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EFFICACY OF YOGA SADHANA ON PHYSICAL HEALTH AMONG IT EXECUTIVES

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Abstract: Executive physical health is an important factor and play vital role in modern work place ambience. A healthy executive inspires his employees to work towards being fit, be more energetic and they are less likely to fall sick. It exerts self confidence and empowers, the executive to challenge themselves, and strive for higher levels of achievements in the work place. As an executive, reducing your sick day is important role for incorporating yogic exercises. Regular yoga practices, can relieve, tension, stress, anxiety, depression and anger. Most executives note an improvement in general well-being over time becomes a post of their routine. The present study has been undertaken to evaluate and assess the relative effects of 12 weeks of selected yogic practices on physical health among executives working in IT profession. For this present investigation, 20 executives who are working in IT profession were randomly selected and assigned as experimental group. The experimental group underwent rigorous yogic practices for 12 weeks. The executives physical health was assessed in both pre and post training situations i.e., before and after 12 weeks of yoga training. After 12 weeks of yogic training, physical health condition was significantly improved among selected executives. This is due to the yogic training imparted to the executives. Thus yogic training has enhanced executive's physical health in improved level.

Key Words: Suriyanamaskar, Pranayama Physical health and Executives.

INTRODUCTION

Executive physical health is significant factor that determine organizations productivity level. As an executive, reducing your sick day is important role for incorporating yoga exercise in to your life style. Yoga exercises boost mental and physical wellness. Regular Yoga practice can relieve tension, stress, anxiety, depression and anger. Most executive also note an improvement in general well being over time, becomes a part of their routine.

Executives who are lean as well as active are seen more productive than the ones who are inactive and overweight.

Employees who have three or more health related risks show a 30% highest rate of absenteeism and 38% higher rate of health related expenditure at work (J.M., Wartel Harris 1977).

Physical inactivity has been identified as the fourth leading risk factor for global mortality (6% of deaths globally). This follows high BP (13%) tobacco use (9%) and high blood glucose (16%) over weight and obesity are responsible for 5% of global mortality. Levels of physical inactivity are rising in executives with major implications for general health.

A healthy executive inspires his employees to work towards being fit, be more energetic and they are less likely to fall sick. If exerts self confidence and empowers, the executive to challenge themselves, and strive for higher levels of achievements in the work place.

Encourage executives to be more active, and fix them to meet daily or weekly yoga exercise goals. Also play out door games with the whole family, scheduled each day to Gym or pick up healthy, active hobbies, like hiking and cycling. Make yogic exercise and physical activity a permanent part of executive daily routine. Involving yogic exercises and most days of week and reap numerous health and productivity benefits.

The benefits of regular yoga Exercise on the body:-

- 1) Improving the functions of different body systems.
- 2) Promotes Physical Wellness

- 3) Improves Mental Wellness and Emotional Intelligence
- 4) Reduces Obesity and Coronary Heart Disease
- 5) Cures Physical Illness and Prolongs Life.
- 6) Enhances Cardio Respiratory Efficiency.
- 7) Reduces Stress and Conflict
- 8) It relieves Depression
- 9) Alertness, Concentration and Cognitive Functions Improved
- 10) Physical Strength is Enhanced
- 11) Job Satisfaction and Job involvement raised
- 12) Reduces Diabetics & cholesterol level
- 13) Sense of Well Being & Spiritual Growth
- 14) Delays Ageing Process

Meaning of Physical Health

The ability to perform daily tasks, and life comfortably in one's body

RESEARCH METHODOLOGY

1. Purpose of the Study

The purpose of the present study was to assess the relative effects of 12 weeks of before and after yoga training on physical health among IT executives.

2. Hypothesis

It was hypothesized that selected yogic training would improve higher physical health condition among IT executives.

3. Selection of Subjects:

For this present study, twenty subjects in experimental group from Tata Consultancy Service, Sholinganallur, Chennai, Tamil Nadu, India, were randomly selected. Only men executives were selected for this present study. Their age ranges from 23 years to 55 years.

4. Selection of Variable

For this present study, physical health variable was chosen as dependent variable. Yoga training is independent variable.

5. Data Collection

The physical health was assessed through standardized questionnaire. The data were collected through primary method. The data period covers from August 2019 to October 2019.

6. Experimental Period

The selected subjects underwent 12 weeks of selected yogic practices daily 60 minutes 5 days in a week. The selected yogic training includes.

1)	Stretching Exercises	_	10 minutes
2)	Suriyanamaskar (3 rounds)	_	30 minutes
3)	Nadhi Shudhi Pranayama	_	5 minutes
4)	Om Meditation	_	5 minutes
5)	Deep Relaxation Technique (DRT)	_	10 minutes

7. Statistical Tools Used

For this present investigation 't' test was applied to find out the mean difference between before and after training situations of the experimental group.

8. Assessment of Physical Health

In order to assess the physical health of executives, the physical health scale constructed by carry, cooper 1988 was used.

This scale consists of 12 items, which were to be responded to on a six point scale (1 - very frequently, 2 - frequently, 3- some times, 4 - infrequently, 5 - very infrequently, 6 - never).

A simple summation of the scores of the subjects' responses was the Physical Health score of the subject. The minimum and maximum possible score of the scale were 12 and 72 respectively.

RESULTS AND DISCUSSION

Results of Physical Health

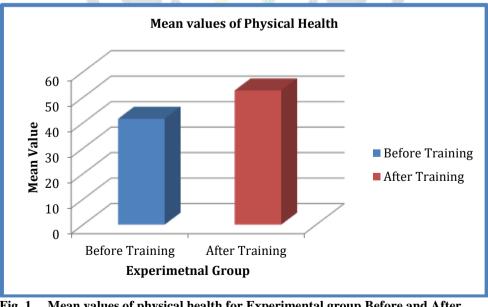
The data collected on physical Health among IT executives were statistically treated and the results are discussed here. The total number of subjects in this study were twenty, who were assigned to experimental group. The subjects were selected from Tata Consultancy Service, Sholinganallur, Chennai, Tamil Nadu, India, After the initial test, the experimental group underwent rigorous yogic training for 12 weeks. Data were collected from each subject at two times, i.e., before training and after 12 weeks of training. 't' test was applied to find out the mean difference among experimental group. The physical Health results are presented in Table - 1.

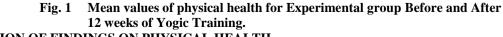
1 able-1				
Mean Values of Physical Health for Experimental Group Before and				
After 12 weeks of Yogic Training				

Sl.No	Physical Health	Ν	Mean	S.D	Std. Error	
1	Before Training score	20	41.55	2.625	0.587	
2	After Training Score	20	52.65	3.329	0.744	
3	Paired Differences		11.1			
4	Percent change		26.71			
5	Paired 't'		24.222**			
6	Df	19				
7	Sig. (2-tailed)	R	0.01			

Source: Computed ** P<0.001 ** Significant at 0.01 level Physical Health Measured in Scores

Table-1 indicates the mean values of experimental group before and after 12 weeks of yogic training period. From the above table, it is evident that after 12 weeks of yogic training, there was marked improvement in physical health among experimental group. The 12 weeks of yogic training has enhanced the physical health of the executives on an average of 26.71 percent. Thus, the yogic training shows its influence in producing an improved level of physical health among experimental subjects.





DISCUSSION OF FINDINGS ON PHYSICAL HEALTH

The result of the present study indicates that the experimental training significantly improved the physical health level of the executives. The following reports agree with the results of the present study. Neha Gothe et al., (2013) found that yoga exercise improved physical health and cognition. Terry et al., (1993) demonstrated physical and psychological well being and job satisfaction of employees. Maryam et al., (2016) showed that physical fitness improves company productivity level. Arndt Biissing et al., (2012) found positive improvement in physical health and mental health among executives. Susmitha

et al., (2020) found pranayama, Hatha yoga and Raja yoga meditation improved executive's cognitive function. Madanmohan et al., (1992) demonstrated that yoga exercises improved cardio respiratory endurance and physical health. Bhole et al., (1982) proved that yogic breathing exercise improved muscle strength and lung function. Iyengar, (1981) showed that yoga facilitates good blood flow to all parts of the body. Anderson and Arnoult (1989) found improved physical health among employees.

CONCLUSION

On the basis of results obtained by statistically analyzing the data on physical health, of experimental group before and after 12 weeks of training, it is concluded that yogic training significantly improved physical health level of the executives.

REFERENCES

- [1] Arndt B Andreas Michalsen, Sat Bir S. Khalsa, Shirley Telles, and Karen J. Sherman (2012). Effects of Yoga on Mental and Physical Health: A Short Summary of Reviews Hindawi Publishing Corporation Evidence-Based Complementary and Alternative Medicine Vol.2012, p.7
- [2] Astrand, Per-Olof and Kaare, Rodahl. (1977). Text Book of Work Physiology: Physiological Bases of Exercise (2nd ed) Newyork : McGraw Hill Book Company.
- [3] Bethany E. Kok, Christian E. Waugh, and Barbara L. Fredrickson 2013. Meditation and Health: The Search for Mechanisms of Action Social and Personality Psychology Compass 7/1: 27–39.
- [4] Bhatnagar, Ganguly and Anantharman, B. (1987). Influence of Yoga
- [5] Bhole, M.V., P.V.Karambelkar and M.L.Gharote. (1982). Effect of Yoga Practices on Vital Capacity, Ind. J. Ches. Dis,, 12:34
- [6] Brown, R.P and P. L. Gerbarg, (2005). "Sudarshan Kriya Yogic breathing in the treatment of stress, anxiety, and depression: part II—clinical applications and guidelines," *Journal of Alternative and Complementary Medicine*, vol. 11, no. 4, pp. 711–717,
- [7] Canter PH, Ernst E. (2003). The cumulative effects of Transcendental Meditation on cognitive function-a systematic review of randomised controlled trials. *Wien Klin Wochenschr*. Vol. 115(21–22):758–766.
- [8] Goldstein Sama, Naglieri Jack A (2014). Handbook of Executive Functioning, Springer.
- [9] Gopal, K.S. Bhatnagar, O.P., Subramanian, N and Nishith, S.D. (1973). Effect of Yogasanas and Pranayamas on Blood Pressure, Pulse Rate and Some Respiratory Functions, Ind. J. Physiol. Pharmacol., 17: 272-276.
- [10] Gothe N.P, Kramer A.F, McAuley E (2014). The effect of an 8 week Hatha yoga intervention on executive function in older adults. J. Gerontol. A Biol. Sci. Med. Sci. 69, 1109-1116.
- [11] Gothe Neha, Pontifex Matthew B, Hillman Charles, McAuley Edward (2013). The acute effect of yoga on executive function. Journal of Physical Activity and Health, 10 (4), 488-495.
- [12] Hart, W. 1987. The Art of Living: Vipassana Meditation. New York: HarperOne.
- [13] Iyengar, B.K.S. (1981). Light on Pranayama, London: Unwin Paperbacks.
- [14] Jayasinghe, S.R (2004). "Yoga in cardiac health (a review)," European Journal of Cardiovascular Prevention and Rehabilitation, vol. 11, no. 5, pp. 369–375.
- [15] Kamakhya Kumar (2015). A study on effect of Yogic intervention on Occupational stress of working Women" International Journal of Yoga and Allied Sciences (ISSN: 2278 – 5159) Vol. 4(2).
- [16] Karambelkar, P.V.; Deshpande, R.R.; and Bhole, M.V. (1982) Some Respiratory Studies On Bhastrika Pranayama With Internal And External Retention of Breath. *Yoga Mimamsa*, Vol. XX1: 3 & 4; 14 20.
- [17] Leong, C.S., Furanham, A., & Cooper, C.L. (1996). The Moderating effect of organisational commitment on the occupational stress outcome relationship. Human Relations, Vol.49, No.10, p.1345-1363.
- [18] Madanmohan, D.P. Thombre, Barathi Balakumar, Nambinarayanan, T.K., Sachin Thakur, Krishnamurthy, N and Chandrabose, A. (1992). Effect of Yoga Training on Reaction Time, Respiratory Endurance and Muscle Strength, Indian Journal of Physiology Pharmacology, 36(4): 229-233.
- [19] Makwana, K., N.Khirwadkar and H.C. Gupta, (1988). Effect of Short Term Yoga Practice on Ventilatory Function Tests", Indian Journal of Physiol. Pharmacol. 32(3): 203-208.
- [20] Maneesh V.M., and Suseela V. (2017). The role and Imporance of Yoga in Education and Well Being: In An Indian Perspective, ICSSR Sponsored National Seminar on :Teacher Education Enhancing Clean Indian and Green India in 21st Century" Organised by the Department of Education, Annamalai University, ISBN 978-93-5288-358-5. pp139-141.

- [21] Maryam Etemadi, Kamyar Shameli, Norihan Abu Hassan, Zuriati Zakaria, Nurul Bahiyah Binti Ahmad Khairudin and Hirofumi Hara (2016). A Review of the Importance of Physical Fitness to Company Performance and Productivity American Journal of Applied Sciences.
- [22] Naragatti S et al. (2019). Brahma Kumaris Sahaj Raj Yoga meditation- as a tool to manage various levels of stress. J. Adv. Res. In Ayurveda Yoga, Siddha & Homeopathy, Vol. 6(1&2), pp. 1-9.
- [23] Neeru Devi and Sheetal (2020). Effectiveness of Yoga in Stress Management at Workplace: A Systematic Review Journal of Emerging Technologies and Innovative Research (JETIR) www.jetir.org 546 JETIR April 2020, Volume 7, Issue 4 www.jetir.org (ISSN-2349-5162).
- [24] Ospina, M. B., K. Bond, M. Karkhaneh et al., (2007). "Meditation practices for health: state of the research," *Evidence Report/Technology Assessment*, no. 155, 2007.
- [25] Prakash A., and Suseela V., (2018). Role of Yoa in promoting Mental Health, Indian Council of Social Science Research Sponsored – ICSSR sponsored Two Day National Seminar on "Strengthening adolescents' Mental Health and their Suicide Prevention" Organiszed by the Department of Education, Annamalai University on 22nd and 23rd June 2018.
- [26] Quick, J.c., Gavin, J.H. Cooper, C.L. & Quick, J.d. 2000. Executive Health : building strength, managing risks, academy of Managemetn Executive, Vol.14, No. 2, p.34-46.
- [27] Radhakrishnan, A., and Suseela V., (2018). Yoga the way of Life for values in Adolescents, International Journal of Multidisciplinary Research, UGC No. 42329, Vol. III(2), Sp. Edn. ISSN : 2278-2311, pp.122-126.
- [28] Ramya, P & Dr.N.Malliga (2015). Comparison of Occupational Stress of Experimental and Control Group Before and After Yoga Intervention International Journal of Business and Management Invention ISSN (Online): 2319 – 8028, ISSN Vol.4(10) October. 2015, PP-64-68.
- [29] Raub, J.A. (2002). "Psychophysiologic effects of Hatha Yoga on musculoskeletal and cardiopulmonary function: a literature review," *Journal of Alternative and Complementary Medicine*, vol. 8, no. 6, pp. 797–812,
- [30] Revati C. Deshpande (2012). "A healthy way to handle work place stress through Yoga, Meditation and Soothing Humor" International Journal Of Environmental Sciences Vol.2(4), 2012.
- [31] Roland, K.P. Jakobi, J.M. and Jones, G.R. (2011) "Does yoga engender fitness in older adults? A critical review," *Journal of Aging and Physical Activity*, vol. 19(1), pp. 62–79, 2011.
- [32] Saeed, S.A. D. J. Antonacci, and R. M. Bloch, (2010). "Exercise, yoga, and meditation for depressive and anxiety disorders," *American Family Physician*, vol. 81, no. 8, pp. 981–987.
- [33] Saraswati. Swami Niranjanananda (2019), Prana and Pranayama, Yoga Publication Trust, Munger, Bihar, India.
- [34] Satya Prakash Saraswati. (1975). Patanjala Raja Yoga, New Delhi: S. Chand & Co. (Pvt.) Ltd.
- [35] Sreekumar, T.S. (2021). Effect of yoga intervention on mindfulness, perceived stress, emotion regulation and affect: a study on senior managers in an Indian multinational corporate International Journal of Indian Culture and Business Management Volume No.23, Issue 4, pp.395-521.
- [36] Srilakshmi devi and Suseela, V. (2017). Yoga Education Enhancing Better Health for Clean Indian and Green India. ICSSR Sponsored National Seminar on "Teacher Education Enhancing Clean Indian and Green India in 21st Century Organised by the Department of Education, Annamalai Unviersity. ISBN : 978-93-5288-358-5, pp.130-133.
- [37] Srilakshmidevi and Suseela V., (2018). Empowerment of Women Health through Yoga, One day National Seminar on Social Media in Teacher Education" (SMTE – 2018) organised by the Department of Education, Periyar University, Salem, ISBN – 978-81-823575-6-0, pp.159-165.
- [38] Suseela V., (2010). Yoga for Mental Health, Journal of Seminar Paper on Medical Application of Yoga, Vol NO. 1(1) ISSN: 22294783, pp.25-27.
- [39] Suseela V., (2015). Effect of selected Yogic Practices on the Managemetn of Stress among Hypertensive Patients, The International Journal of Humanities and Social Studies, Vol. 3(4), ISSN: 23219203, pp. 170-173.
- [40] Suseela, V and Vekatachalapathy, K., (2017). Handbook of Yogasana, Annamalai University Publications, Printed under UGC-XII – Plan Grant ISBN 978-81-925974-1-6.
- [41] Suseela, V. (2016). Yoga in Professional LIfe, M/s SSD Publishers & Distributors, 5-A, Sahni Mansion, Ansari road, Daryaganj, New Delhi, ISBN 978-93-8357-557-2

www.jetir.org (ISSN-2349-5162)

- [42] Susmita Patra, Dr. Ishita Chatterjee, Debolina Dasgupta (2020) Impact of Pranayama, Hatha Yoga, and Raja Yoga Meditation on Executive Function and Metacognitive Regulation ISSN: 2455-2631 November 2020 IJSDR Vol. 5(11)
- [43] Terry, D.J., Neilsen, M. & Perchard, L. (1993). Effect of work stress on Psychological well-being and job satisfaction, Australian Jounral of Psychology, 1993. (Dec). Vol.45(3), p.168-175.

[44] Udupa, K.N. and R.H.Singh. (1972). scientific Basis of Yoga, Jour. Amer. Med. Assoc. 220: 206.

