



# ROLE OF YOGA IN PSYCHOLOGICAL HEALTH AMONG ELDERLY

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## Abstract

In today's scenario, yoga is very beneficial to all age group. Age is an important aspect to be considered while studying the physiological as well as psychological changes. There is no age constraint to do yoga practices. Yoga is an ancient set of integrated physical and mental practices. It fosters the long-term effect on positive psychological states such as self-awareness, inner peace, transcendence and spirituality. It also reduces stress, anxiety and other psychological disorders such as depression. The aim of the present review paper is to summarize all the different researches to get comprehensive information about the effect of yoga on psychological variables among aged.

**Keywords:** Yoga, Physical, Mental, Psychological variables, Spirituality, Exercise.

## INTRODUCTION

In worldwide populations, aging is an important feature of human development in which burden of disability is increasing. Therefore, it is necessary to establish strategies that reduce the onset of disability, promote healthy aging and improve the quality of life. Whenever we studied about the physiological and psychological changes in human life age is considered to be an important factor among them. The process of becoming older is called aging. If we define it in a broader sense, it can be refer to as single cell with an organism which has ceased dividing.

In human aging represents the accumulation of changes that encompass psychological, physical and social changes. As we grow older some activities are decreased (skin flexibility, hearing, vision, physical activity) while other increased (knowledge, wisdom). Aging is not only a population phenomenon but also an

individual experience (Robine et al., 2013) with biological, spiritual, cultural, psychological, and dimensions(Cunti & Bellantonio, 2018).

Yoga is an ancient set of integrated physical and mental practices created to foster the long-term experience of positive psychological states, including self-awareness, and inner peace transcendence and spirituality. Historically, yoga was not used to treat the pathologies but used to increase lifelong physical and spiritual well-being. Researches based on the yoga claims that there are numerous advantages of practicing yoga. It can be reduce the negative effects and enhance the positive wellness.

Yoga is popular as a relaxation and therapeutic intervention among groups of all ages, including the older adults. There are many types and styles of yoga, practices which combine stretching with rhythmic, deep breathing and meditation as well as Asanas with goal to increase physical strength and flexibility in skeletons.

## Literature Review

1. Javnbakht, HejaziKenari and Ghasemi (2009) conducted a study on 2 groups of woman one is experimental group (n=34, who is exposed to yoga classes of 90 min duration for two months twice a day) and second is control group (n=31 who did not receive yoga). The result shows that the experiential group (pre and post) did not differ in effect of intervention. The mean score of pre-test was  $12.82 \pm 7.9$  and mean of post-test was  $10.79 \pm 6.04$ , i.e statistically insignificant ( $p = 0.13$ ). However, when the experimental group was compared to the control group, women who participated in yoga classes showed a significant decrease in trait anxiety ( $p < 0.001$ ) and state anxiety ( $p = 0.03$ ). So, the 2 month yoga class helped in significant reduction in levels of anxiety in women participants.
2. Armat et al., (2018) conducted a study on retired woman employees in Iran by applying laughter therapy. The result showed significant difference in depression ( $p < .001$ ) and anxiety ( $p < .001$ ) scores between groups. Laughter yoga play significant role to reducing anxiety and depression among retired women.
3. Krishnamurthy (2007) conducted a study on people above age 60 living in residential homes. The result show that the depression symptom scores of the Yoga Group at both quarter and half year decreased significantly from the average baseline of 10.6 to 8.1 and 6.7, respectively ( $p < .001$ ). The other groups showed no change. Hence, the method of yoga including mental and physical practices was useful for institutionalized older persons.
4. Shohani, et al., (2018) conducted a study to investigate the effects of yoga on anxiety stress, and depression in women living in Iran. This is a quasi-experimental design study with pre-test and post-test. Depression Anxiety Stress Scale-21(questionnaire) was used in the study. The yoga exercises and training sessions were held for 28 days (three times in weeks; 70-60 minutes) by a professional. Paired sample t-test was used to compare the results of before & after the intervention. Result revealed that

yoga showed a positive correlation with all three variable i.e. Depression, stress and anxiety ( $r=.8, .7$  &  $.7$  at  $P < 0.001$ ). Results revealed that regular yoga exercise significantly reduced stress, anxiety and depression in women.

5. Moliver, et al., 2013 conducted a study on 211 female yoga practitioners (45-80) and examine psychological attitudes, transcendence, mental mastery, and subjective vitality according to the length and frequency of yoga practice. They found significant positive relationship between yoga experience and all outcome variables. Yoga is found to have exercising protective effect against low levels of subjective well being and vitality.
6. Wang and Szabo(2020) conducted a review based study on the effects of yoga or yoga-related interventions on stress management and remission. This review included various types of yoga practice (e.g., Hatha yoga, Bikram yoga, Kundalini yoga, SudarshanKriya yoga, Kripalu yoga, Yin yoga). Time spectrum was conducted from 4 wks to 28 wks. This review revealed that most types of yoga have positive effects on stress reduction in healthy populations.
7. Bonura(2007) conducted a study to show the effect of a 42-days yoga intervention on the psychological health of senior citizens ( $n=98$ ; Mean age = 77.04, SD = 7.28). The study found that Yoga participants improved more than both exercise and control participants, in anger (ES = 1.01, 0.12, and 0.11 respectively, from pre-test to post-test; and 0.89, -0.01, and 0.17 from pre-test to follow-up), anxiety (ES = 0.58, 0.31, 0.18, and 0.89, 0.28, 0.27), depression (ES = 0.53, 0.07, 0.05, and 0.54, 0.01, 0.04), well-being (ES = 0.49, 0.36, 0.01, and 0.53, 0.28, -0.08), general self-efficacy (ES = 0.98, 0.35, -0.12, and 0.73, 0.43, -0.12), and self-efficacy for daily living (ES = 0.87, 0.35, 0.07, and 0.51, 0.24, 0.09). Changes in self-control were associated with changes in general self-efficacy and trait anxiety. Self-control is proposed as a mechanism underlying the impact of yoga on psychological health.
8. Evans (1999) proposed that with regular exercise the older adults achieved more benefit than other age group. The low functional independence and high rate of chronic disease so typical of older adults can be dramatically influenced by regular exercise. Evidence indicates that exercise can decrease the risk of developing disease and may even help to stop or reverse the progression of certain disease conditions (Blumberg et al., 1992). Physically active adults over age of 65 are twice as likely to die without disability as are older sedentary adults (Ferrucci et al., 1999). These findings indicate higher quality of life in the years approaching death. In addition to the well-documented physical health benefits of regular exercise, physical activity is associated with a variety of psychological variables, including mood, stress reactivity, and cognitive functioning.
9. Netz and Jacob (1994) studied that physical activity help to improved happiness and well-being in elderly adults. In one study, physically fit women with a mean age of 64.5 years showed immediate improvements in global mood after a 75-minute session of aerobic dance (Pierce & Pate, 1994). When Hills and Argyle (1998) asked 275 individuals between the ages of 18 and 82 to rate their happiness during four leisure tasks (sport/exercise, music, church and watching TV soaps), only sport/exercise

was found to actually increase happiness levels. Therefore, physical activity has benefits beyond mere recreation, for increasing well-being and positive mood.

10. Lee and Hung (2011) conducted a study on retired adults (n=352) in Taipei. The purpose of the study was to identify the relationship between physical exercise and the feelings of well-being of the retired elderly. The results show that exercise frequency and well-being were positively correlated.
11. Belam (2020) conducted a review based study on the practice of Yoga to know the benefits it can bring for physical and mental health. He found that the research in this area is so far still in its infancy, but found yoga has potential to be a useful potential treatment for older people with mental health problems.
12. Bonura et al.,(2014) conducted a study on older adults to identify the effect of a yoga intervention on psychological health. Participants were randomly assigned to chair yoga, chair exercise, and control groups. Pre-intervention, post-intervention, and 1-month follow-up on the State Anger Expression Inventory, State Anxiety Inventory, Geriatric Depression Scale, Lawton's PGC Morale Scale, General Self-Efficacy Scale, Chronic Disease Self-Efficacy Scales, and Self- Control Schedule were used. The result shows that Yoga participants improved more than both exercise and control participants in anger (Cohen's  $d = 0.89$  for yoga versus exercise, and  $0.90$  for yoga versus control, pre-test to post-test; and  $d = 0.90$  and  $0.72$ , pre-test to follow-up), anxiety ( $d = 0.27, 0.39$  and  $0.62, 0.63$ ), depression ( $d = 0.47, 0.49$  and  $0.53, 0.51$ ), well-being ( $d = 0.14, 0.49$  and  $0.25, 0.61$ ), general self-efficacy ( $d = 0.63, 1.10$  and  $0.30, 0.85$ ), and self-efficacy for daily living ( $d = 0.52, 0.81$  and  $0.27, 0.42$ ). Over a 6-week period, findings indicate yoga's potential for improving psychological health in older adults.
13. Nityananthan and Kalpana (2014) conducted a study on random sample of middle aged men divide in to two groups i.e. control group and experimental groups each consisting of fifteen subjects. Pre tests were conducted for all the subjects on selected psychological variables such as stress and self confidence. The experimental group was exposed to respective treatment for six weeks. The post tests were conducted on the above said dependent variables after a period of six weeks. The difference between the initial and final means was considered as the effect of respective effects on the subjects. The statistical significance was analyzed through ANCOVA. The results show that the yoga improved overall health conditions of the middle aged men with significant improvement and reduction in stress. The comparison of post test means between experimental group 22.00 and control group 25.40 were proved to be significant
14. Bonura and Pargman (2009) investigate that the Effects of Exercise versus Yoga on Stress, Anxiety, and Depression in Older Adults. In this study participant subjects were randomly assigned to one of four activity groups: chair Yoga, chair aerobics, walking, and social games (non-activity control group) and classes were held for 30 minutes, 3 days per week, for 6 weeks. ANCOVAs were used to compare the mean difference. The results showthat the overall impact of the intervention was statistically significant,  $r = .60$ ,  $F(60,615) = 1.45$ ,  $p = .05$  and the time by group effect for stress frequency was

statistically significant,  $r = .52$ ,  $F(15, 86) = 1.55$ ,  $p = .05$ . Time by group interactions for the other variables (stress severity, depression, and anxiety) was non-significant, although Yoga participants experienced the most benefits over the course of the intervention.

15. Nanthakumar (2020) conducted a review based study to examine the effectiveness of classical yoga not only as a complementary therapy but also as a viable option in the management of anxiety and depression. The results support the view of yoga as complementary therapy and also as a stand-alone therapy in managing and reducing anxiety and depression.
16. Shahidi et al., (2010) conducted a study to compare the effectiveness of Kataria's Laughter Yoga and group exercise therapy in decreasing depression and increasing life satisfaction in older adult women ( $n=70$ , Mean of age=65) of a cultural community of Tehran, Iran. The study completed by sixty subjects out of seventy. The result shows that significant difference in decrease in depression scores of both Laughter Yoga and exercise therapy group in comparison to control group ( $p < 0.001$  and  $p < 0.01$ , respectively). There was no significant difference between Laughter Yoga and exercise therapy groups. The increase in life satisfaction of Laughter Yoga group showed a significant difference in comparison with control group ( $p < 0.001$ ). No significant difference was found between exercise therapy and either control or Laughter Yoga group. Laughter Yoga is effective as group exercise program in improvement of life satisfaction and depression on depressed women's.
17. Ram, Rao and Kumar (2020) reviewed the studies related to stress reduction through yoga. Through studies it can be revealed that stress is one of the factors that lead to muscular-skeletal disorders such as eye strain, shoulder or neck tension, back pain carpal syndrome, or headaches. Yoga can reduce stress & relieve muscular tension or pain and results in improved work performance.

## Conclusions

On the basis on above mentioned studies it can be said that yoga is having positive effect of various psychological variables such as reducing anxiety, stress and depression. Asanas may increase the flexibility and strength thereby improves physical functioning that ultimately leads to better psychological health. Yoga intervention requires active participation of individuals. Further studies should identify which interventions are more effective for elderly. Studies done in this area revealed that yoga can be effective in reducing the negative emotion and fostering positive emotions.

## Reference

- Armat, M. R., Emami Zeydi, A., Mokarami, H., Nakhband, A., & Hojjat, S. K. (2018). The impact of laughter yoga on depression and anxiety among retired women: a randomized controlled clinical trial. *Journal of women & aging*, 1-12.
- Atchley, R. D. (1985). *Social forces and aging*. Belmont, CA: Wadsworth Publishing.
- Bonura, K. B. (2007). Impact of Yoga on Psychological Health in Older Adults. Retrieved on dated 10-10-2020 from <https://diginole.lib.fsu.edu/islandora/object/fsu%3A181833>
- Bonura, K. B., & Pargman, D. (2009). The effects of yoga versus exercise on stress, anxiety, and depression in older adults. *International Journal of Yoga Therapy*, 19(1), 79-89.
- Bonura, K. B., & Tenenbaum, G. (2014). Effects of yoga on psychological health in older adults. *Journal of physical Activity and Health*, 11(7), 1334-1341. Retrieved on dated 10-10-2020 from <https://journals.humankinetics.com/view/journals/jpah/11/7/article-p1334.xml>
- Belam, G. (2020). Yoga as an intervention for older peoples mental health: a literature review. *Working with Older People*. Retrieved on dated 11-10-2020 from [https://www.emerald.com/insight/content/doi/10.1108/WWOP-05-2020-0017/full/html?casa\\_token=LhF\\_SISsytCAA:9IOIdhtTjxukmVG64dYbtHczawMMknIKkvjgrhxyDMpPIXyMNuffjOTndlx4dbQmKjwy0JLtZo\\_peYtlMAvwefbV6ffOdmQho3LY0B8OvCu4LYtv5v](https://www.emerald.com/insight/content/doi/10.1108/WWOP-05-2020-0017/full/html?casa_token=LhF_SISsytCAA:9IOIdhtTjxukmVG64dYbtHczawMMknIKkvjgrhxyDMpPIXyMNuffjOTndlx4dbQmKjwy0JLtZo_peYtlMAvwefbV6ffOdmQho3LY0B8OvCu4LYtv5v)
- Blumberg, J., Kenney, W., Seals, D., & Spina, R. (1992). Exercise and nutrition in the elderly. Gatorade Sports Science Institute: *Sport Science Exchange Roundtable*, 3 (4), RT #10.
- Antonia, C., & Bellantonio, S. (2018). Education, Physical Activity and Healthy Ageing in Italy: Theoretical and Operating Dimensions.
- Evans, W. J. (1999). Exercise training guidelines for the elderly. *Medicine and science in sports and exercise*, 31(1), 12-17.
- Ferrucci, L., Izmirlian, G., Leveille, S., Phillips, C. L., Corti, M. C., Brock, D. B., & Guralnik, J. M. (1999). Smoking, physical activity, and active life expectancy. *American journal of epidemiology*, 149(7), 645-653.
- Fernández-Ballesteros, R., Robine, J. M., Walker, A., & Kalache, A. (2013). Active aging: a global goal.
- Javnbakht, M., Kenari, R. H., & Ghasemi, M. (2009). Effects of yoga on depression and anxiety of women. *Complementary therapies in clinical practice*, 15(2), 102-104. Retrieved on dated 11-10-2020 from <https://www.sciencedirect.com/science/article/pii/S1744388109000048>
- Krishnamurthy, M. N., & Telles, S. (2007). Assessing depression following two ancient Indian interventions: effects of yoga and ayurveda on older adults in a residential home. *Journal of Gerontological Nursing*, 33(2), 17-23.

- Lee, Y. J., & Hung, W. L. (2011). The relationship between exercise participation and well-being of the retired elderly. *Aging & mental health*, 15(7), 873-881. Retrieved on dated 10-10-2020 from <https://www.tandfonline.com/doi/abs/10.1080/13607863.2011.569486>
- Moliver, N., Mika, E. M., Chartrand, M. S., Haussmann, R. E., & Khalsa, S. B. S. (2013). Yoga experience as a predictor of psychological wellness in women over 45 years. *International Journal of Yoga*, 6(1), 11. Retrieved on dated 10-10-2020 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3573537/>
- Nanthakumar, C. (2020). Yoga for anxiety and depression—a literature review. *The Journal of Mental Health Training, Education and Practice*.
- Netz, Y., & Jacob, T. (1994). Exercise and the psychological state of institutionalized elderly: a review. *Perceptual and Motor Skills*, 79(3), 1107-1118.
- Nityananthan V, Kalpana B. (2014). Impact of yoga on stress and self-confidence among the middle aged men. *Management Health*, 2014; 18:36039.
- Ram, A. B., Rao, K. D., & Kumar, P. P. Stress Reduction through Yoga. Retained on dated 11-10-2020 from [http://www.academia.edu/download/63268556/ICESPE\\_2020\\_Final20200511-79375-rmuplv.pdf#page=477](http://www.academia.edu/download/63268556/ICESPE_2020_Final20200511-79375-rmuplv.pdf#page=477)
- Russell, R. V. (1984). Correlates of life satisfaction in retirement. AM Arbor, MI: University Microfilms International.
- Shahidi, M., Mojtahed, A., Modabbernia, A., Mojtahed, M., Shafiabady, A., Delavar, A., & Honari, H. (2011). Laughter yoga versus group exercise program in elderly depressed women: a randomized controlled trial. *International journal of geriatric psychiatry*, 26(3), 322-327.
- Shohani, M., Badfar, G., Nasirkandy, M. P., Kaikhavani, S., Rahmati, S., Modmeli, Y., & Azami, M. (2018). The effect of yoga on stress, anxiety, and depression in women. *International journal of preventive medicine*, 9. Retrieved on dated 10-10-2020 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5843960/>
- Wang, F., & Szabo, A. (2020). Effects of Yoga on Stress Among Healthy Adults: A Systematic Review. *Alternative Therapies in Health and Medicine*. Retrieved on dated 11-10-2020 from [https://www.researchgate.net/profile/Feifei\\_Wang26/publication/339458519\\_Effects\\_of\\_Yoga\\_on\\_Stress\\_Among\\_Healthy\\_Adults\\_A\\_Systematic\\_Review/links/5eb032b045851592d6b880e2/Effects-of-Yoga-on-Stress-Among-Healthy-Adults-A-Systematic-Review.pdf](https://www.researchgate.net/profile/Feifei_Wang26/publication/339458519_Effects_of_Yoga_on_Stress_Among_Healthy_Adults_A_Systematic_Review/links/5eb032b045851592d6b880e2/Effects-of-Yoga-on-Stress-Among-Healthy-Adults-A-Systematic-Review.pdf)