EFFECT OF SMET ON EMOTIONS AND SELF-ESTEEM -A STUDY OF MANAGERS IN A LARGE PSU IN INDIA

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Abstract :

Stress and strain is an integral part of modern-day managers in corporations; more so, in the current globalised world. It adversely affects their health, productivity and well-being. Managing stress in the workplace of the managers appears to be a huge challenge for many corporations. Many previous studies on Self-Management of Excessive Tension (SMET) have indicated how SMET has led to a reduction of stress in managers. A pre-post study was conducted to investigate the effect of the five days residential SMET program for the managers of a large public sector energy Organisation in India. Two psychometric instruments; Positive Affect (PA) and Negative Affect (NA) Scale (PANAS) and Self-esteem Scale were administered before and after the SMET workshop. The study showed a significant increase, in PA scores as well as self-esteem scores and NA significant decrease in NA scores of the managers. The paper concludes how the SMET workshop enhanced emotional well-being and self-esteem of the managers in the Organisation. The author also indicates a few areas of further research.

Key Word: *Yoga, Manager, Positive and negative affect, Self-esteem, SMET, PANAS, ONGC*

Introduction

Economic liberalization: India had played an important role in global trade over the earlier centuries. Though it had closed the borders over last few decades, the change seems to have been initiated through the process of liberalization. The economic liberalisation in India refers to ongoing economic reforms in India that started on 24 July 1991. After Independence in 1947, India adhered to socialist policies. Attempts were made to liberalise the economy in 1966 and 1985. In 1991, after India faced a balance of payments crisis, the IMF required India to undertake a series of structural economic reforms. The new neo-liberal policies included opening for international trade and investment, deregulation, initiation of privatisation, tax reforms, and inflation-controlling measures (Wikipedia, 2014).

Further, India's growth miracle has attracted worldwide attention, particularly, because this growth has been pursued to the wide ranging economic reforms introduced in the early 1990s. Many other developing countries intensified linearization during this period, but were unable to experience a similar spurt in their economic growth. One distinctive feature of India's Liberalization experience is the gradual and calibrated manner in which reforms were introduced, especially with respect to external Liberalization, be it in the financial, agricultural or manufacturing sector (UNCTAD, 2012).

In other words, Indian economy has gone through liberalization since 1990s, leading to rapid globalisation. This pace of globalisation has been picking up, leading to economic growth, infrastructure development, and

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employment generation. On the other side, while meeting the high targets and the rapid pace of growth under constraints, the managers of large corporations have been facing many challenges; time management, stress, health issues of non-communicable diseases (Shah, & Patnaik, 2011).

Stress at work place: In the corporate organisations, the managers are expected to meet the challenges of profitability, growth, customer satisfaction, employee attrition and statutory compliance along with deadlines to achieve the above objectives. These challenges create stress at workplace.

The relationship between work stress and well-being has flourished over the past 20 years. One of the major advances in this literature has been the emergence of the Allostatic Load model as a central organizing theory for understanding the physiology of stress. This has been considered as health outcomes that are associated with exposure to psychosocial stressors at work and provide insight into how workplace experiences affect well-being. Within an Allostatic Load framework, with a focus on primary (e.g., stress hormones, anxiety and tension) and secondary (e.g., resting blood pressure, cholesterol, body mass index) mediators, as well as tertiary disease end points (e.g., cardiovascular disease, depression, mortality). Recommendations are provided for how future research can offer deeper insight into primary Allostatic Load processes that explain the effects of workplace experiences on mental and physical well-being (Daniel, & Christopher, 2013).

Stress, according to Robbins (2003) is an opportunity, demand, constraint, threat or challenge can create stress for an individual when the effect of the event is uncertain and important. Factors relating to the environment, the organization, and the individual can also trigger stress (Robbins & Judge, 2007). This happens especially when s/he is unable to deal with the demands or constraints encountered. While stress at work as a concept has been in existence since long and has been widely studied, both the antecedents and consequences of stress in modern day are very different and have strong implications in ones' personal and professional lives too.

Further, if the stress continues for long duration, it affects the growth and potential development of the individual and which starts declining at both personal and professional levels. This is more so, as an individual goes against his or her own true nature of self. Eventually, the emotional upsurges take over his/her discrimination faculties and lead him towards destruction. All these leads to stress; leading to ill-health, lower the productivity, and other related issues.

As the business environments become more competitive, businesses more dynamic and organizational roles become more complex, the potential for organizational role stress increases. Varied sources of work stress have been identified by researchers. Five categories of stressors were identified by Landy and Trumbo (1976) such as excessive competition, hazardous working conditions, job insecurity, task demands and long or unusual working hours. Marshall and Cooper (1976) classified stress as intrinsic to a job or role, career growth, relationship with colleagues and Organisational climate and structure as five main clusters of work stress.

Srivastava (2009) found that the role of an employee in the organization may create conditions that cause stress for employees at work effecting the quality of work life. Such Organizational role stress has been found to be

negatively related to managerial effectiveness. Nelson and Burke (2000) suggest that a number of factors such as role ambiguity, lack of power and role conflict can also be stressful. Sharma and Devi (2008) further add that role overload, lack of senior level support, lack of group cohesiveness, inequity at workplace, role stagnation, resource inadequacy in the role, constraints on change contribute to the stress of employee.

Role of yoga in stress: Patanjali suggests a solution, that the above can be overcome by adopting "Yoga as a way of life" (Taimni, 1961). According to him, Yoga is all about controlling the thought processes of human beings (Taimni, 1961). In other words, Patanjali, many other spiritual and Yogic leaders have recommended Yoga for overcoming stress and taking care of the physical, emotional and psychological well-being of individuals. This has become imperative in the modern day life.

Pattanjali defines yoga is a technique used to calm down mental thoughts to reach the true Self (Iyenger, 1996) and skills to manage life that fosters moderation and harmony is the message of Patanjali's yoga sutra (Becker, 2000). Yoga harnesses our will, emotions, expands our power of insight, vision and analysis. Yoga is a science to harness the will, calm the mind and steady the emotions, without losing the sharpness of intellect is the key to human progress (Nagendra & Nagarathna, 1997). The integrated Yogic technique is able to accommodate and bring a harmonious work culture without expecting any return (Chakraborty, 1978).

Yoga offers us a holistic lifestyle of bliss, efficiency, emotional equipoise, mental clarity, intellectual sharpness and physical well-being. It is towards the holistic lifestyle that we should move through SMET (Nagendra & Nagarathna, 1997).

Emotional Intelligence: To meet various opportunities and challenges in a corporate setup, more so, in a globalized world, manager is expected to have high levels of their emotional intelligence (EI) and positive emotion that helps them in the execution of work without hampering their well-being. If not adequate, there can be an opportunity to develop this EI.

Emotional Intelligence has evolved as an area in the last three decades. This has gained further significance in the context of globalization. "Emotional Intelligence is the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth" (Mayer & Salovey, 1997).

While elaborating what makes a leader, Goldman (1998), the thought leader of EI states "effective leaders possess high degrees of emotional intelligence. Along with IQ and technical skills, emotional capabilities are the entry-level requirements for executive positions. Emotional intelligence is playing an important role at the highest levels of the company, and is often linked to exceptional performance. Social skill is another key component to successful management".

Review of literature on stress management: Few previous studies on executives had shown significant improvement in EI. Specifically, an integrated yoga practice program of one month has shown significant improvement of the EI level of Managers in (Adhia, Nagendra, & Mahadevan, 2010). In another study, managers undergoing one-hours of SMET program for one month period reported significant

improvement in EI (Kumari, Nath, Nagendra, & Sharma, 2007) and EC (Kumari, Nanth, & Nagendra, 2007). In another study, the five days SMET program also showed significant improvement in EI (Ganpat & Nagendra, 2011) as well as in executive functions based on Brain wave coherence (Ganpat & Nagendra, & Muralidhar, 2011). In a recent study of managers in ONGC, a large public sector energy corporation found a significant increase in the scores of cognitive abilities, anxiety scores and in lowering the symptoms of distress in ONGC managers (Singh, Pradhan, & Nagendra, 2013).

Effect of Yoga on Positive Affect Negative Affect Scale (PANAS): An emotion is defined as a mental and physiological state associated with a wide variety of feelings, thoughts, and behaviors. It is a prime determinant of the sense of subjective well-being and appears to play a central role in many human activities as quoted by (Narasimhan, Nagendra, & Nagarathna, 2011). These emotions were grouped under positive and negative effect. Positive Affect Negative Affect Scale (PANAS) is a tool to measure the person both positive and negative emotion aspect which is very essential for anybody irrespective of professions (Watson, Clark & Tellegen, 1988). In a randomized control study design on prisoners in 7-British jail participated in either yoga program (1 class per week) or a control group for 10-week. Yoga group had increased self-reported a positive effect, and reduced stress and psychological distress compared to control group (Bilderbeck, Farias, Brazil, Jakobowitz, & Wikholm, 2013). Similarly, an open-arm pre-post study having 450 participants were undergoing integrated yoga module that consisted of asanas, pranayama, relaxation, notional correction and devotional sessions. Three hundred and twelve pre-post sets of data showed an increase in Positive Affect by 13% and Negative Affect reduced by 47% after a week long Yoga program. Even short term open armed study can bring a significant positive change in individuals positive and negative effect (Narasimhan, Nagendra, & Nagarathna, 2011).

Effect of Yoga on self-esteem: In a Randomized Control Trial study, which consisted of 226 normal, healthy participants were undergoing a set of integrated yoga module that include asanas, pranayama, meditation, notional correction, and devotional sessions. The control group took part in physical exercises (PE) both groups had under supervision for 6-day/week, for eight weeks, 1-hour/day. The effect size for self esteem in the Yoga group was higher than control group in three domains of self-esteem. The results suggested that both groups had an influence of self esteem in different magnitude of changes (Deshpande, Nagendra, & Nagarathna, 2009).

The research gap of present study: The author found the research gap in India and the significance of exploring the impact of SMET training on ONGC participant's on their emotional health benefits. Hence the current study aimed to evaluate the effect of SMET training on Positive Affect and Negative Affect Scale (PANAS) and self-esteem.

METHODOLOGY

Keeping the above objectives in mind, the researcher selected ONGC, where the research objectives can be met fruitfully. Purposive sampling was adopted for conducting the study. ONGC is a large scale public sector undertaking in the energy sector.

Participants

In this research study, the sample size was calculated using the G*Power (a general power

analysis program) 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009). The minimum sample size need for this study was (no = 65) calculated based on previous study, i.e. The effect size was calculated as 0.456, fixing alpha = 0.05, power = 0.95 (Narasimhan, Nagarathna & Nagendra, 2011) and But present current study consisted of seventy participants. All the participants were recruited from ONGC executive undergoing Self-Management of excessive tension (SMET) workshop at S-VYASA. Both male and female participants with the age ranging from 25 to 60 years were included in this study. Participants having multiple ailments and health related issues and women during menstruation were excluded based on general routine health check up by resident doctors. The current study was approved by the Institutional ethics committee and an informed consent form was obtained from all the participants after explaining them regarding the trial of the research.

Limitations of the study: This study was confined to ONGC; only one large PSU managers over a period of one year. Such studies could be done in other sectors with similar growth pattern such as aviation, Hospitality, education, etc. to map and mitigate stress levels among employees. Further, there was no control group and only subjective variables were measured, short term in a residential setup.

Assessment

Positive and Negative Affect Schedule (PANAS): All subjects were recorded before the start and end of the SMET workshop. Positive and negative affect schedule (PANAS). The PANAS is comprised of a total 20-item with two sub-scales 10-item each measure to assess positive and negative affect. Participants were asked to rate themselves on the scale over past 5-day using a Likert scale from 1 ("very slightly or not at all") to 5 ("extremely"). The PANAS alpha internal consistency reliabilities are high, ranging from 0.86–0.90 for positive affect and from 0.84–0.87 for negative affect (Watson, 1988; Watson, Clark & Tellegen, 1988).

Rosenberg Self-esteem Scale: This is a self-reported scale consisted 10-item evaluates individual global feeling of self worth. The rating scale ranges from 1 (strongly agree) to 4 strongly disagrees). It is validated and reliable for self-esteem measures (Rosenberg, 1965).

Study Design: The current study was designed as a single armed pre-post study, wherein the subjects were interviewed on the record both before and after the 5 days SMET intervention.

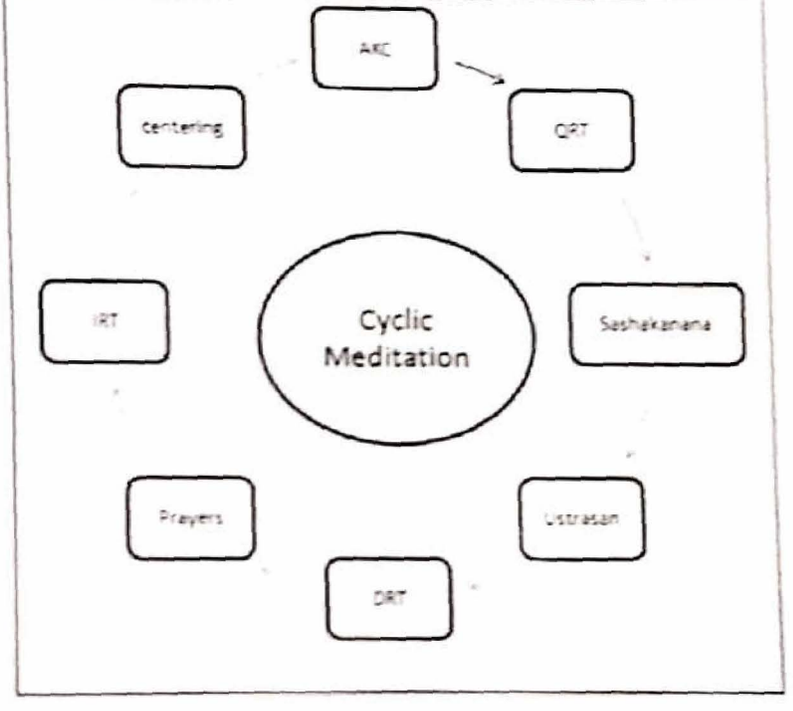
Intervention Adopted

SMET Intervention: SMET comprises of a set of theory. The practices (Cyclic Meditation) based on the principle of 'stimulation followed by relaxation' derived from Mandukyakarika. Cyclic Meditation (CM), consisting of a set of eight techniques practiced cyclically, is a key process in SMET, and was practiced for 30 minutes every day. CM is very different from any other form of meditation. It comprises of a set of physiological stimulations (Yogic postures) followed by relaxation techniques, i.e. The Instant Relaxation Technique (IRT), the Quick relaxation Technique (QRT) and the Deep Relaxation Technique (DRT). The CM process is given below in a pictorial format and more details about the structure of the SMET program are given in Table-1. As explained above, the SMET has multiple component/dimensions. The details of SMET are provided in Figure-1.

Table 1: SMET Program details

SMET THEORY	SMET Practices
Theory 1. Introduction to SMET 2. Concept and Physiology of Stress 3. Stress and it's Release 4. Executive Growth 5. Group Dynamic 6. SMET and Yoga Therapy Research 7. Integrated Approach of Yoga therapy 8. *Pranayama* and Health 9. Yoga for Mastery over Emotion (*Bhakti* Yoga) 10. Action in Relaxation (Karma Yoga) 11. Concept and Basis of Yoga (Happiness Analysis)	**Practice session** Cyclic Meditation

Figure-1: **Schematic diagram of Cyclic Meditation**



Results

Data were analyzed using paired 't' test to assess the effect of SMET intervention for five days.

PANAS

It was observed that the scores of negative affect were lower ($p<0.001$) and positive scores were found to be higher ($p<0.01$) following the SMET intervention of five days. The significant change in the scores is quoted in Table-2.

Self-esteem

It was evident that the self esteem scores was higher ($p<0.001$) following the SMET intervention. The significant changes in Self-esteem scores were reflected in Table-2.

Table-2: The Pre & Post scores of positive & negative effect, self reported self esteem is given in the form of Mean±SD.

n=70	PRE	POST	Percentage changes	P values
Positive affect	37.4±6.35	40.31±5.97***	-7.78	P<0.001
Negative affect	14.13±6.09	12.54±4.26**	11.25	P=0.004
Difference of (Positive-Negative) affect	23.27±9.10	27.22±8.21	-19.34	P<0.001
Self-esteem	21.79±4.05	23.3±4.52***	-6.93	P<0.001

Legend: ***p< 0.001, **p<0.01, comparing Pre & Post scores of the above mentioned variables by using paired 't'-test.

Discussions

The present study found there were improvements in positive affect, self-esteem score and decrement negative affect scores after SMET training program.

Our findings are supported by the previous scientific finding on the beneficial effects of yoga on emotional effect measured using PANAS (Bilderbeck, Farias, Brazil, Jakobowitz, & Wikholm, 2013; Narasimhan, Nagendra, & Nagarathna, 2011) and self-esteem (Deshpande, Nagendra, & Nagarathna, 2009). The current findings also substantiate the a few studies conducted in targeted ONGC managers, where SMET has been shown positive improvements in EI (Adhia, 2010, Kumari, Nath, Nagendra, & Sharma, 2007), recent mental status symptoms somatisation, anxiety, social dysfunction, and depression (Ganpat & Nagendra, 2011).

Mechanisms: The component of SMET consisted of cyclic meditation, lecture sessions, and talks on Indian Psychology of Gita. The effect of Cyclic meditation immediately after a single session found a reduction in oxygen consumption (Sarang & Telles, 2006), increase high frequency component of HRV (Patra & Telles, 2010); improve the cognitive domains measured by memory (Subramanya & Telles, 2009), attention task (Sarang & Telles, 2007; Subramanya & Telles, 2009), P300 auditory oddball task (Sarang & Telles, 2006). Further quality of sleep was enhanced in subsequent night on day practice day of CM (Patra & Telles, 2009). This suggests that CM which is a key practice of SMET practice could bring about change not only at the level of gross level but also at the tissue level.

Major Findings and Conclusions: SMET program had enhanced the psychological well-being of ONGC participants in a residential setup where in they were not exposed to any work related stress. SMET appears to be a very powerful tool, with lesser investments (time, money, and resources) resulting in high impact outcomes of positive affect, lower negative affect, higher self-esteem. This study was first of its kind where in the strong psychological tools like PANAS, self-esteem was studied in a considerably good sample size.

Applications of the study: This study has a wide range of applied value. SMET practice can be introduced in an industrial setup to ensure better health and to remain unfected with stress at the workplace.

Suggestions for future: In the future a large sample size with a follow up and assessment of objective variables needs to be studied to explore the effectiveness of SMET in the industrial set up where the managers really face the challenge of work and targets.

In summary five days SMET program had a positive influence on positive affect scores, reducing negative affect scores and enhancing self-esteem scores of ONGC participants.

Reference

- Adhia, H., Nagendra, H.R., & Mahadevan, B. (2010). Impact of adoption of yoga way of life on the emotional intelligence of managers. IIMB Managment Review, 22, 32-41.
- Shah, A., & Patnaik, I,. (2011). India's financial globalisation. http://www.imf.org/external/pubs/ft/wp/2011/wp1107.pdf. India's financial globalisation.
- Becker, I. (2000). Uses of yoga in psychiatry and medicine. In: Muskin PR, editor. Complementary and alternative medicine and psychiatry. Washington DC: American Psychiatric Press, pp. 107–45.
- Bilderbeck, A. C., Farias, M., Brazil, I. A., Jakobowitz, S., & Wikholm, C. (2013). Participation in a 10-week course of yoga improves behavioural control and decreases psychological distress in a prison population. J Psychiatr Res, 47(10), 1438-1445.
- Chakraborty, S. K. (1987). Managerial effectiveness and quality of work life: Indian insights, New Delhi: Tata McGraw-Hill.
- Daniel, C., G. & Christopher, C.R. (2013). Work Stress and Employee Health: A Multidisciplinary Review. Journal of Management. 39: 1085-1122.
- Deshpande, S., Nagendra, H. R., & Nagarathna, R. (2009). A randomized control trial of the effect of yoga on Gunas (personality) and Self esteem in normal healthy volunteers. Int J Yoga, 2(1), 13-21.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: tests for correlation and regression analyses. Behav Res Methods, 41(4), 1149-1160.
- Ganpat, T. S., & Nagendra, H. R. (2011). Integrated yoga therapy for improving mental health in managers. Industrial Phychiatric journal. 20(1), 45-48.
- Ganpat, T. S., & Nagendra, H. R. (2011). Yoga therapy for developing emotional intelligence in mid-life managers. J Midlife Health, 2(1), 28-30.
- Ganpat, T. S., Nagendra, H. R. & Muralidhar, K. (2011). Effect of Yoga on brain wave coherence in executive. Indian J Physiol Pharmacol, 55(4), 304-308.
- Goleman, D. (1998). What makes a leader, Harvard Business Review, pp. 82-91. as seen on the http//www.unpd.org/content /dam/Samoa/docs/UNPD_WS_TLDP2_ What makes a leader_PDF.

- Iyengar, B. K. (1996). Light on yoga. (1996). New York: Schocken Books.

- Kumari, S., N., Nath, N. .C. B., Nagendra, H.R., & Sharma, S. (2007). Effectiveness of SMET programme with Respect to Emotional Well-being of Managers -An Empirical Study. Vilakshan, XIMB Journal of Management. 4:165-173.

- Kumari, S., N., Nath., N. C. B., & Nagendra, H.R.(2007). Enhancing Emotional Competence among Managers through SMET. National Academy of Psychology, India. , 52(2), 171-173.

- Landy, F.J. & Trumbo, D.A. (1976). Psychology of Work Behaviour. USA, Dorsey Press.

- Marshall, J. & Cooper, C. L. (1979). Executive under pressure: A psychological study. New York: Praeger Publishers.

- Mayer, J., & Salovey, P. (1997). 'Ability Model of Emotional Intelligence', available on-line: http//emotionaliq.com/ (accessed 17 November 2003).

- Nagendra, H. R., & Nagarathna, R. (1997). New perspectives in stress management. Bangalore, India: Swami Vivekananda Yoga Publications. , 61(5), 386-391.

- Narasimhan, L., Nagarathna, R., & Nagendra, H.R. (2011). Effect of integrated yogic practices on positive and negative emotions in healthy adults. Int J Yoga, 4(1), 13-19.

- Nelson, D. L. & Burke, R. J. (2000). Women Executives: Health, Stress and Success, Academy of Management Executive, 14, pp.107–21. on-line: http//emotionaliq.com/ (accessed 17 November 2003).

- Patra, S., & Telles, S. (2009). Positive impact of cyclic meditation on subsequent sleep. MED Sci Monit, 15 (7), 375-381.

- Patra, S., & Telles, S. (2010). Heart rate variability during sleep following the practice of cyclic meditation and supine rest. 35(2): 135-104.

- Robbins, S. P., and Judge, T. A. (2007). Organizational behavior. 12th edition. New Jersey: Pearson Education.

- Robbins, S.P. (2003). Organisational Behavior, 10th ed., Prentice Hall, New Delhi 47.

- Rosenberg, M. & Princeton, N.J. (1965): Princeton University Press; 1965. Society and the adolescent self-image.

- Sarang, P. S., & Telles, S. (2006). Oxygen consumption and respiration during and after two yoga relaxation techniques. Appl Psychophysiol Biofeedback, 31(2), 143-153.

- Sarang, S. P., & Telles, S. (2006). Changes in p300 following two yoga-based relaxation techniques. Int J Neurosci, 116(12), 1419-1430.

- Sarang, S. P., & Telles, S. (2007). Immediate effect of two yoga-based relaxation techniques on performance in a

letter-cancellation task. Percept Mot Skills, 105(2), 379-385.

- Sharma, J. & Devi, A. (2011). Role stress among employees: An empirical study of commercial banks, Gurukul Business Review Vol. 7, pp. 53-61.

- Singh S.N., Pradhan, B., & Nagendra, H.R. (2013). Effect of five days of self management of excessive (SMET) residential workshop on top line days. Ph D. Thesis.

- Srivastava, A.K. (2006). Role stress in the public sector: An empirical study, Managment and Change, 10 (1) pp. 1-10.

- Subramanya, P., & Telles, S. (2009a). Effect of two yoga-based relaxation techniques on memory scores and state anxiety. Biopsychosoc Med, 3, 8.

- Subramanya, P., & Telles, S. (2009b). Performance on psychomotor tasks following two yoga-based relaxation techniques. Percept Mot Skills, 109(2), 563-576.

- Taimni, I. K. (1961). The Science of Yoga. The Theosophical Publishing House, India: Madras

- UNCTAD. (2012). Annual report. pp.22. http//www.unctad.org/en/PublicationsLibrary/dom2013d1_en.pdf.

- Watson, D. (1988). Intra-individual and inter-individual analyses of positive and negative affect: their relation to health complaints, perceived stress, and daily activities. J Pers Soc Psychol, 54(6), 1020-1030.

- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. J Pers Soc Psychol, 54(6), 1063-1070.

- Wikipedia (2014), "The free encyclopedia, Economic liberalisation in India", as seen on the http://en.wikipedia.org/wiki/Economic_liberalisation_in_India.