

Vol 5 Issue 2 March 2015

ISSN No : 2230-7850

---

International Multidisciplinary  
Research Journal

*Indian Streams  
Research Journal*

Executive Editor  
Ashok Yakkaldevi

Editor-in-Chief  
H.N.Jagtap

---

## Welcome to ISRJ

**RNI MAHMUL/2011/38595**

**ISSN No.2230-7850**

Indian Streams Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board. Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

### *International Advisory Board*

Flávio de São Pedro Filho Federal University of Rondonia, Brazil	Mohammad Hailat Dept. of Mathematical Sciences, University of South Carolina Aiken	Hasan Baktir English Language and Literature Department, Kayseri
Kamani Perera Regional Center For Strategic Studies, Sri Lanka	Abdullah Sabbagh Engineering Studies, Sydney	Ghayoor Abbas Chotana Dept of Chemistry, Lahore University of Management Sciences[PK]
Janaki Sinnasamy Librarian, University of Malaya	Ecaterina Patrascu Spiru Haret University, Bucharest	Anna Maria Constantinovici AL. I. Cuza University, Romania
Romona Mihaila Spiru Haret University, Romania	Loredana Bosca Spiru Haret University, Romania	Ilie Pintea, Spiru Haret University, Romania
Delia Serbescu Spiru Haret University, Bucharest, Romania	Fabricio Moraes de Almeida Federal University of Rondonia, Brazil	Xiaohua Yang PhD, USA
Anurag Misra DBS College, Kanpur	George - Calin SERITAN Faculty of Philosophy and Socio-Political Sciences AL. I. Cuza University, Iasi	.....More
Titus PopPhD, Partium Christian University, Oradea,Romania		

### *Editorial Board*

Pratap Vyamktrao Naikwade ASP College Devrukh,Ratnagiri,MS India	Iresh Swami Ex - VC. Solapur University, Solapur	Rajendra Shendge Director, B.C.U.D. Solapur University, Solapur
R. R. Patil Head Geology Department Solapur University,Solapur	N.S. Dhaygude Ex. Prin. Dayanand College, Solapur	R. R. Yaliker Director Managment Institute, Solapur
Rama Bhosale Prin. and Jt. Director Higher Education, Panvel	Narendra Kadu Jt. Director Higher Education, Pune	Umesh Rajderkar Head Humanities & Social Science YCMOU,Nashik
Salve R. N. Department of Sociology, Shivaji University,Kolhapur	K. M. Bhandarkar Praful Patel College of Education, Gondia	S. R. Pandya Head Education Dept. Mumbai University, Mumbai
Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai	Sonal Singh Vikram University, Ujjain	Alka Darshan Shrivastava Shaskiya Snatkottar Mahavidyalaya, Dhar
Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College, Indapur, Pune	G. P. Patankar S. D. M. Degree College, Honavar, Karnataka	Rahul Shriram Sudke Devi Ahilya Vishwavidyalaya, Indore
Awadhesh Kumar Shirotriya Secretary,Play India Play,Meerut(U.P.)	Maj. S. Bakhtiar Choudhary Director,Hyderabad AP India.	S.KANNAN Annamalai University,TN
	S.Parvathi Devi Ph.D.-University of Allahabad	Satish Kumar Kalhotra Maulana Azad National Urdu University
	Sonal Singh, Vikram University, Ujjain	

**Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India**  
**Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.isrj.org**



## ROLE OF YOGA IN PSYCHOLOGICAL WELL-BEING: A REVIEW

**Ghanshyam Singh Thakur**

Assistant Professor, Dept. of Yoga, Hemwati Nandan Bahuguna Garhwal University,  
Srinagar Garhwal, Uttarakhand

**Abstract :-** Mental health includes psychological, emotional, and social well-being of a person. Now-a-days, mental illnesses are on the rise due to increased stress levels because of various lifestyle changes. This leads to impaired functioning along with mental distress. The purpose of this review was to evaluate the efficacy of yoga on psychological well being. For this various past research studies were searched by using key words such as mental health, yoga, stress, psychological well being, and quality of life. The reviews of literature indicate that yoga is an effective adjuvant therapy for improving mental health. Yoga helps in decreasing anxiety, stress, neuroticism, and cognitive skills, thereby increasing overall well-being of a person. Extensive and large-scale randomized controlled trials are needed to substantiate the role of yoga in improving mental health and quality of life. However, yoga is yet to be accepted as a stand-alone treatment for mental health disorders.

**Key Words:-** Yoga, Social Well-being, Psychological.

### INTRODUCTION

Mental health is “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community (1).” It includes psychological, emotional, and social well-being of an individual. Mental illnesses are disorders which affect mood, behaviour, and thinking of a person. Mental illness is defined as “collectively all diagnosable mental disorders” or “health conditions that are characterized by alterations in thinking, mood, or behaviour (or some combination thereof) associated with distress and/or impaired functioning (2).” Now-a-days, mental disorders are commonly found but there are treatments available. Yoga, an ancient traditional Indian practice, is found to be effective mind-body therapeutic modality which improves mental and physical health (3, 4, 5, 6). Yoga is also found to be effective in management of anxiety, trauma-related depression, PTSD, physiological stress due to exposure to war, natural calamities, incarceration, and interpersonal violence (7).

### Yoga and anxiety

Yoga practice decreased anxiety, somatisation of discomfort and stress, and improved self-rated sleep quality and health-related quality of life in 70 age and gender matched study participants of experimental group. State anxiety, quality of life, somatisation of stress, discomfort and self-rated quality of sleep were assessed using State-Trait Anxiety Inventory, SF-12, Symptom Checklist-90-R, Nijmegen Discomfort Evaluation Scale and Sleep Rating Questionnaire respectively (8, 9, 10).

A comparative interventional study was conducted to explore the effect of one month yoga camp on anxiety in apparently healthy housewives (20-50 years). Hamilton Anxiety (HAMA) Scale was used as an assessment tools to evaluate anxiety levels. The results of this study indicated that severity of anxiety was decreased

significantly after yoga practice of one month. Application and adaptation of the philosophy and principals of yoga in everyday life helps in improvement of mental health (11).

Kinser et al., stated that yoga practices may convey sustained positive effects on ruminations, depression, anxiety, stress and health-related quality of life in case of individuals with major depressive disorder (MDD). Major depressive disorder patients suffer from recurrent episodes of depression along with persistent depressive symptoms in spite of psychotherapeutic and pharmacologic treatment. Yoga, being a mind-body therapeutic intervention, acts as an adjunctive therapy in MDD patients. In this study, the researcher used standardized outcome measures along with a 1 year follow-up assessments i.e. 1 year after the intervention. It was revealed through qualitative and quantitative assessments that yoga practice has long-term positive and sustained benefits even after the treatment was discontinued (12).

A parallel-groups design pilot study was conducted by Streeter et al., to examine the effect of acute yoga session versus reading session on brain aminobutyric (GABA) levels. The researcher enrolled 8 yoga practitioners and 11 comparison subjects for this study. Yoga practitioners' group was given yoga practice for 60 minutes and comparison group was given reading session of 60 minutes. Magnetic resonance spectroscopic imaging was used to measure GABA-to-creatinine ratio. It was observed that GABA levels were increased 27% in yoga practitioners' group but there was change in comparison group. Thus, the findings of this study showed that yoga practice can be used for the treatment of mental illnesses such as anxiety and depression, which are characterized by low GABA levels (13). The same authors carried another study to explore whether the increase in GABA levels are specific to yoga or related to physical activity. 19 and 15 subjects were enrolled in yoga group and walking group respectively. Both the groups were given their respective interventions i.e. yoga practice and walking exercise for 12-weeks. It was observed that yoga group showed significant improvement in mood and anxiety as compared to the walking group (14).

#### **Yoga for stress**

A quasi-experimental study was carried out by Huang et al., to investigate the effectiveness of a single 90 minute hatha yoga class versus 8 week and 90 minute class per week course on stress reduction in 63 middle-aged women (40-60 years of age) of New Taipei city. Heart rate variability (HRV) and The Perceived Stress Scale (PSS) assessed the effectiveness of stress reduction. It was found that regular, long-term hatha yoga practice was highly significant in reducing perceived stress. Also, perceived stress was found to be significantly reduced in a single 90 minute session of hatha yoga (15). Another short-term yoga training of one month was found to be effective in improving mental and general well-being in MBBS students of the age group of 18-23 years. General Health Questionnaire-28 was used to assess the students before and after yoga intervention of one month. Highly significant improvement was observed in mental and general well-being of MBBS students (16).

An intensive yoga intervention of six days was found to be effective in reducing the traits of neuroticism in 249 patients having illnesses related to the mental health. PGI Health Questionnaire was used to assess the levels of neuroticism before and after yoga intervention of six days. It was observed that reduction in the traits of neuroticism was maximum in females, self-employed patients, patients with 17 years of education, and patients of age group 36-51 years. It was also observed that socio-demographic factors play a very important role in neuroticism levels (17).

#### **Yoga for mental well-being**

A randomized controlled study was conducted by Taspinar et al., to examine the effects of resistance exercises and hatha yoga on well-being and mental health in sedentary adults. The study participants were divided into three groups i.e. Resistance exercise group, hatha yoga group, and control group. The tools used to assess fatigue were Beck Depression Inventory, Rosenberg Self-Esteem Scale, Body Cathexis scale, Visual Analog Scale and Nottingham Health Profile before and after yoga intervention of 7 weeks. Control group did not participate in any sessions. The resistance exercise group showed improvement in body image, whereas hatha yoga group improved self-esteem, dimensions of fatigue, and quality of life. Depression symptoms were found to be decreased at a similar level in both hatha yoga and resistance exercise group. It was concluded that resistance exercise and hatha yoga had positive effects on well-being and mental health in sedentary adults (18).

A case-control design study was carried out by Cramer et al., to investigate the effect of regular yoga practice on mental health and quality of life in patients suffering from chronic diseases. The study participants were selected from a large observational study and divided into experimental and control group. Mental health, quality of life, health satisfaction and life satisfaction were assessed using Hospital Anxiety and Depression Scale, SF-36 questionnaire, and Questionnaire for Life Satisfaction respectively. It was observed that the experimental group had better general health status, physical component score and physical functioning on the SF-36 as compared to the control group. Also, yoga practices were associated with improved physical health but not mental health in case of

patients suffering from chronic diseases (19).

#### Yoga and cognitive skills

Nangia and Malhotra conducted a research study to explore the effect of regular yoga practice on mental health and cognitive skills. 38 subjects were divided into two groups i.e. yoga group and control group. The assessment tools used were PGI Memory Scale, Digit Symbol Test, and Mental Health questionnaire. Results of this study revealed that regular yoga practitioners had better attention, concentration, mental balance, remote memory, immediate recall, delayed recall, visual retention, verbal retention of dissimilar pairs, and visual recognition along with better mental health (20). Additionally, sustained attention and self esteem was improved in students after yoga practice (21, 22).

#### Conclusion

Pharmacological remedies for mental health disorders have undesirable side-effects, due to which non-pharmacological remedies can play a vital role as an adjuvant treatment for chronic mental health patients. Yoga is one such mind-body intervention which is cost-effective and is free from undesirable side-effects. Moreover, reviews presented indicate that yoga is an effective tool to maintain quality of life, mental health and general well being. Further, large scale randomized controlled trails are needed to explore effect of yoga practices on psychological well being.

#### REFERENCES

1. World Health Organization. Strengthening Mental Health Promotion. Geneva, World Health Organization (Fact sheet no. 220), 2001.
2. U.S. Department of Health and Human Services. Mental Health: A Report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services; Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health, 1999.
3. Ray US, Mukhopadhyaya S, Purkayastha SS, Asnani V, Tomer OS, Prashad R, Thakur L & Selvamurthy W. 2001. Effect of yogic exercises on physical and mental health of young fellowship course trainees. *Indian J Physiol Pharmacol*. 45(1): 37-53.
4. Bussing A, Michalsen A, Khalsa SBS, Telles S & Sherman KJ. 2012. Effects of yoga on mental and physical health: A short summary of reviews. *Evid Based Complement Alternat Med*, 2012:165410.
5. Khalsa SB. Yoga for Psychiatry and Mental Health: An Ancient Practice with Modern Relevance. *Indian J Psychiatry* 2013;55, Suppl S3:334-6.
6. Balasubramaniam M, Telles S & Doraiswamy PM. 2012. Yoga on our minds: A systematic review of yoga for neuropsychiatric disorders. *Front Psychiatry*, 3:117.
7. Telles S, Singh N, Balkrishna A. 2012. Managing mental health disorders resulting from trauma through yoga: A review. *Depress Res Treat*, 2012: 401513.
8. Shirley Telles, Nilkamal Singh, Arti Yadav, & Acharya Balkrishna. 2012. Effect of yoga on different aspects of mental health. *Indian J Physiol Pharmacol*, 56(3): 245-254.
9. Gururaja D, Harano K, Toyotake I & Kobayashi H. 2011. Effect of yoga on mental health: Comparative study between young and senior subjects in Japan. *Int J Yoga*, 4(1): 7-12.
10. Umadevi P, Ramachandra S, Varambally S, Philip M, Gangadhar B N. Effect of yoga therapy on anxiety and depressive symptoms and quality-of-life among caregivers of in-patients with neurological disorders at a tertiary care center in India: A randomized controlled trial. *Indian J Psychiatry* 2013;55, Suppl S3:385-9
11. Mullur LM, Khodnapur JP, Bagali S, Aithala M & Dhanakshirur GB. 2014. Role of yoga in modifying anxiety level in women. *Indian J Physiol Pharmacol*, 58(1): 92-5.
12. Kinser PA, Elswick RK & Kornstein S. 2014. Potential long-term effects of a mind-body intervention for women with major depressive disorder: sustained mental health improvements with a pilot yoga intervention. *Arch Psychiatr Nurs*. 28(6): 377-83.
13. Chris C. Streeter, J Eric Jensen, Ruth M. Perlmutter, Howard J Cabral, Hua Tian, Devin B Terhune, Domenic A. Ciraulo & Perry F. Renshaw. 2007. Yoga asana sessions increase brain GABA levels: A pilot study. *The Journal of Alternative and Complementary Medicine*. 13(4): 419-426.
14. Chris C. Streeter, Theodore H. Whitfield, Liz Owen, Tasha Rein, Surya K. Karri, Aleksandra Yakhkind, Ruth Perlmutter, Andrew Prescott, Perry F. Renshaw, Domenic A. Ciraulo, & J. Eric Jensen. 2010. Effects of Yoga Versus Walking on Mood, Anxiety, and Brain GABA Levels: A Randomized Controlled MRS Study. *J Altern Complement Med*, 16(11): 1145-1152.

15. Huang FJ, Chien DK & Chung UL. 2013. Effect of hatha yoga on stress in middle-aged women. *J Nurs Res*, 21(1): 59-66.
16. Bansal R, Gupta M, Agarwal B, Sharma S. 2013. Impact of short term yoga intervention on mental well being of medical students posted in community medicine: A pilot study. *Indian J Community Med*, 38(2): 105-108.
17. Telles S, Naveen KV, Kumar N, Balkrishna A. 2012. The effect of yoga on neuroticism in an Indian population varies with socio-demographic factors. *J Cult Divers*. 19(4): 118-23.
18. Taspinar B, Aslan UB, Agbuga B, Taspinar F. 2014. A comparison of the effects of hatha yoga and resistance exercise on mental health and well-being in sedentary adults: a pilot study. *Complement Ther Med*, 22(3): 433-40.
19. Cramer H, Lauche R, Langhorst J, Dobos G & Paul A. 2013. Quality of life and mental health in patients with chronic diseases who regularly practice yoga and those who do not: A case-control study. *Evid Based Complement Alternat Med*. 2013: 702914.
20. Nangia D & Malhotra Rekha. 2012. Yoga, cognition, and mental health. *Journal of the Indian Academy of Applied Psychology*, 38(2):262-269.
21. Sheela, Nagendra HR & Ganpat TS. 2013. Efficacy of yoga for sustained attention in university students. *AYU*, 34(3): 270-272.
22. Sethi JK, Nagendra HR & Ganpat TS. 2013. Yoga improves attention and self-esteem in underprivileged girl student. *J Educ Health Promot*, 2: 55.

# Publish Research Article International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper, Summary of Research Project, Theses, Books and Book Review for publication, you will be pleased to know that our journals are

## Associated and Indexed, India

- \* International Scientific Journal Consortium
- \* OPEN J-GATE

## Associated and Indexed, USA

- Google Scholar
- EBSCO
- DOAJ
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Database
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database
- Directory Of Research Journal Indexing

Indian Streams Research Journal  
258/34 Raviwar Peth Solapur-413005, Maharashtra  
Contact-9595359435  
E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com  
Website : www.isrj.org