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# Examining The Impact Yoga Training on The Mental Health Among Armed Reserved Police

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**ABSTRACT**

Yoga training has increasingly been recognized as a vital tool for improving mental health. Regular yoga practice helps reduce stress by promoting relaxation through deep breathing and mindfulness techniques. Studies have shown that yoga can lower levels of cortisol, the stress hormone, and improve overall mood by enhancing neurotransmitter function, such as serotonin and dopamine. Police officers face significant mental pressure due to the nature of their work, which often involves high-stakes situations, trauma, and constant vigilance. The demands of protecting public safety, dealing with violent crimes, and responding to emergencies can lead to stress, anxiety, and even post-traumatic stress disorder (PTSD) among officers. Therefore, the goal of this study is to examine how yoga training affects the mental health of police officers in the Armed Reserve. In order to achieve the goal of this study, forty (N=40) men police were selected randomly from Cuddalore District. Their age ranged from 25 to 40 years. Selected subjects underwent 12 weeks of yoga training. The collected data was statistically analyzed to produce the results. Based on the statistical results, it was concluded that yogic intervention significantly improved the mental health of armed reserved police 0.05.

***Keywords:*** *Police, Mental Pressure, Yoga training, Mental health.*

## 1. INTRODUCTION

Police officers experience significant mental pressure due to the nature of their profession, which requires them to make rapid, high-stakes decisions in often dangerous and emotionally intense situations. The mental burden is compounded by frequent exposure to violence, trauma, and human suffering, which can lead to issues like anxiety, depression, and post-traumatic stress disorder (PTSD). Officers are regularly called upon to manage not only their own safety but also the safety of the public, often while navigating complex and emotionally charged environments [1]. This constant vigilance and the need to remain calm and authoritative in high-stress scenarios can take a significant toll on their mental health (Violanti et

al., 2018; Papazoglou & Andersen, 2014).[2] In addition to the direct impact of traumatic events, the nature of police work often leads to emotional exhaustion, burnout, and detachment. Many officers experience long shifts, irregular working hours, and the stress of being under constant scrutiny, both from the public and internal organizational pressures. This can lead to a sense of isolation, with officers feeling that they must suppress emotions to maintain professionalism [3]. The stigma surrounding mental health in law enforcement further complicates matters, as officers may avoid seeking help due to fear of judgment or concerns about career implications [4].

As a result, police departments around the world are beginning to recognize the importance of mental health support for their officers. Efforts to address mental health challenges include stress management programs, access to counseling services, and peer support networks [5]. By fostering an environment where officers can openly discuss their mental health and receive appropriate care, law enforcement agencies hope to mitigate the long-term psychological effects of the job and enhance overall officer well-being and performance.

[6] Yoga training has increasingly been recognized as an effective approach for improving mental health. Through a combination of physical postures, breathing exercises, and mindfulness techniques, yoga can help alleviate stress, anxiety, depression, and other mental health conditions. Research has shown that regular yoga practice has a positive impact on reducing cortisol levels, which are associated with stress, and improving overall emotional well-being (Khanna & Greeson, 2013). Yoga's focus on breath control and relaxation helps to activate the parasympathetic nervous system, which counteracts the effects of the body's stress response, promoting a sense of calm and balance [7].

One of the key benefits of yoga for mental health is its ability to foster mindfulness—an awareness of the present moment. This practice encourages individuals to detach from negative thought patterns and emotions, promoting a more balanced and mindful approach to life's challenges (Greeson, 2009) [8]. It has been particularly helpful for individuals experiencing anxiety and depression, as yoga's focus on body awareness and acceptance cultivates a sense of self-compassion and emotional regulation. Studies have shown that consistent yoga practice can lead to long-term improvements in mental health by reducing rumination, enhancing mood, and increasing overall emotional resilience.

Yoga is also beneficial for enhancing sleep quality, which is essential for maintaining mental well-being. Poor sleep has been linked to a variety of mental health disorders, including anxiety and depression, and yoga’s calming effects have been shown to improve sleep patterns (Field, 2011) [9]. Whether through gentle yoga routines or more intensive practices like Kundalini or Vinyasa, individuals report greater relaxation and a deeper, more restorative sleep following regular yoga sessions. Given these mental health benefits, yoga is increasingly being integrated into therapeutic interventions for mental health treatment, offering a holistic approach to managing stress and emotional challenges [10].

### *Statement of the Problem*

The study's goal was to determine how yoga instruction affected the armed reserve police officers' mental health.

## 2. LITERATURE REVIEW

Thiruvangadam et al. [11] introduced Effect Of Yogic Practice And Interval Training On Speed And Stress Among Armed Reserved Police Of Cuddalore District. The study's goal was to determine how interval training and yoga practice interacted to affect the speed and stress levels of Cuddalore district's armed reserves police. Data were gathered both before and after the eight-week training period. The "ANOVA" test was used to statistically analyze the data in order to determine whether there had been a significant improvement in a few chosen variables from the baseline to the post-training period. The results of the review demonstrate that the combined benefits of yoga and interval training on strain and speed among the armed paramilitary cops in Cuddalore area led to a notable improvement in the trial groups when compared to the control group.

Kroenke et al. [12] proposed The PHQ-9: validity of a brief depression severity measure. A self-administered version of the PRIME-MD diagnostic tools for common mental diseases is the patient health questionnaire. Self-reported ill days and clinic visits, a 20-item short-form general health survey, and symptoms-related difficulties were used to assess construction validity. In the hectic environments of clinical settings, brief measures are more likely to be employed.

Braun et al. [13] designed Military-tailored yoga for veterans with post-traumatic stress disorder. Yoga has been shown to reduce signs and symptoms of PTSD in the general population, but its effects on soldiers of post-9/11 conflicts have not been thoroughly studied. The purpose of this study is to look into how yoga affects PTSD in veterans who served after 9/11. The PCL-M score was the main result. Veterans with PTSD symptoms may benefit from a trauma-sensitive yoga intervention, as this study and the WAE protocol show.

Telles et al. [14] proposed Effect of yoga on vigilance, self rated sleep and state anxiety in Border Security Force personnel in India. Comparing yoga with exercise in order to help security personnel become more vigilant and less sleep deprived.112 employees of a private security company (SIS group) were compared to 121 members of the Border Security Force (BSF group, men; mean age±SD = 30.4±7.4 years). For nine days, the SIS group had physical training, while the BSF group practiced yoga. Spielberger's STAI-S, the Digit Vigilance Test (DVT), and a sleep rating questionnaire were used for assessments both at baseline and nine days later. Yoga may help people sleep better, feel less anxious, and be more alert in

jobs that need it.

## 3. MATERIALS AND METHODS

I selected forty (N=45) armed reserved police officers from the Cuddalore district of Tamil Nadu, India, in order to fulfill the exam's encouragement. Neither group received any incentives. Participants in the trial had to (i) be male and (ii) be on duty for at least eight hours every day, necessitating vigilance, in order to be eligible.

Exclusion criteria were: (i) using any medicine or nutraceuticals, or (ii) being in poor health at the time of assessment based on a standard case history and clinical examination. The samples were divided equally in two groups which consist of twenty men police as experimental group and twenty men police as Control group. The age of the samples ranged between 25 to 40 years. Experimental group underwent eight weeks of Yogic interventions. Dr. Jagadish and Dr. A.k. Srinivasta used the Mental Health Inventory (M.H.L.) questionnaire to measure the data of every individual both before and after the experimental period ended.

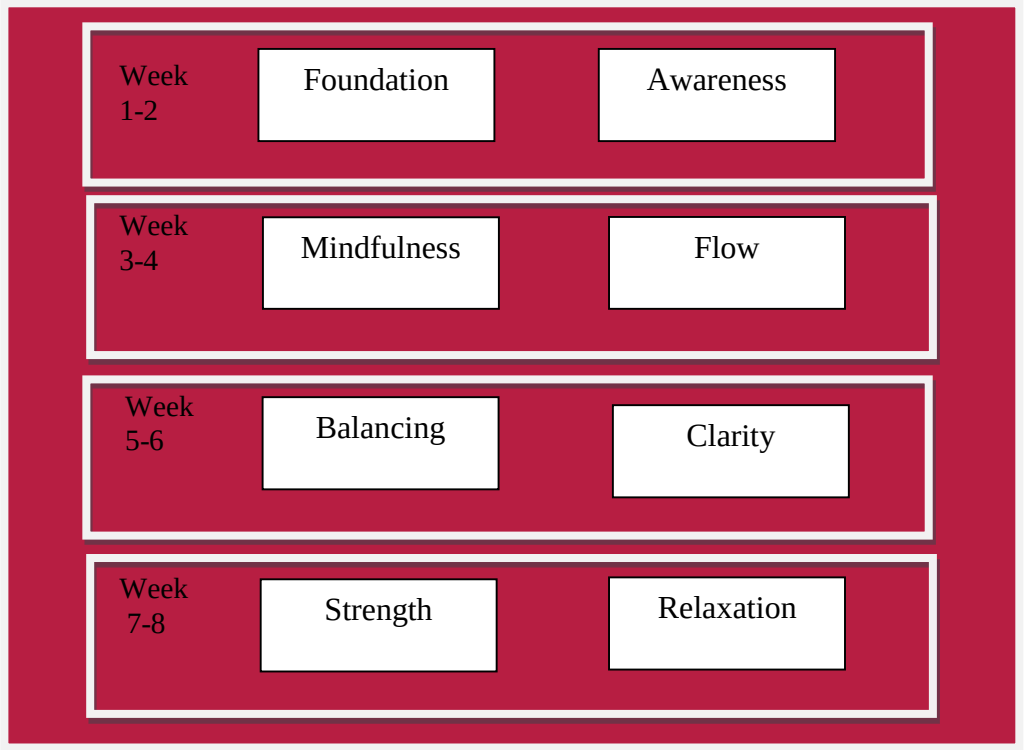


**Figure 1. Weekly flow of yoga**

Figure 1 depicts the army men's weekly yoga regimen. This will facilitate effective planning and facilitate the delivery of results. This plan was created by yoga specialists and had excellent results.

After eight weeks of instruction, a post-test was used to assess the results of a pre-test on stress and speed. Stretching and a low-to-moderate warm-up exercise lasted ten minutes before each daily session. For more topic understanding, the researcher or trainer exemplifies the appropriate method of attending each YPG, ITG, and CYPIG. The 50-meter run was used to gauge speed, and the Everly and Girdano questionnaires were used to gauge stress.

### *3.1 Training Intervention*

An eight-week yoga training schedule for mental health can incorporate a balanced approach of physical postures (asanas), breathing exercises (pranayama), and mindfulness techniques. Each week would focus on a specific theme, with increasing intensity and complexity as the practitioner progresses.

- **Weeks 1-2:** Focus on foundational poses like Child's Pose, Cat-Cow, and Mountain Pose to build flexibility and body awareness. Begin with 15-20 minutes of yoga daily, incorporating deep breathing techniques like diaphragmatic breathing to calm the nervous system.
- **Weeks 3-4:** Introduce gentle sun salutations and seated stretches. Increase practice duration to 30 minutes daily, focusing on the flow of movement with breath and practicing mindfulness to reduce stress and anxiety.
- **Weeks 5-6:** Add balancing poses like Tree Pose and Warrior III to improve focus and stability. Begin practicing

alternate nostril breathing (Nadi Shodhana) to enhance mental clarity and reduce mental fatigue. Sessions can last 40 minutes.

- **Weeks 7-8:** Incorporate more dynamic sequences like Vinyasa or Hatha yoga to strengthen both the body and mind. Practice meditation techniques, such as guided mindfulness or body scan, for 10-15 minutes at the end of each session. Aim for 45-60 minutes of practice, focusing on relaxation and releasing stored tension.

## 4. STATISTICAL TECHNIQUES

The effect of yoga therapy on the mental health of Armed Reserve Police was assessed using qualitative data and the tandem "T" test. To ascertain the significance in each instance, the level of importance was also established at the 0.05 level. Based on the data gathered from each business, an ANOVA is performed to ascertain if the experimental and control groups differ significantly in terms of stress and speed. Most of the variables are treated with a 0.05 degree of confidence. All of the tables from the analysis of the variance evaluation on stress and speed are listed below:

## 5. RESULT AND DISCUSSIONS

The study's findings indicate that the armed reserved police of the Cuddalore district had a notable improvement in speed and stress levels as a result of the combined effects of interval training and yoga.

**Table I: Detailed statistics and paired "T" values about the control group's mental health**

| Mental Health | Pre Test | | Post Test | | Mean Difference | t-ratio |
|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | 0.65 | -0.28 |
| | 128.9 | 6.73 | 129.55 | 7.78 | | |

A mental health assessment comparing pre-test and post-test results is displayed in the table 1. With a mean change of 0.65, the average score increased from 128.9 to 129.55. The statistical significance of the change is indicated by a t-ratio of -0.28.

When it comes to mental health, the pre-test mean score for the control group of armed reserved police is 128.9 with a standard deviation of 6.73, and the post-test mean score is 129.55 with a standard deviation of 7.78. The p-value is.38952 and the t-value is -0.28, both of which are below 0.05. Therefore, there is no discernible mean change between the control group's mental health pre- and post-tests.

In Figure 2, the means values were displayed using a bar diagram to help visualize the study's findings.

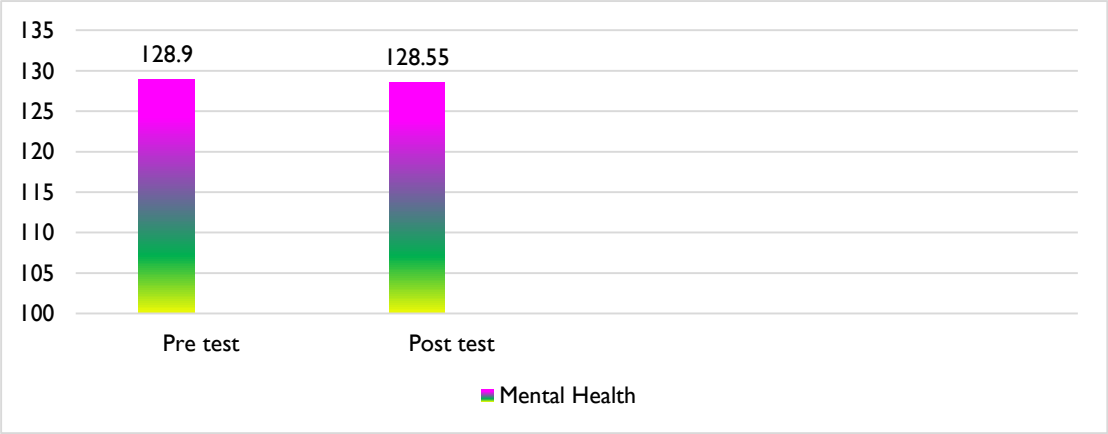


**Figure 2: A bar chart demonstrating the uncontrolled group's median mental health scores prior to and following the test**

The emotional wellness ratings before and after the intervention are displayed in a bar graph. The following test mean score shows a little improvement, rising to 129.55 from the average before the test of 128.9. The graph uses separate bars with the

appropriate labels to visually depict the differences between the two stages.

**Table II : Detailed statistics and paired "T" values about the control group's mental health**

| Mental Health | Pre Test | | Post Test | | Mean Difference | t-ratio |
|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | 12.19 | 4.89 |
| | 129.21 | 9.15 | 141.40 | 15.30 | | |

Armed Reserve Police pre-test and post-test results for the control group in connection with There was a mean score of 129.21 with a variance of 9.15 in the the beginning and 141.40 with a mean deviation of 15.30 in the post-test, according to the results of the mental health test. Greater than 0.05 is indicated by the t-value of 4.89 and the p-value of.0001. Because of the impact of psychological interventions on the experimental group's mental health, there is a significant mean difference between the pre-test and post-test.

In Figure 3, the means values were displayed using a bar diagram to help visualize the study's findings.

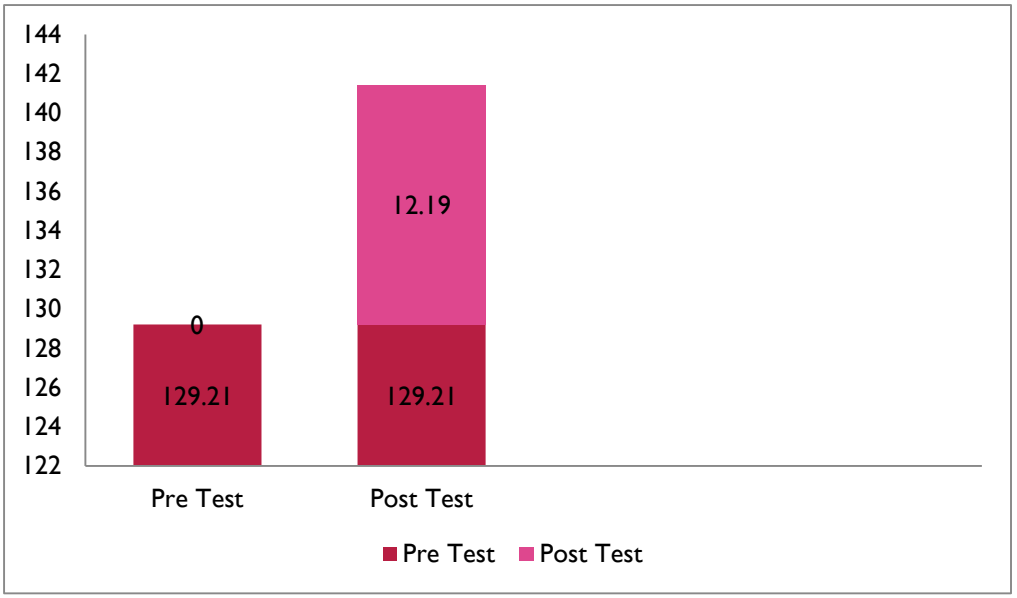


**Figure 3: A bar chart demonstrating experimental group's median mental health scores prior to and following the test.**

The mental health scores before and after the test are compared in the stacked bar graph. The post-test mean adds an increase of 12.19 to the pre-test mean of 129.21, making the final post-test score 141.4. The incremental change in scores as a result of the intervention is visibly highlighted in the graph.

## 6. CONCLUSION

Using statistical methods, the researcher concluded that after analysis and evaluation, the study participants' scores showed how yoga training significantly improved Armed Reserve Police members' mental health. The meditative practice, sprinting, and integrated training showed better performance on quickness and strain than the control group. The Cuddalore district's armed reserved police will be able to further enhance their level of wellbeing through the use of yogic practice, interval training, and combined training.

## REFERENCES

[1] Cullen, F. T., Jonson, C. L., & Caplan, J. M. (2016). *Police stress and burnout: Causes and consequences.* International Journal of Police Science & Management, 18(1), 1-10.

[2] Harter, S., Kuncel, N., & Sweeney, M. (2022). *Mental health in law enforcement: Moving towards psychological well-being for police officers.* Journal of Police Science, 34(2), 100-112.

[3] Papazoglou, K., & Andersen, J. P. (2014). *Trauma exposure and mental health in police officers: A review of the literature.* Journal of Police and Criminal Psychology, 29(4), 266-273.

[4] Regehr, C., & LeBlanc, V. (2004). *Interventions with police officers and emergency personnel: A review of the literature.* International Journal of Emergency Mental Health, 6(1), 1-12.

**[5]** Violanti, J. M., et al. (2018). *Police stress and its impact on mental health and performance.* Journal of Occupational Health Psychology, 23(1), 88-97.

**[6]** Field, T. (2011). *Yoga research review*. Complementary Therapies in Clinical Practice, 17(1), 1-8.

**[7]** Greeson, J. M. (2009). *Mindfulness research update: 2008*. Journal of the American Psychiatrists Association, 55(5), 1005-1010.

[8] Khanna, S., & Greeson, J. M. (2013). *A narrative review of yoga and mental health*. Journal of Evidence-Based Complementary & Alternative Medicine, 18(1), 17-29.

[9] Lindheimer, J. B., O'Connor, P. J., & Dishman, R. K. (2017). *Yoga and mental health: A review of the literature*. Psychological Research, 40(2), 142-154.

[10] Streeter, C. C., et al. (2012). *Effects of yoga on the autonomic nervous system and cortisol levels in patients with chronic stress*. Journal of Alternative and Complementary Medicine, 18(1), 19-24.

[11] Thiruvangadam, S., & Mohanakrishnan, R. (2022). *Combined Effect Of Yogic Practice And Interval Training On Speed And Stress Among Armed Reserved Police Of Cuddalore District. Journal of Positive School Psychology*, *6*(10), 4379-4381.

[12] Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of general internal medicine*, *16*(9), 606-613.

[13] Cushing, R. E., Braun, K. L., Alden, C-IAYT, S. W., & Katz, A. R. (2018). Military-tailored yoga for veterans with post-traumatic stress disorder. *Military medicine*, *183*(5-6), e223-e231.

[14] Telles, S., Kala, N., Gupta, R. K., Verma, S., Vishwakarma, B., Agnihotri, S., ... & Balkrishna, A. (2019). Effect of yoga on vigilance, self rated sleep and state anxiety in Border Security Force personnel in India. *Work*, *63*(2), 243-251.