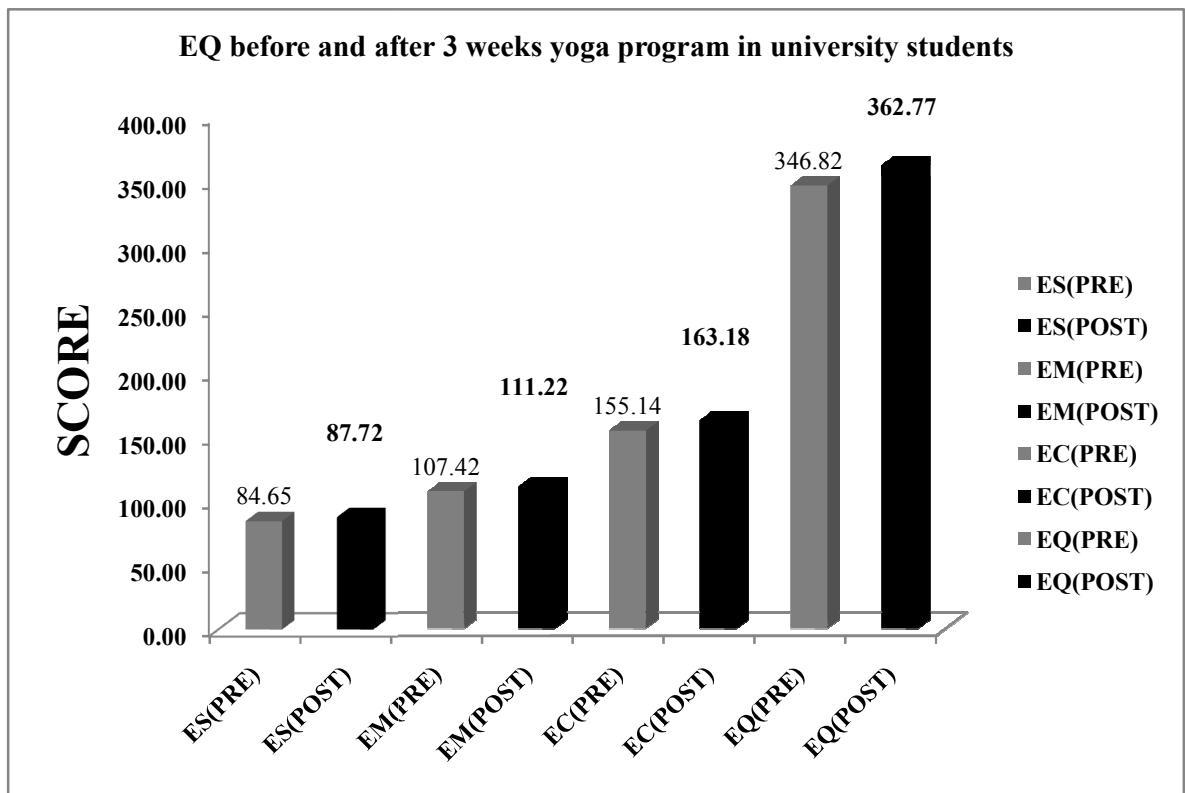
TABLE 3: DATA ANALYSIS OF EQ

Psychological Dimension	Mean ± Standard deviation		Percentage Increase	<i>P</i>
	Before IYM (Pre)	After IYM (Post)		
ES	84.65±12.84	87.72±10.84	3.63	0.01*
EM	107.42± 14.25	111.22± 12.69	3.54	0.002**
EC	155.14± 20.32	163.18± 20.00	5.18	<0.001***
EQ	346.82± 37.89	362.77± 32.41	4.60	<0.001***

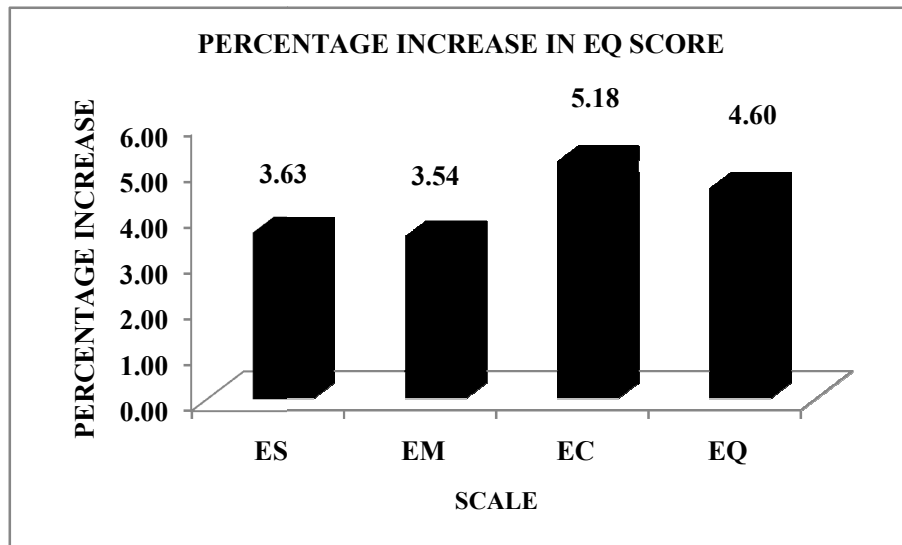
***Significant at 0.05 level, **Significant at 0.01 level, ***Significant at 0.001 level**

LIST OF FIGURES

1. EQ BEFORE AND AFTER THE SMET PROGRAM



2. PERCENTAGE INCREASE IN EQ SCORE



APPENDICES

1. INFORMED CONSENT FORM

Title of the project : EMOTIONAL INTELLIGENCE IN UNIVERSITY STUDENTS

UNDERGOING YOGA INSTRUCTORS' COURSE

Investigator : Sasmita Dash

Name of the guides : Dr. H. R. Nagendra & Dr. Tikhe Sham Ganpat

Name of the Participant : _____

Date and Time : _____ and _____

About the Study

This study deals with the effect of a Integrated Yoga module designed to relieve stress and improve emotional well-being of. All information obtained during the study will be kept confidential and individual report of the test will be given.

1. You can withdraw from the study at any point of the time unconditionally.
2. In case the study does cause any adverse effects, the institution is not liable.

I hereby have understood the above and consent voluntarily to participate in the study.

Place _____

Date _____

Signature of the participant

2. EQ QUESTIONNAIRE

EMOTIONAL

QUOTIENT

(EQ) TEST

The **22** situations given here will help you to know more about yourself and about people around you.

Answer on the basis of how you **FEEL** and not what you **THINK**.

There is no right or wrong answer.

Answer honestly and do not spend too much time.

Usually your first response is best response.

Do not leave any question unanswered.

Name:-.....

Age: -

Gender: - M/F...

Educational

Qualification:-...

Profession:-.....

RESPONSE SHEET

- 1. a
- b
- c
- d

- 2. a
- b
- c
- d

- 3. a
- b
- c
- d

- 4. a
- b
- c
- d

- 5. a
- b
- c
- d

- 6. a
- b
- c
- d

- 7. a
- b
- c
- d

- 8. a
- b
- c
- d

- 9. a
- b
- c
- d

- 10. a
- b
- c
- d

- 11. a
- b
- c
- d

- 12. a
- b
- c
- d

- 13. a
- b
- c
- d

- 14. a
- b
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- 15. a
- b
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- 16. a
- b
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- 17. a
- b
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- d

- 18. a
- b
- c
- d

- 19. a
- b
- c
- d

- 20. a
- b
- c
- d

- 21. a
- b
- c
- d

- 22. a
- b
- c
- d

GO TO EQ TEST NOW:

1. You have been denied a promotion by the management for which you were eligible. Moreover, one of your juniors has been promoted. You are emotionally upset and feel frustrated. What will you do?
 - a. Talk it over with your boss and ask for reconsideration of the management's decision.
 - b. Start abusing the colleague who superseded you.
 - c. Move to court and obtain a stay order to get justice.
 - d. Identify your shortcomings and try to improve your performance.
2. A freshly recruited professional graduate joins your organisation as a management trainee. After a few weeks, she complains to you that she was not being taken seriously by her subordinates. What will you suggest her?
 - a. Ask her to handle the situation herself and not bother you with trivial matters.
 - b. Tell her that such behaviour should be ignored.
 - c. Ask her to be bold, face the challenge and overcome the problem.
 - d. Empathize with her and help her figure out ways to get others to work with her.
3. At the workplace, due to some misunderstanding, your colleagues stop talking to you. You are convinced that there was no fault of yours. How will you react?
 - a. Wait till they come and start talking to you again.
 - b. Take the initiative, go forward and start talking to them.
 - c. Let things take their own time to improve.
 - d. Ask someone to mediate.
4. You get into an argument with your colleague and end up attacking him/her personally. Later you realize that you never intended to tarnish the image of your colleague. How will you handle such ugly situation?
 - a. Sit calmly and consider what triggered off the arguments and was it possible to control your anger at that point of time.
 - b. Avoid future arguments and leave the room.
 - c. Apologise to your colleague for your behaviour.
 - d. Continue with the argument till you reach some definite conclusion.
5. Imagine you are an insurance salesperson selling insurance policies. You approach a number of prospective clients who slam the door on your face and refuse to buy policies. What will you do?
 - a. Blame yourself and stop work for the day.
 - b. Reassess your capabilities as an insurance salesperson.
 - c. Come out with fresh strategies to overcome similar situations in future.
 - d. Contact the clients again some other day.
6. When someone directly criticizes your behaviour, how will you behave?
 - a. Tend to close up and stop listening.
 - b. Carefully listen to their opinion.
 - c. Tend to get upset about it.
 - d. Think of ways to change your behaviour.

7. You are on an aircraft and suddenly the air-hostess announces that it has been hijacked by the terrorists. Everyone is in a state of shock. What will be your reaction?
- Blame yourself for choosing an inauspicious day for travelling.
 - Be in emotional control and attend to the instructions of the pilot/air hostess.
 - Continue to read your magazine and pay little attention to the incident.
 - Cry out and vow not to travel by air in future.
8. Imagine that you are a police officer posted in a sensitive area. You get information of violent ethnic clashes between two religious communities in which people have been killed from both sides and property damaged. What action will you take?
- Decide not to visit the spot personally as there may be a danger to your life.
 - Relax; this is not the first time riots have taken place.
 - Try to handle the situation by taking action as per law.
 - Reach the spot and assuage the feelings of the victims.
9. Your grown up daughter starts arguing with you every now and then. She tells you that you cannot impose your old-fashioned attitudes and outdated values on her. How will you tackle her?
- Accept her statement in helplessness and take a low-profile position in the family.
 - Send her to a psychologist to learn her adjust with her environment.
 - Manage your emotions and explain your point of view as patiently as possible.
 - Talk to her and understand her emotions, beliefs and attitudes.
10. After weeks of merger of two largest financial firms, hundreds of employees were expected to lose their jobs. You, being the General Manager (HQ), were told to convey to the employee the decision of the management. How will you convey the message?
- Give a gloomy picture and tell them you have no option but to fire half of them.
 - Give a bright picture and tell them that the company will be blessed with talented people from both firms.
 - Tell them that you will collect more information to be fair and update them every few days on how things will take shape.
 - Announce the decision and let the employees take a decision about what they want.
11. You are a professor in a college. While delivering a lecture, a student comments that you have not prepared the topic properly and you are just passing the time. This has hurt your self esteem. What will be your reaction?
- Report to the principal of the college about the unruly behavior of the student.
 - Order the student to leave the classroom at once.
 - Ask him/her to meet you in your chamber after the class to explain what he/she wants.
 - Judge the emotions of the class and promise to make amendments accordingly.
12. As CEO of a company, while taking a meeting with the union, one of the union leaders levels serious allegations of corruption and favoritism against you. How will you react?
- Continue with the discussion and listen to their demands with a cool head.
 - Ask union leader to make allegations in writing and offer an impartial enquiry.
 - Cancel further negotiation and ask the union leader to apologise first.
 - Leave the room after assigning the responsibility to your subordinate to continue with the meeting.

13. You had an argument with your spouse on some trivial family matter and are not on speaking terms for sometime. The situation is causing mental disturbance to both of you. What will you do?
- Stick to your stand; after all you were never at fault.
 - Try to break the ice by analysing the reasons for the conflict.
 - Make first move and ease the situation.
 - Wait for your spouse to make the first move to restore normalcy.
14. You hail from a rural area and take admission in a city college. You find your classmates taunting you as you are not smart and are unable to speak good English. How will you manage yourself?
- Ignore them.
 - Shout back and tell them to mind their own business.
 - Leave studies half way and go back to your village.
 - Accept their challenge and prove that you can match them.
15. While speaking to an audience, you feel that:
- It is difficult to convey your speech.
 - You are partly comfortable in conveying your speech.
 - You are comfortable in conveying your speech.
 - You feel that you will do better with some more practice.
16. Your friend's sister, who got married just one year back, is heading for a divorce. She is highly educated and economically self dependent. She comes to you for guidance. What will you advise her?
- Tell her to go ahead with the divorce as she is a first class MBA and her husband can not take her for granted
 - Empathize with her for marrying an academically average person.
 - Advise her to talk to her husband and figure out the reasons behind the mal-adjustment.
 - Tell her that academic qualifications are important but these do not help in leading a successful married life.
17. There is blind girl in your class. She trips on her way out of the class. You see a few of your friends making fun of her and laughing at her. What will you do?
- Laugh along with your friends.
 - Ignore the incident as they are your friends.
 - Help the blind girl make her way out of the class room but say nothing to your friends.
 - Help the girl and then confront your friends for being so insensitive.
18. While having an argument with someone, if you lose, you:
- Feel totally beaten.
 - Wait for the next opportunity to beat your opponents.
 - Winning and losing are part of the game.
 - Analyse the reasons for the loss.

19. You are working as HRD General Manager in a large multi-national company that recruit dozens of fresh MBAs, engineers and other professionals on senior positions every year. This requires time, energy and money. However, you find that 75 percent of the young recruits are leaving the company after around two years of work experience to join more attractive jobs. What will you do?

- a. Ignore the trend. There is rampant unemployment and you can find more people lined up to join your company.
- b. Try to find out the root cause of their leaving the job and take corrective measures to retain them as you have already invested in them heavily.
- c. Increase the pay package and lure them in working with you.
- d. Change the selection criteria and recruit people on the basis of their need and requirements.

20. You have been involuntarily transferred to a remote project and posted under a new boss. Although you have been given a pay hike and also a promise for promotion in near future yet, you are not comfortable. Your family can not shift along with you due to education of your children. You are in a sensitive area and your security is also at risk. You are undergoing a mild level of stress. How will you diffuse the stress?

- a. Enjoy. After all there has been a hike in your pay for working in a sensitive area.
- b. Wait. It may turn out to be an opportunity for early promotion.
- c. Lament. Why should such terrible things happen to you only?
- d. Act in haste. Think to resign and find out a new job for you.

21. You have lived your life for so many years on this earth. How would you like to explain your life at the moment in one sentence?

- a. Successful: Well, I am a contended person who got whatever could make me feel happy.
- b. OK: Well, it's a mixed experience for me. It's 50:50.
- c. Comfortable: Well, destiny is in the hand of God. Man is just a puppet.
- d. Uncomfortable: Well, I feel I deserved better but could not get it.

22. As an HRD manager you have to recruit a large number of employees for a multinational firm. After the written test and interview you find that most of candidates who qualified are women. What will be your reaction?

- a. Hire women employees. They deserve it as they have qualified the selection criteria.
- b. Well it's a women's world. Hire them any way.
- c. Hire male and female employees in equal number.
- d. Avoid women employees as they are a liability.

3. RAW DATA

NAME	A GE	GEN DER	COUN TRY	ES(P RE)	ES(P OST)	EM(P RE)	EM(P OST)	EC(P RE)	EC(P OST)	EQ(P RE)	EQ(P OST)
PRATEEK	24	M	INDIA	80	90	105	75	130	145	315	310
SHYAM	19	M	INDIA	65	55	70	105	120	155	255	315
SHASHIDHA R	21	M	INDIA	95	70	120	120	165	155	380	345
VIJAY	22	M	INDIA	80	85	120	120	125	135	325	340
DUTTA	31	M	INDIA	95	95	85	110	165	175	325	380
NICHOLAS	29	M	USA	80	75	120	115	150	180	350	370
CHINMAYA	28	M	INDIA	100	85	110	120	135	175	345	380
ATHREYA	23	M	INDIA	90	90	95	120	145	150	330	360
TRILOKI	27	M	INDIA	80	85	100	115	135	175	315	375
AMIT	26	M	INDIA	100	100	130	125	195	165	415	390
SANTOSH	24	M	INDIA	85	75	120	120	140	160	345	355
VISHNU	34	M	INDIA	90	85	115	130	130	155	335	370
SANTOSH	42	M	INDIA	95	95	110	130	165	200	390	425
MAHESH	25	M	INDIA	95	90	135	110	195	180	425	380
VENUMAD HAV	45	M	INDIA	80	95	95	125	170	150	345	370
CHANDRA	31	M	INDIA	90	100	105	110	140	170	335	380
DINESH	23	M	INDIA	90	85	95	125	115	105	300	315
FRANK STARK	31	M	GERMANY	100	100	115	130	155	185	370	415
INDRAJIT JETA	30	M	INDIA	95	95	95	110	130	180	340	385
NIVEDITA	23	F	INDIA	80	100	115	105	155	160	350	365
SARASWAT AMMA	40	F	INDIA	55	85	85	125	120	180	260	390
GODAWARI	40	F	INDIA	90	90	125	115	165	170	380	375
RAJANI	42	F	INDIA	80	60	85	125	135	165	300	350
SARASVATI	37	F	INDIA	70	60	80	125	125	150	275	335
SABITA	36	F	INDIA	65	65	85	90	120	185	270	340
ARUNA	23	F	INDIA	70	85	110	105	140	170	320	340
LOGESHWA RI	19	F	INDIA	80	80	140	130	165	180	385	390
NATALIE	19	F	ENGLAND	80	85	110	115	170	185	360	385
JANANI	18	F	INDIA	90	75	105	135	140	175	335	385
ANNAPURNA A	31	F	INDIA	90	85	120	115	170	180	380	380
SMITA	25	F	INDIA	95	95	65	115	150	170	310	380
PARIMALA	32	F	INDIA	90	85	95	115	150	180	335	380
PRAVEENA	25	F	INDIA	90	90	115	115	170	175	375	380
LIN KWOK	50	F	CHINA	85	80	90	105	175	160	350	345
KSENIJA	26	F	LATVIA	90	90	85	85	140	170	315	345
TENZIN	27	F	INDIA	85	95	100	95	140	155	325	345

NIBEDITA	17	F	INDIA	85	95	105	95	175	155	365	345
MITIKA	23	F	INDIA	90	90	110	140	125	160	325	395
BHAGYALA											
XMI	20	F	INDIA	80	90	110	125	155	170	340	385
RAJANI	36	F	INDIA	95	100	115	110	135	160	345	370
SOUDAMIN											
I	30	F	INDIA	80	85	95	110	150	170	325	365
BHAGYASH											
REE	47	F	INDIA	100	85	110	120	170	175	380	380
AVANTIKA	27	F	INDIA	80	95	100	95	115	140	295	330
S.SUJANA	25	F	INDIA	85	85	105	120	180	175	370	380
K.YASODA	23	F	INDIA	75	90	105	115	105	195	285	400
ANKITA	25	F	INDIA	100	100	115	120	170	195	385	415
MOLLIKA	21	F	INDIA	95	90	120	120	175	185	390	390
JYOTI	36	F	INDIA	100	100	120	115	160	170	380	385
NAYANA	24	F	INDIA	95	95	115	115	145	190	355	400
JAGADEV	25	F	INDIA	75	90	95	120	160	175	330	385
SASMITA	17	F	INDIA	80	90	115	115	170	165	365	370
SWATIPRIY											
A	23	F	INDIA	100	95	100	115	135	170	335	380
PRADEEP	24	M	INDIA	90	95	75	90	160	135	325	310
MARUTI	19	M	INDIA	85	90	125	105	170	175	380	370
AMIT	20	M	INDIA	50	70	65	70	105	145	220	285
SANJAY	20	M	INDIA	50	65	110	110	135	140	295	315
SHREYAS	20	M	INDIA	65	90	85	115	105	185	255	390
MANDEEP	18	M	INDIA	75	75	115	120	150	150	340	345
BAIJU	38	M	INDIA	95	90	125	125	165	150	385	365
PRADEEP	47	M	INDIA	95	75	110	120	175	175	380	370
V.SUDIP R.	20	M	INDIA	55	90	80	115	120	185	255	390
SUBHASH	23	M	INDIA	95	95	110	115	155	155	360	365
AMIT	38	M	INDIA	95	90	125	115	185	170	405	375
RAJENDRA	21	M	INDIA	75	75	75	95	140	125	290	305
SHRIDINAT											
H	19	M	INDIA	60	70	115	110	155	140	330	320
JAYAN B.	21	M	INDIA	95	100	110	120	145	150	350	370
DHEERAJ	18	M	INDIA	65	100	110	110	135	155	310	365
SHIVKUMA											
R	22	M	INDIA	80	100	100	100	150	140	335	340
VINOD	30	M	INDIA	90	95	120	120	175	155	385	370
ADITYA	19	M	INDIA	35	100	85	105	140	140	260	345
SHYAM	18	M	INDIA	75	85	105	80	165	160	345	325
NITESH	17	M	INDIA	80	90	105	115	160	150	345	355
JAGADES	50	M	INDIA	80	95	115	115	185	190	380	400
KARAMJIT	25	M	INDIA	95	70	120	115	175	125	390	310
PRAKASH	47	M	INDIA	95	100	105	115	175	195	375	410
ROOPA	25	F	INDIA	85	85	120	125	175	185	380	395
SAROJA	40	F	INDIA	70	95	125	100	150	170	345	365
NITYA	27	F	INDIA	70	80	105	95	115	125	290	300
LINA	28	F	ENGLAN	90	100	120	100	140	145	350	345

D

POONAM	25	F	INDIA	85	85	100	100	150	175	335	360
BASANTI	31	F	INDIA	95	95	125	120	185	150	405	365
ALYSSA	21	F	ENGLAN D	95	100	110	120	175	150	380	370
DWITIVA	24	F	INDIA	95	100	120	115	175	180	390	395
LEICY	20	F	ENGLAN D	90	95	110	115	180	165	380	375
RANITA	26	F	INDIA	80	80	130	105	155	135	365	320
HUANG	55	F	ENGLAN D	85	80	100	120	150	160	335	360
TEJASWINI	21	F	INDIA	85	80	90	90	135	130	310	300
HUANG	29	F	ENGLAN D	85	95	100	115	150	170	335	380
UJWALA	49	F	INDIA	90	90	130	115	180	185	400	390
BABITA	17	F	INDIA	55	85	110	95	175	130	340	310
SAVITA	26	F	INDIA	70	80	120	130	145	185	335	395
P.PARIMAL A	41	F	INDIA	75	85	105	100	175	150	355	335
SNEHA SHASHIKAL A	22	F	INDIA	80	85	110	115	135	155	325	355
ARUNDHAT I	39	F	INDIA	100	95	115	110	180	140	395	345
KEERTI	17	F	INDIA	85	100	95	115	150	170	330	385
NIKITA	22	F	INDIA	85	100	85	110	135	145	305	355
DEEKSHITA	22	F	INDIA	95	95	115	105	165	145	375	345
NEERAJA	17	F	INDIA	95	70	110	80	135	130	340	280
SAFIYA	19	F	INDIA	85	90	80	105	145	145	310	340
UTTAMKU MAR	23	F	INDIA	95	95	105	105	155	160	355	360
DINESH	29	M	INDIA	80	75	120	120	160	160	360	355
SATYASEEL AN	17	M	INDIA	55	85	95	75	140	130	290	305
MIDHUN	18	M	INDIA	50	60	100	100	130	140	280	300
VASANT	24	M	INDIA	70	95	110	140	160	180	340	415
MANISH	26	M	INDIA	90	95	115	125	195	190	400	410
AKASH	20	M	INDIA	90	80	100	105	180	160	370	345
SUSANTA	17	M	INDIA	50	70	100	120	125	105	275	285
ANKIT	33	M	INDIA	90	95	95	105	175	180	360	380
MANORANJ AN	18	M	INDIA	95	80	85	100	135	130	315	310
DEEV DATTA	38	M	INDIA	90	80	115	110	175	140	380	330
SRINATH	36	M	INDIA	100	100	115	110	175	185	390	395
PRAKASH	21	M	INDIA	80	65	110	85	160	150	350	300
RAJAT	56	M	INDIA	95	95	105	110	150	145	350	350
PRAVEEN	26	M	INDIA	95	90	105	110	160	180	360	380
VINAY	28	M	INDIA	90	90	120	140	190	190	400	420
SURESH	29	M	INDIA	95	95	115	120	160	175	370	390
PARTHA	26	M	INDIA	95	95	80	100	145	170	320	365
	20	M	INDIA	95	95	130	140	165	180	390	415

SUBHENDU	29	M	INDIA	60	90	110	100	140	165	310	385
SMARAN	19	M	INDIA	90	90	110	100	165	170	365	360
SATYABRAT											
A	27	M	INDIA	70	85	100	115	140	155	310	355
A.PRAKASH	50	M	INDIA	95	95	120	105	190	195	405	415
LEELARAM	22	M	INDIA	90	90	130	105	135	125	355	335
AVINASH	18	M	INDIA	90	95	90	125	150	165	330	385
LIU CHANG	20	M	ENGLAN D	90	50	115	95	190	110	395	255
UPENDRA	32	M	INDIA	95	95	125	125	180	165	400	385
KSENIA	23	F	ENGLAN D	95	90	110	115	175	190	380	395
SHALAOME	25	F	ENGLAN D	85	65	95	105	160	165	340	325
SAYA	18	F	INDIA	95	95	100	120	140	160	335	375
DEEKSHITA	18	F	INDIA	80	80	115	95	175	125	370	340
SHAMBHAV											
I	17	F	INDIA	100	100	120	135	170	195	390	430
HAMMANS	59	F	ENGLAN D	85	80	115	80	165	175	365	355
SWATY	21	F	INDIA	85	95	100	115	155	190	340	400
JIGISHA	40	F	INDIA	90	90	115	115	160	165	365	370
DEBORA	20	F	INDIA	80	80	90	105	175	165	345	350
RAMAYA	26	F	INDIA	85	85	85	115	150	170	320	370
POOJA	19	F	INDIA	95	95	130	115	175	190	400	400
MANISHA	25	F	INDIA	95	100	110	110	160	190	365	400
MANSHU	20	F	INDIA	100	100	105	115	170	165	375	380
PALLAVI	19	F	INDIA	100	95	130	120	190	195	420	410
SINDHU	21	F	INDIA	95	95	110	105	160	175	365	375
VASANTI	25	F	INDIA	85	100	95	110	110	175	290	385
RANJANI	21	F	INDIA	95	95	105	120	185	190	385	405
SUDHA	28	F	INDIA	100	95	110	125	155	145	365	365
SONG	28	F	INDIA	90	85	95	85	160	140	345	330
MAHALAX											
MI	25	F	INDIA	85	85	110	115	115	175	310	375
LO PULKI	30	F	INDIA	85	95	95	105	125	160	305	360
MINIKA											
JHA	19	F	INDIA	95	90	115	115	160	165	370	370
PADMAVAT											
I	27	F	INDIA	90	95	115	115	190	195	395	405
RAJANTI	17	F	INDIA	70	70	80	100	150	120	300	290
SOMASHEK											
AR	25	M	INDIA	90	80	100	105	180	145	370	330
VISHNUKU											
MAR	18	M	INDIA	80	70	95	110	145	140	320	320
ANNADAN											
AYYA	24	M	INDIA	65	65	105	110	150	170	320	345
CHEVULWA											
R	20	M	INDIA	90	85	110	110	145	150	345	345
DHANANJA											
Y	31	M	INDIA	90	50	135	120	165	140	390	310
PAWAN	24	M	INDIA	85	75	95	90	165	135	345	300

NIMMAGA											
DDA	51	M	INDIA	95	95	120	115	170	160	385	370
RAJANISH	29	M	INDIA	95	95	135	115	180	180	410	390
SUDHARSH											
AN	28	M	INDIA	95	95	130	120	165	175	390	390
RANJAY	24	M	INDIA	75	85	130	110	155	170	360	365
AJAY	23	M	INDIA	95	90	100	110	145	160	360	360
MAHESH	24	M	INDIA	90	70	100	105	140	130	330	305
HARIDEV	25	M	INDIA	90	90	105	110	165	180	360	380
BASIL	21	M	INDIA	90	90	105	115	175	190	370	395
DONG											
QING	23	F	CHINA	65	80	105	125	150	140	320	345
FU FENG	42	F	CHINA	90	95	120	120	190	190	400	405
RITU	25	F	INDIA	90	95	115	100	155	175	360	370
LI YUN LI	27	F	CHINA	75	90	130	120	135	155	340	365
VANASHRE											
E	23	F	INDIA	95	100	115	115	170	185	380	400
SONG	25	F	S.KOREA	40	90	105	125	125	145	270	360
MASELLA	19	F	FRANCE	80	65	110	120	155	185	345	370
SARASWAT											
H	20	F	INDIA	95	95	100	105	145	185	340	385
NAGASRAV											
ANI	24	F	INDIA	95	95	110	100	150	170	355	365
POOJA	26	F	INDIA	95	95	110	105	160	175	265	375
SAMANT	36	F	INDIA	95	95	105	100	170	190	370	385
TRIPATI	20	F	INDIA	85	95	120	100	165	160	370	355
LATA M	34	F	INDIA	70	90	120	125	130	160	320	375
AMBILI	23	F	INDIA	100	100	100	110	170	175	370	385
VIDYAM	19	F	INDIA	90	95	115	105	165	170	370	370
RESHMA	35	F	INDIA	80	95	115	125	155	145	350	365
VASUDHA	69	F	USA	90	100	115	120	185	180	390	400
SPHOORTI	22	F	INDIA	70	95	85	95	165	165	320	355
HARSHINI	23	F	INDIA	70	100	120	90	130	160	320	350
ROHINI	21	F	INDIA	55	80	110	90	135	145	300	315