

Influence of Integrated Yoga Training (IYT) on Physical and Psychological Symptoms of IT Management Staff'

Vijay Singh Gusain¹, B.P.Gaur²

How to cite this article:

Vijay Singh Gusain, B.P.Gaur/Influence of Integrated Yoga Training (IYT) on Physical and Psychological Symptoms of IT Management Staff' / Indian J of Ancient & Yoga. 2022;15(2): 51-56.

Abstract

This research study was conducted to evaluate the Influence of Integrated Yoga Training(IYT) on Physical and Psychological Symptoms of Middle Management Staff of an IT organization. A pre-andpost- research design was adopted for the study. A purposive sample of 20 subjects, out of 34 Yoga practitioners, was drawn from T.I. Infotech, Delhi NCR. The subjects selected for the study were homogenous in terms of age (27-34), educational qualification (graduation and plus), socio-economic status and work experience (07-14 years). The subjects were administered on the Mental Health Check List (MHCL) of Pramod Kumar prior to commencement and termination of 30 minutes Yoga intervention of Integrated Yoga Training (IYT) for two months. The data collected and analyzed on Sandler's 'A' test with a significance criterion of $\alpha = \text{or } p < .05$. The results shows that after two months of the Yoga training, the subjects differed significantly on both of their Physical Symptoms as well as Psychological Symptoms at $p < 0.0005$, as compared to their pre-experimental stages. This implies that the subjects improved their mental health significantly after two-month practice of Integrated Yoga(IYT).

Keywords: Integrated Yoga Training; Physical and Psychological Symptoms, Mental Health.

Introduction

W.H.O. has reported that "Mental Health (W.H.O. report 2001, p.3)¹ is crucial to the overall wellbeing of individuals, societies and countries". Wig, 1979 (in Shah, 1982)² stated that "Mental Health is another name of quality of life". Gopalakrishnan (1986, p.9)³ opined that "the simplest definition of Mental Health is peace within and harmony with others. It comprises the wellbeing of both the intellectual components and emotional components of mind". Kumar (1992)⁴ interpreted mental health as presence of "mental peace, harmony and content" and absence of "disabling and debilitating symptoms, both mental and somatic in the person". Jagdish (2001)⁵ mental health is "the state of mental

pleasure and lacking of psycho-physiological complaints." The present study takes mental health of middle management staff in lines of these two pioneers.

Yoga is a tool for attaining holistic health. The term Yoga which is derived from Sanskrit root "Yuj" means union, the union of self (jivatma) with supreme universal self (parmatma). The aim of seeking 'union' does comprise obtaining relief not only from pain and sufferings but also attaining permanent bliss and happiness. The objectives of Yoga also comprise attainment of holistic health in addition to attainment of fullest development of personality and Kaivalya (ultimate freedom or self-realization or experience of one's innermost being). Hence Yoga after is right mean to improve mental health in line with aforesaid pioneers Kumar and Jagdish.

The basis of Yoga is traced from various Ancient and Middle Ages Indian literatures and scriptures. Hundreds of Yogis of nineteenth, twentieth and twenty-first centuries have thrown light on Yoga and its associated subjects enough which has not only made Yoga accessible to the common man but also expressed it in much more meaningful

Author Affiliation: ¹Assistant Professor, ²Former Head, Department of Science of Living & Yoga, Jain Vishwa Bharti Institute, Ladnun, Rajasthan 341306, India.

Corresponding Author: B.P. Gaur, Former Head, Department of Science of Living & Yoga, Jain Vishwa Bharti Institute, Ladnun, Rajasthan 341306, India.

E-mail: drbpgaur@gmail.com

Received on: 17.01.2022

Accepted on: 19.02.2022

ways without losing its originality. Thousands of researches conducted on the subject matter of Yoga in the past nine decades have made it acceptable to the minds of today's educated people.

Research studies conducted so far in India and abroad reported that people who practiced Yoga regularly not only reduced their pain and suffering to greater degree but also improved their quality of life by improving their physical, mental, emotional, social and spiritual health as well as personality. Fehr (1974)⁶ concluded that T.M. leads to (i) greater reduction in Nervousness (reduces psychosomatics), (ii) aggressiveness - (increased self-control and emotional maturity (iii) irritability - (increased calm in frustrating situations and increased tolerance) (iv) greater reduction in Depression (increased contentment and self-confidence, (v) greater increase in sociability, (increased friendliness and liveliness (vi) increased placidity (increased self-assuredness good humor, (vii) decreased tendency to procrastinate, decreased tendency to dominate - increased respectfulness, (viii) greater decrease in Inhibition (increased naturalness, spontaneity sufficiency) (ix) greater change in the extroversion (capacity for warm interpersonal relationship, and (x) greater reduction in Neuroticism (increased emotional stability and decreased tension, (xi) increased self-reliance - increased effectiveness, balance mood and vigor). Torber, Mertesdore and Hiesel (1976)⁷ observed the T.M. practicing normal subjects to be less nervous (less psychosomatic disturbances), less aggressive (greater self-control and greater emotional maturity), less depressed (greater contentment, greater self-confidence) irritable (greater calm in frustrating situations, greater tolerance) greater placidity (greater self-assuredness, more good humor, less tendency to procrastinate, less inhibition (greater naturalness, greater spontaneity, greater self-sufficiency, less neuroticism (greater emotional stability, less tension) more relaxation, more activation, more elation, less anxiety, less fatigue, less physical tension, less physical weakness and increased physical wellbeing. Bhardwaj, Upadhyaya, and Gaur (1979)⁸ found the significantly positive effect of T.M. on anxiety and psycho-neurotic problems of the anxiety neurotic patients. They inferred T.M. as a treatment modality for neurotic problems. Lovell-Smith (1982)⁹ concluded TM improved general physical and mental health, relief from insomnia, decreased need for tranquilizers, and fewer headaches due to regular practice of Transcendental Meditation (T.M.). Vinod (1984)¹⁰ concluded that Shavasana Meditation (Yoga Nindra) produces emotional stability and physical relaxation

significantly. Shrikrishna (1985)¹¹ concluded that the yogic practices are more useful in the treatment of Anxiety Neurosis, mild to moderate Hypertension, Mucus Colitis, Bronchial Asthma and Chronic Rhinitis. Alexander, Swanson, Rainforth, Carlisle, Todd and Oates (1993)¹² established a positive effect of the T.M. program on stress reduction, health and employee development in two occupation settings. Udupa (1996)¹³ found remarkably good results (58% clinically cured, 25.5% relieved) in the cases of different stress disorders that underwent Yoga therapy with or without the help of biofeedback. He also suggests that Yogic practice can play a great role in prevention of various stress diseases provided it is practiced with all sincerity and in a regular manner. Bhogal (1997)¹⁴ found a reduction in psychological stress due to Yoga practice. Bera, Gore and Oak (1998)¹⁵ observed a reduction of physiological stress due to Shavasana practice. Jain & Sharma (2005) conducted an experimental study with before and after of 6 days intervention and one month, to explore effect of the 'Art of Living' basic course on 30 students on two questionnaires i.e., Test of Measuring Stress by Miller and Smith; and Hindi version by Gautam, Nijhawan and Kamal of Goldbergs General Health Questionnaire. Their findings revealed that stress arousal was decreased and general health was found to be improved in the subjects after the intervention phase. Desai and Nagendra (2005)¹⁶ observed that Cyclic Meditation reduced stress and improved psychological wellbeing and sleep quality in night shift workers. Smith, Hancock, Blake-Mortimer, and Eckert (2007)¹⁷ concluded that Yoga appears to provide more improvement in stress, anxiety, and health status as compared to relaxation.

Gaur, Gusain and Suresh (2009)¹⁸ investigated the Role of Meditation on Mental Health and found it as an effective tool for not only managing the poor mental health (anxiety disorder, mood disorder/depression, habit disorder, psychosomatic disorders etc.) but also for attainment and development of qualities of positive mental health. Gaur & Gusain (2009)¹⁹ found significant improvement in mental health of female executives after one month of Preksha Meditation (P.M.) treatment. Gaur and Gusain (2009)²⁰ found positive effects of one month P.M. intervention on psychosomatic health of male executives. Saxena (2010)²¹ found a significant reduction in anxiety after one month's Yoga program on IT executives of 22 to 30 ages. Agnihotri and Rani (2010)²² found a significant reduction in their depression after one month's Yoga based stress program on BPO executives of 18 to 30 ages. Gaur, Gusain and Ahuja

(2014)²³ concluded positive effects of two months P.M. practice on three variables out of the six viz., Adaptability (AD), Personal Efficiency (P.E.) and Positive Attitude (P.A.).

Significance of the Study

Some studies are relecting the beneficial effects of a few meditation techniques and Yoga based relaxation techniques on mental health and various aspects of the human being but the investigators did not find researches related to Integrated Yoga Training (IYT) and mental health of IT management staff. Hence the present study has its significance in evaluating the effect of IYT on the mental health of the IT management personnel.

Objective of Study

The objectives of the present study are:

1. To assess the level of Physical Symptoms and Psychological Symptoms of Mental Health of IT Management Staff at baseline.
2. To evaluate the effects of Integrated Yoga Training (IYT) on Physical Symptoms and Psychological Symptoms of Mental Health (MHCL) after two months.
3. To present obtained data and results scientifically and statistically in quantitative forms.

Problem & Conceptual Clarification

What is the Influence of Integrated Yoga Training (IYT) on Physical and Psychological Symptoms of Mental Health of IT Middle Management? More specifically - does Integrated Yoga practice lead to significant improvement in the Mental Health of male management personnel?

Integrated Yoga Training (IYT) here meant by a module of 30 minutes practiced by the male management personnel. The module comprised of Sukshma Vyayamas & Asanas (12 exercises & asanas) with five repetitions for 15 minutes- Greeva Shakti Vikasak Kriya-I (Sidewise Head Tilt), Greeva Shakti Vikasak Kriya-II (Sidewise Head Turn), Greeva Shakti Vikasak Kriya-III (Up and Down Head Tilt), Greeva Shakti Vikasak Kriya-IV (Head/Neck Rotation), Skandhmoola Shakti Vikasak Kriya-I (Shoulder Rotation), Skandhmoola Shakti Vikasak Kriya-II (Shoulders-up & down), Vakshasthal Shakti Vikasak Kriya (Chest expansion & Shoulder extension), Kati Chakra (Waist Rotation), Kati Shakti Vikasak Kriya (Sidewise Bending), Kati Shakti Vikasak Kriya

(Forward & Backward Bending), Utkatasana (Chair Pose), Natarajasan (Level-I & II); Pranayamas for 07 minutes-Deep Breathing, Suksham Kapalbhati (Active Exhalation with lowest level of pressure, sound; comfortable rhythm), Anulom-Vilom (Alternate Breathing); Laghu Dhyana for 07 minutes (Short-Term Meditation with chanting of mantra 'SO-HUM' i.e. 'SO' while inhaling and 'HUM' while exhaling). The session was closed by rubbing the hands till they become warm and then sliding them from the head to feet.

Management Staff here means IT personnel holding positions of Junior and Senior Executives and Assistant Managers.

Physical symptoms mean Headache, Tiredness, Disturbed Sleep, Indigestion and Acidity and Psychological symptoms means Anxiety & Tension, Restlessness, Nervousness, Loneliness, Hopelessness and Anger.

Hypothesis

Here, a single-directional and declarative hypothesis framed as: -In comparison to the baseline status (pre-experimental stage) the subjects practicing Integrated Yoga will be found significantly better in their Physical as well as Psychological Symptoms of Mental Health on Mental Health Check List (MHCL) after two months of regular practice.

Methodology

Research Design

A pre-post-experimental design was adopted for this study as illustrated under-

Fig. 1

Group/I.V.	Experimental Stages- (Pre)/ D.V.	Experimental Stages- (Post)/ D.V.
Experimental Group (IYT)	Measurement of Physical and Psychological Symptoms of Mental health	Measurement of Physical and Psychological Symptoms of Mental health

Control over Variance

Here Integrated Yoga Training (IYT) is Independent Variable (I.V.) while Physical and Psychological symptoms of Mental Health are Dependent Variables (D.V.). Adequate precautionary measures were taken to control extraneous and relevant variables, i.e., subject relevant, situation relevant and sequence relevant by adopting a sound strategy.

Sample

For the current study, a purposive sample of 20 subjects, out of 34 Yoga practitioners, was drawn from management staff working in TI Infotech, Noida, Delhi NCR. The subjects selected for the study were homogenous in terms of age (27-34), educational qualification (graduation and plus), socio-economic status (junior executives, executives, assistant managers) and work experience (07-14 years).

Tests used

The Mental Health Check List (MHCL) of Pramod Kumar(1992) was used for measuring mental health of the employees. The test is standardized with its high degree of reliability and validity.

Procedure

The Mental Health Check List (MHCL) was administered on all the subjects prior to the commencement of Integrated Yoga Training (baseline). The training was imparted to the subjects by a trained and experienced Yoga teacher. Each subject of the group practiced IYT regularly in the morning, for 30 minutes for two months. After two months, the test was re-administered on the same subjects.

Result

The scores obtained on the Mental Health Check List (MHCL) were analyzed and are presented in table 1. The obtained data were analyzed using Sandler’s ‘A’ test with significant criteria of $p < 0.05$. Table 1 presents mean and Sandler’s ‘A’ values of pre- post-experimental stages of the subjects.

Table 1: Mean and ‘A’ values for Experimental Group at Pre-Experimental Stage and Post-Experimental Stage on Mental Health Check List (N=20)

Mental Health	Pre-Mean	Post-Mean	Sandler’s ‘A’	P<
MHCL	8.8	7.7	0.095	0.001
Physical Symptoms				
MHCL	10.8	9.65	0.069	0.001
Psychological Symptoms				

The obtained results indicate that the scores of Physical Symptoms, Psychological Symptoms of Mental Health of the subjects increased significantly ($p < 0.0005$) on the Mental Health Check List (MHCL) after two months of Integrated Yoga Training (IYT). This indicates that the subjects

improved their Physical Symptoms, Psychological Symptoms of Mental Health after Integrated Yoga Training (IYT). Here improvement in Mental Health of the management personnel owing to IYT implies a reduction in the frequency of Physical symptoms i.e. Headache, Tiredness, Disturbed Sleep, Indigestion and Acidity and Psychological symptoms i.e. Anxiety & Tension, Restlessness, Nervousness, Loneliness, Hopelessness and Anger. Hence, the proposed hypothesis is corroborated by the present finding.

Discussion

The results reveal that the subjects of the experimental group improved their physical as well as psychological symptoms after two months of Integrated Yoga Training (IYT). These findings are corroborated by other findings of research studies on Transcendental Meditation (TM), Preksha Meditation (PM), Vipassana Meditation (VM) and other Yoga and based relaxation techniques.

Nagaratanamma (2008)²⁴ found Integrated Yoga package with dietary reforms had significant improvement in frequency of psychosomatic disorder (Migraine) at $P < 0.01$ and in the duration of psychosomatic disorder (migraine) at $p < 0.01$. Gaur & Gusain (2009)²⁵ found positive effects of one month PM intervention on the psychosomatic health of male executives. Gaur & Gusain (2009)²⁶ concluded positive significant ($p < 0.005$) in one month’s Preksha Meditation (PM) on mental health of female executives. Saxena (2010)²⁷ observed the effect of one month’s Yoga program on IT executives of 22 to 30 age and found significant reduction in their anxiety ($p < 0.01$). Agnihotri and Rani (2010)²⁸ investigated effect of one month’s Yoga and based stress management program on BPO executives of 18 to 30 age and found significant reduction in their depression ($p < 0.01$). Sudha (2012)²⁹ investigated the effect of cultural asanas as prescribed by B.K.S. Iyengar and Suryanamaskar (Sun Salute) as prescribed by Swami Satyananda Saraswati on Traffic Policemen and found a significant reduction in anxiety and improvement in job involvement. Sharma, M., Vats, N., Gaur, B.P. and Pathak, M. (2015)³⁰ observed a significant effect of T.M. on Anxiety, Restlessness, Nervousness, Loneliness, Despair, Anger, Headache, Fatigue, Sleep Disorder, indigestion and Acidity of working women. These findings are very close to the results of the present study.

Conclusion

The overall picture emerged from the findings leads to following conclusions:

1. The subjects of the experimental group (20) are homogenous in terms of homogenous in terms of age (27-34), educational qualification (graduation and plus), socio-economic status (junior executives, executives, assistant managers) and work experience (07-14 years).
2. Integrated Yoga Training (IYT) improved both physical as well as psychological symptoms of Mental Health of subjects of the experimental group significantly ($p < 0.0005$) on the Mental Health Check List (MHCL) after two months of regular practice. Hence, hypothesis the is corroborated by the present finding.
3. The improvement in mental health in the subjects is due to the regular practice of IYT. In fact, the IYT improved Mental Health of Middle Management Staff. In other words, IYT reduced frequency and intensity of Physical symptoms i.e. Headache, Tiredness, Disturbed Sleep, Indigestion and Acidity and Psychological symptoms i.e. Anxiety & Tension, Restlessness, Nervousness, Loneliness, Hopelessness and Anger

Recommendations / Suggestions

1. Since the current study is conducted for a period of two months and without a control group on a small sample of IT middle management staff working in an Information and Technology company. It is, therefore, suggested that such type of study may be conducted further at a wider range and for long-term period using larger sample with control group of lower and top management staff and both genders.
2. The current test i.e., Mental Health Check List (MHCL) is applied to assess physical and psychological symptoms of mental health but does not specify the areas of mental health. Hence it is suggested that further investigations may be attempted to study the impact of Yoga, meditations and Yoga and based relaxation techniques on various areas of Mental Health using some other tests.

References

1. W.H.O. Report 2001 (2002). Mental Health: New Understanding New Hope/ W.H.O.-Delhi: Book Well.
2. Shah, A.K. (1988): "Integration of Mental Health" Ed. Pandey, J. (1988) Organizational Behavior and Mental Health," Psychology

- in India: The State-of between the-Art., Vol. III, Sage Publications Pvt. Ltd, M-32, Market G.K.-I, New Delhi 110048.
3. Gopalakrishnan, N. (1986): "Mental Health and You" India Book House Pvt. Ltd., Bombay, India.
4. Kumar (1992). Manual for Mental Health Check List. Published by National Psychological Corporation, Agra, India.
5. Jagdish (2001). Manual for Employee's Mental Health Inventory. Published by Rakhi Prakashan, 6/9, H.I.G, Flats, Sanjay Place Housing Society, Agra-282002 (India).
6. Fehr, T. (1974): "A Longitudinal study of the effect of the T.M. program on changes in personality" Department of Social Affairs, MIUI, Forschungsring Schopferische Intelligenz, Dormagen, West Germany.
7. W Torber, S., Mertesdorf, F., and Hiesel, E. (1976): Effects of T.M. on Mood and Bodily Sensations. Diplomaarbeit of first author (abbr.) University of Cologne, Cologne, W. Germany.
8. Bhardwaj, P., Upadhyaya, S., and Gaur, B.P. (1979): "T.M. as a Treatment Modality in Neurotic Disorders," Journal of Rajasthan Psychiatry Society, (2), 53-57.
9. Lovell-Smith, H.D. (1982). T.M. treating the patients as well as the disease. The New Zealand Family Physician 9:62-65 April 1982.
10. Vinod, S.D. et al. (1984-85): "Effect of Yogic practice performed in a state of meditation on adolescent anxiety and certain personality variable," Proceeding ICYR, Article No.-21.
11. Srivastava, A.K. (1990): "Occupational stress, job involvement and mental health of employees in public and private sector organizations: A comparative study." I.C.S.S.R., New Delhi.
12. Alexander, C.N., Swanson, G.C., Rainforth M.V., Carlisle, T.W., Todd, C.C. and Oates, R.M. (1993): Effect of the T.M. program on stress-reduction, health and employee development in two occupational setting Anxiety, Stress and Coping, 6: 245-262.
13. Udupa, K. N. (1996): "Stress and its management by Yoga," Motilal Banarasiidass publishers Pvt. Ltd., Delhi.
14. Bhogal R.S (1997). Yoga psychology - its relevance to stress, anxiety, and emotional disorders. Yoga-Mimamsa, 32; (4) 35-40.
15. Bera T.K., Gore M.M., & Oak J.P. (Oct.1998). Recovery from stress in two different postures and in Shavasana. Ind. J. Phy. & Pharm., 42; (4) pg. 473-478.
16. Desai, V.P. and Nagendra, H.R. (2005): "Efficacy of Yoga and Relaxation technique on Psychological Variables in Night Shift Executives" Abstract: souvenir of 15th Int. Conf.

- on *Frontiers in Yoga Res. and Applications* Dec. 2005.
17. Smith C, Hancock H, Blake-Mortimer J, Eckert K. (2007). A randomized comparative trial of yoga and relaxation to reduce stress and anxiety. *Complement Ther Med.* Jun; 15 (2): 77-83, Equb 2006 Jun 21.
 18. Gaur, B.P., Gusain, V.S. and Suresh, C. R. (2009). Role of Meditation on Mental Health. Paper presented on National Seminar on Yoga, Mental Health and Society, organized P.G. Department of Yoga and Holistic Health, Govt. M.B. P.G. College, Haldwani, Nainital, Uttarakhand from 23th to 24th May, 2009.
 19. Gaur, B.P. and Gusain, V.S. (2009). Impact of Preksha Meditation on Mental Health of Female Management Personnel. Paper presented at National Workshop on Girl's & Women's Health organized by CCRYN, New Delhi & Mahatma Gandhi Prakritik Chikitsa Samiti (Regd.), Jind, Haryana, from 29th to 30th March, 2009. Paper published in *International Journal of Yoga and Allied Sciences*, Vol., 06, Issue-I, January to June, 2017.
 20. Gaur, B.P. and Gusain, V.S. (2009). Influence of Preksha Meditation on Psychosomatic Health of Organizational Officials. Paper presented at National Seminar organized by CCRYN, New Delhi & Jain Vishwa Bharti Institute, Ladnun, Rajasthan, from 06th to 08th March, 2009.
 21. Saxena, N. (2010): Management of Anxiety due to Techno-stress. Abstract: pp.47, National Yoga Week, 12-18 February, 2010 organized by MDNIY, New Delhi, India.
 22. Agnihotri, R and Rani, S. (2010): Yogic Intervention on Work Culturally related Depression in BPO sector. Abstract: pp.49, National Yoga Week, 12-18 February, 2010 organized by MDNIY, New Delhi, India.
 23. Gaur, B.P., Gusain, V.S. and Ahuja, R. (2014). Impact of Transcendental Meditation on Self Efficiency of Personnel of shopping mall of Metro City. Paper presented on National Yoga Week-2014, Abstract: pp.41, organized Morarji Desai National Institute of Yoga, Delhi, from 12th to 18th February, 2014.
 24. Nagaratanamma, B. (2008). Effect of Yoga on the alleviation of Psychosomatic Disorder. *Journal of Common G & R.*, Vol. 25, No.2, p.p., 167-172.
 25. Gaur, B.P. and Gusain, V.S. (2009). Influence of Preksha Meditation on Psychosomatic Health of Organizational Officials. Paper presented at National Seminar organized by CCRYN, New Delhi & Jain Vishwa Bharti Institute, Ladnun, Rajasthan, from 06th to 08th March, 2009.
 26. Gaur, B.P. and Gusain, V.S. (2009). Impact of Preksha Meditation on Mental Health of Female Management Personnel. Paper presented at National Workshop on Girl's & Women's Health organized by CCRYN, New Delhi & Mahatma Gandhi Prakritik Chikitsa Samiti (Regd.), Jind, Haryana, from 29th to 30th March, 2009. Paper published in *International Journal of Yoga and Allied Sciences*, Vol., 06, Issue-I, January to June, 2017.
 27. Saxena, N. (2010): Management of Anxiety due to Techno-stress. Abstract: pp.47, National Yoga Week, 12-18 February, 2010 organized by MDNIY, New Delhi, India.
 28. Agnihotri, R and Rani, S. (2010): Yogic Intervention on Work Culturally related Depression in BPO sector. Abstract: pp.49, National Yoga Week, 12-18 February, 2010 organized by MDNIY, New Delhi, India.
 29. Sudha, E. (2012): Effect of Cultural Asanas and Surya Namaskar on Selected Psychological Variables among Traffic Policemen. Souvenir: pp.236-241, National Yoga Week, 12-18 February, 2012 organized by MDNIY, New Delhi, India.
 30. Sharma, M., Vats, N., Gaur, B.P. and Pathak, M. (2015). Transcendental Meditation as Treatment Modality for Psycho-somatic Problems. *International Journal of Yoga and Allied Sciences*, Vol.:04, Issue 02, July to December, 2015, pp. 82-89.

