The International Journal of Indian Psychology
ISSN 2348-5396 (Online) | ISSN: 2349-3429 (Print)
Volume 13, Issue 3, July- September, 2025
DIP: 18.01.148.20251303, DOI: 10.25215/1303.148
https://www.ijip.in

Research Paper

A Comparative Study of HIIT and Yoga Practitioners on Emotional Dysregulation, Positive and Negative Affect and Perceived Stress

Rujula Pravin Jadhav[1]*, Akanksha Brahme[2]

ABSTRACT

The present study compared the effects of Yoga and High Intensity Interval Training (HIIT) on the emotional dysregulation, positive and negative affect and perceived stress of young adults between the ages 20-30. For this research, a total of 80 participants, particularly, 40 yoga practitioners and 40 HIIT practitioners completed a questionnaire that consisted of a personal detail sheet, and scales such as the Difficulties in Emotion Regulation Scale (DERS), the Positive and Negative Affect Scale (PANAS) and Perceived Stress Scale (PSS). These subjects were selected using the Snowball Sampling method who had been actively engaging in either Yoga or HIIT practices for at least 6 months. Descriptive Statistics and the Shapiro-Wilk test were first administered on the collected data to check for Normality. After it was confirmed that the data is normal, we conducted a t-test to compare the means of the two groups, i.e., Yoga and HIIT practitioners. The statistics revealed no difference between Yoga and HIIT practitioners on their emotional dysregulation and negative affect, but a significant difference was observed on the levels of positive affect and perceived stress, with Yoga practitioners having significantly lower scores than HIIT practitioners. These findings tell us that while both forms of exercises help maintain our emotional wellbeing, Yoga offers additional benefits in lowering stress levels and improving positive emotions.

Keywords: *Yoga, HIIT, Emotional Dysregulation, Positive Affect, Negative Affect, Perceived Stress, Young Adults*

In today's fast paced world, constant states of stress, emotional burnouts, and increasing mental health problems are found to be very common. Every other person is susceptible to such problems. These challenges ask to search for ways to manage and maintain mental health and well being. Different types of exercises have widely been known and acknowledged by various cultures, including scientific research done over many years, to have positive effects on your mood, helping you cope with stress, anxiety and improve your physical as well as your mental well being. Prior research has suggested that both forms of exercise offer psychological benefits, though through different mechanisms (Saanijoki et al., 2018; Sharma & Gopalan, 2021).

[1]Postgraduate student of psychology, Modern College of Arts, Science and Commerce
[2]Assistant Professor, Modern College of Arts, Science and Commerce
*Corresponding Author

Received: May 20, 2025; Revision Received: August 05, 2025; Accepted: August 09, 2025

In current times, High Intensity Interval Training (HIIT) and Yoga have been gaining a lot of popularity, since many people are being conscious about maintaining good physical health, regulating their mental health, and have started incorporating various types of exercises and yoga practices in their daily routine. HIIT is known to improve mood and increase energy levels by activating endorphins and reducing cortisol levels (Thayer & Lane, 2000), while Yoga combines mindfulness, physical movement, and breathwork to calm the nervous system and promote relaxation (Field, 2016; Zou et al., 2018). These benefits are consistent with theories such as the affect regulation model and the stress-buffering hypothesis, which suggest that regular physical activity helps individuals in managing emotional challenges and build mental resilience (Lazarus & Folkman, 1984; Gross, 2002).

High Intensity Interval Training or HIIT is a form of exercise where rigorous activities are done in a short span of time, followed by a resting period when you allow your body to return to homeostasis. By the way of illustrating, a typical HIIT workout can include running or more appropriately, sprinting, doing burpees, cycling, all using the body's maximum strength for a set amount of time, for instance, 30 mins, followed by slow pedalling or jogging for about 1-2 minutes, and then repeating this cycle required number of times.

HIIT has become increasingly popular because of its time efficient training routines that can be very easily incorporated in your daily life without having to worry about maintaining work-life balance whilst keeping yourself healthy.

Yoga, on the other hand, includes practices that emphasize on physical health as well as mindfulness techniques that help you keep calm, regulate your emotions and help maintain a good mental as well as physical health. Yoga has been around for thousands of years and has been an integral part of our culture. The earliest mentions of yoga can be found in the texts of Rig Veda, which was then made systematic by Sage Patanjali in the Yoga Sutras. This Yoga Sutra outlined the Ashtanga Yoga (the eight limbs of yoga), which helped attain inner peace and self realization through breath control (pranayama), physical postures (asanas) and meditation (dhyana).

It was introduced to the western world in the 20th century by the Indian gurus such as Swami Vivekananda, Pattabhi Jois and B.K.S. Iyengar. Recognizing its worldwide influence, the United Nations has declared June 21st as International Yoga Day. Modern practices of yoga now have a blend of contemporary science and traditional wisdom and continue to gain popularity for promoting both physical health and mental wellbeing.

In this study, we are going to see how practicing HIIT and Yoga has an effect on certain psychological factors such as: Emotional Dysregulation, Positive and Negative Affect, and Perceived Stress. To see whether HIIT and Yoga have any prominent effect on emotional dysregulation, positive and negative emotions and stress levels of individuals, we will compare studies and researches done previously on these topics and try to find the ones that support our rationale and help us present the reasons for comparing these two forms of exercises and explanations about the concepts mentioned to get a comprehensive understanding of the topic.

Emotional Dysregulation:

Emotional dysregulation is the inability to regulate and manage one's emotional responses to certain situations or stimuli. When a person is emotionally dysregulated, they may experience heart palpitations, might have inappropriate emotional responses to situations, may have difficulty calming down; basically, have a hard time regulating their emotions which can sometimes be overwhelming. The concept of emotional dysregulation is very important in the field of psychology because it is linked to various mental health issues such as borderline personality disorder, depressive and anxiety disorders. On the other hand, people who have good emotional regulation skills can cope with negative emotions in a better and effective way, and are able to reframe negative thoughts. They are also very resilient and have a better overall mental wellbeing as compared to people who are high on emotional dysregulation.

Positive and Negative Affect:

- Positive Affect: All the pleasant emotions and feelings that we experience as a result of interaction in the world is what positive affect is. It includes feelings of happiness, enthusiasm, joy, contentment, etc. Positive affect does not mean a complete absence of negative feelings, but actively experiencing good feelings and being appreciative of all the good things in life. Those high on positive affect naturally have better personal and social relationships, tend to have more motivation, and generally have a positive and brighter outlook on life.
- Negative Affect: Negative affect can be seen as the exact opposite of positive affect. It is the experience of negative emotions such as sadness, anger, disgust, guilt, contempt, fear, irritability. People with a high negative affect can be seen frequently feeling sad or depressed, having low moods.

Perceived Stress:

The feelings and thoughts a person experiences about the amount of stress they are having is what perceived stress is. As the name suggests, it is very subjective in nature. It is not about the actual event that has taken place but about how the person evaluates and interprets those events. It is characterized by feelings of unpredictability, uncertainty, uncontrollability and can severely affect a person's mental health, influencing their ability to make sound judgements and cope usually leading to negative outcomes.

Statement of the Problem

To compare HIIT and Yoga on Emotional Dysregulation, Positive and Negative Affect, and Perceived Stress among young adults.

Objectives

1. To study emotional dysregulation between HIIT and Yoga practitioners.
2. To compare emotional dysregulation between HIIT and Yoga practitioners.
3. To study positive affect in HIIT and Yoga practitioners.
4. To compare positive affect between HIIT and Yoga practitioners.
5. To study negative affect in HIIT and Yoga practitioners.
6. To compare negative affect between HIIT and Yoga practitioners.
7. To study perceived stress in HIIT and Yoga practitioners.
8. To compare perceived stress between HIIT and Yoga practitioners.

METHODOLOGY

Hypotheses

1. **H1:** Yoga practitioners will have lower emotional dysregulation compared to HIIT practitioners.
2. **H2:** Yoga practitioners will have higher positive affect compared to HIIT practitioners.
3. **H3:** Yoga practitioners will have lower negative affect compared to HIIT practitioners.
4. **H4:** Yoga practitioners will have lower perceived stress compared to HIIT practitioners.

Variables

1. Independent Variables (IV):

- Yoga
- HIIT

2. Dependent Variables (DV):

- Emotional Dysregulation (measured by the DERS scale)
- Positive Affect (measured by the PANAS scale)
- Negative Affect (measured by the PANAS scale)
- Perceived Stress (measured by the PSS scale)

Inclusion Criteria:

1. Individuals aged 20 to 30 years (young adults).
2. Participants who have been regularly practicing either Yoga or HIIT for at least 1 month (minimum 3 days per week).
3. Willingness to voluntarily participate in the study with informed consent.
4. Ability to read and understand English, as all scales were administered in English.

Exclusion Criteria:

1. Individuals who practice multiple forms of physical activity simultaneously, making it difficult to isolate the effects of Yoga or HIIT.
2. Participants who have had a recent major life event (e.g., bereavement, surgery, or major injury in the past 3 months) that could significantly impact their emotional well-being or stress levels.
3. Individuals currently undergoing psychological therapy or counseling, which may influence their affect or stress levels independently of physical activity.
4. Those with a history of neurological disorders, chronic pain conditions, or any physical limitation that might affect their experience of exercise.

Tools

1. **Difficulties in Emotion Regulation Scale (DERS). Gratz & Roemer, 2004:** The Difficulties in Emotion Regulation Scale is a 36 item questionnaire that is designed to measure difficulties in a person's emotional regulation that are clinically relevant. It is used to measure an individual's ability to understand, manage and accept emotions effectively. The scores are interpreted as the higher the score, the greater the dysregulation.
2. **Positive and Negative Affect Schedule (PANAS). Watson, Clark & Tellegen, 1988:** The Positive and Negative Affect Schedule is a very widely used scale that is used to measure an individual's positive and negative emotions. The scale of 20

items; 10 items that measure positive affect and 10 items that measure negative affect. Each item is rated on a 5-point likert scale, where 1 means "very slightly or not at all" to 5 that is "extremely". The scores are interpreted as the higher the positive score, the higher is the positive affect. The higher the negative score, the greater is the negative affect; and vice versa.

3. **Perceived Stress Scale (PSS). Cohen, Kamarck & Mermelstein, 1983:** The Perceived Stress Scale measures an individual's perceived stress levels. The 10 questions in the scale assess thoughts and feelings during the past month, focusing on unpredictability, uncontrollability, and feelings of being overloaded. There are various versions of the scales that include the original 14 items (PSS-14), 10 items version (PSS-10) and the 4 items version (PSS-4). The scores are interpreted as the higher the score, the greater is the perceived stress.

Sample

1. Total participants: 80
2. Young adults aged 20 to 30 years, engaging in Yoga or HIIT for at least 6 months.
3. Sampling method: Snowball Sampling.

Research Design

Comparative study design of HIIT and Yoga practitioners on emotional dysregulation, positive and negative affect and perceived stress.

Procedure

Data collection was carried out by providing participants with an informed consent form, ensuring that they understood the purpose of the study and their right to confidentiality. After signing the consent form, participants were asked to complete a Personal Data Sheet and the three scales: DERS, PANAS, and PSS. The Personal Data Sheet collected basic demographic details, while the scales assessed emotional dysregulation, affect, and stress. Participants completed the scales online through a survey platform or in paper format, depending on their preference.

Once the data were collected, they were analyzed using SPSS to assess the differences between Yoga and HIIT practitioners on the studied variables.

RESULTS

Descriptive Statistics:

Data was analysed using SPSS version 29. Upon conducting the descriptive analysis and the Shapiro Wilk test of normality, it was found that data follows a normal distribution. Hence, an independent sample t - test was used to find significant difference between the means of Yoga practitioners and HIIT practitioners on their Emotional Dysregulation, Positive and Negative Affect and Perceived Stress.

Table 1: Descriptive Statistics

	Emotional Dysregulation	**Positive Affect**	**Negative Affect**	**Perceived Stress**
N	80	80	80	80
Mean	40.1625	29.6875	20.1375	19.6375
Median	40.5000	30.5000	20.0000	20.0000
Std. Deviation	10.96882	10.37230	9.13020	9.54171

	Emotional Dysregulation	Positive Affect	Negative Affect	Perceived Stress
Skewness	.024	-.269	-.170	-.321
Std. Error of Skewness	.269	.269	.269	.269
Kurtosis	-.329	-.370	-.156	-.098
Std. Error of Kurtosis	.532	.532	.532	.532

T - Test:

To determine if the differences between the two groups are statistically significant, we performed a t-test for independent samples. The results are as follows:

Table 2.1: t - test for Equality of Means

	t	df	Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
			One - Sided p	Two - Sided p			Lower	Upper
DERS Equal Variances Assumed	-1.723	78	.044	.089	-4.17500	2.42269	-8.99820	.64820
PA Equal Variances Assumed	3.176	78	.002	.003	6.97500	2.19647	2.602173	11.3478
NA Equal Variances Assumed	-.967	78	.168	.337	-1.97500	2.04241	-6.04114	2.09114
PSS Equal Variances Assumed	-2.018	78	.013	.005	.005	2.09325	-8.39235	-.05765

Table 2.2: Group Statistics

Group Statistics					
	Initials	**N**	**Mean**	**Std. Deviation**	**Std. Error of Mean**
DERS	**1**	40	38.0750	10.81402	1.70985
	2	40	42.2500	10.85511	1.71634
PA	**1**	40	33.1750	8.63769	1.36574
	2	40	26.2000	10.87976	1.72024
NA	**1**	40	19.1500	9.32477	1.47438
	2	40	21.1250	8.93907	1.41339
PSS	**1**	40	17.5250	8.84623	1.39871
	2	40	21.7500	9.84951	1.55734

DISCUSSION

This study aimed to compare Yoga practitioners and HIIT practitioners across four key variables: Emotional Dysregulation (DERS), Positive Affect (PA), Negative Affect (NA), and Perceived Stress (PSS). The results from the t-test analysis provided us with significant insights into the relationship between these variables and the two exercise groups.

Hypothesis 1: The Yoga practitioners will have lower Emotional Dysregulation than HIIT practitioners.

The first hypothesis was that Yoga practitioners would show lower emotional dysregulation compared to HIIT practitioners. However, the t-test results did not show a significant difference between the two groups regarding emotional dysregulation. The mean scores for both groups were relatively close, with Yoga practitioners having a mean of 38.07 and HIIT practitioners scoring 42.25 on the DERS scale.

It is possible that both forms of exercise: Yoga and HIIT are effective in improving and enhancing emotional regulation to some degree, but in different ways. Yoga emphasizes mindfulness and relaxation, while HIIT focuses on intense physical exertion, which may also help release tension and stress. It could be that the emotional regulation benefits from HIIT are not as apparent in this study due to the short-term nature of the exercise or the specific types of emotional regulation assessed by DERS scale. Additionally, factors like individual differences in emotional coping skills or pre-existing levels of emotional dysregulation may also explain why no significant difference was found.

Comparison of Yoga and Aerobic Trainings for Improving Mental Health of Divorced Women, (Mousavi & Moghtader 2017, Journal of Research and Health), found that a 2-month yoga program and an aerobics program both led to significant improvements in participants' mental health, with no significant difference between the outcomes of the two groups. Similarly, a narrative review titled Yoga and Physical Exercise – A Review and Comparison (Govindaraj et al. 2016, International Review of Psychiatry), concluded that yoga interventions were "equal and/or superior" to traditional exercise on most psychological outcome measures. The findings of their study support the idea that regular yoga practice and HIIT produce comparable improvements in emotional regulation, which explains why the comparative study observed no significant difference in emotional dysregulation between yoga and HIIT practitioners.

Hypothesis 2: The Yoga practitioners will have higher Positive Affect than HIIT practitioners.

The second hypothesis proposed that Yoga practitioners would exhibit higher positive affect compared to HIIT practitioners. This hypothesis was supported by the results in our study. The mean score for Yoga practitioners was significantly higher (33.17) compared to HIIT practitioners (26.2). The t-test revealed a significant difference between the two groups ($p = 0.003$), confirming that Yoga practitioners tend to have a higher level of positive emotions.

Yoga promotes relaxation, mindfulness, and positive emotions, which are known to improve overall emotional well-being. Practices like deep breathing, meditation, and gentle movements likely contribute to a more positive outlook and greater emotional stability. On the other hand, while HIIT improves physical health, it might not provide the same

emotional and mental benefits as Yoga, which is specifically designed to promote relaxation and positive emotional states.

In the study Effect of Integrated Yoga Module on Positive and Negative Emotions in Home Guards in Bengaluru: A Wait list Randomized Control Trial (Amaranath, Nagendra & Deshpande. 2016, International Journal of Yoga), an 8-week yoga intervention led to a significant increase in Positive Affect (PA) scores and a decrease in Negative Affect in a high-stress group, as compared to a no-exercise control. This highlights yoga's strong mood-lifting benefits. By contrast, high-intensity training may not boost a positive mood as much.

Opioid Release after High-Intensity Interval Training in Healthy Human Subjects (Saanijoki et al. 2018, Neuropsychopharmacology), reported that while exercises of moderate-intensity improved mood (increasing positive affect and euphoria), a vigorous HIIT session actually increased negative emotions such as exhaustion and irritation. The HIIT participants experienced less of the positive "feel-good" effect. Taken together, these studies suggest that yoga practitioners tend to experience higher positive affect than HIIT practitioners, aligning with the comparative findings of our study. Yoga's emphasis on relaxation and mindfulness likely contributes to a greater elevation in positive mood states.

Hypothesis 3: The Yoga practitioners will have lower Negative Affect than HIIT practitioners.

The third hypothesis stated that Yoga practitioners would show lower negative affect compared to HIIT practitioners. However, the results did not support this hypothesis, as no significant difference was found between the groups. The mean score for Yoga practitioners was 19.15, while HIIT practitioners scored 21.13. The t-test revealed no statistically significant difference between the two groups regarding negative affect ($p = 0.337$).

One possible reason for this result could be that both Yoga and HIIT practitioners experience a similar level of negative emotions, but for different reasons. Yoga focuses on relaxation and reducing negative emotions, but it may not address acute emotional stressors as effectively as HIIT, which provides us with a quick release of built-up tension. Additionally, individual differences, such as personality traits and pre-existing emotional conditions, may have a greater influence on negative affect than the type of exercise practiced. It is possible that HIIT practitioners may experience higher levels of acute stress during the workout, but recover quickly afterward, resulting in an overall similar level of negative affect.

In the study, Changes in Inhibitory Control, Craving and Affect After Yoga vs. Aerobic Exercise Among Smokers with Nicotine Dependence (Kim et al. 2022, Frontiers in Psychiatry), participants completed separate sessions of yoga and aerobic exercise. It was found that both forms of exercise significantly reduced negative affect, with no significant difference between the yoga and cardio sessions in how much they lowered negative mood.

This finding of equal efficacy is found to be similar in other contexts as well. For example, a study of college students in China noted that a single yoga class and a fitness training class both led to decreases in negative mood immediately afterward (while the yoga group had additional benefits in other areas). Such evidence supports the observation that yoga and HIIT practitioners do not differ significantly in negative affect, each activity can similarly

alleviate negative emotions like distress or sadness through the mood-enhancing effects of physical exercise.

Hypothesis 4: The Yoga practitioners will have lower Perceived Stress than HIIT practitioners.

The fourth hypothesis proposed that Yoga practitioners would report lower perceived stress compared to HIIT practitioners. This hypothesis was supported by the results. The mean score for Yoga practitioners was 17.53, while HIIT practitioners scored 21.75. The t-test revealed a significant difference ($p = 0.005$), indicating that Yoga practitioners experienced lower levels of stress.

Yoga has been shown to have a significant impact on reducing stress. Practices such as mindfulness, deep breathing, and meditation activate the parasympathetic nervous system, which helps calm the body and reduce stress by bringing it back to homeostasis. HIIT, while beneficial for physical health, is often associated with high levels of physical exertion and stress during exercise. This might explain why HIIT practitioners reported higher stress levels compared to Yoga practitioners, who engage in more calming practices.

In an Indian trial A Pragmatic Comparison Between Aerobic Exercise and Suryanamaskar in Stress Management in Medical Professionals: A Quasi-experimental Study (Joshi et al. 2022, Cureus Journal of Medical Science), 30 physicians were split into a daily aerobic exercise group vs. a yoga-based Surya Namaskar group for 4 weeks. Both groups' Perceived Stress Scale scores declined, but the yoga group's reduction in stress was significantly greater than that of the aerobic exercise group. This suggests that the yoga regimen was more effective at lowering participants' perceived stress.

Likewise, acute studies favor yoga for stress relief: The Acute Effect of a Single Yoga Lesson on Mood and Stress among College Students (He et al. 2018, Med Sci Sports Exercise conference abstracts), found that while a 90-minute fitness class and a 90-minute yoga class, each of them led to reduced self-reported stress in students, the yoga session produced a larger drop in stress (as measured by cortisol levels) compared to the conventional exercise session. These findings, from both chronic and single-session interventions, reinforce that yoga practitioners experience lower perceived stress than their HIIT counterparts. Yoga's mind-body techniques (breath control, meditation, relaxation) likely provide an extra buffer against stress that HIIT's purely physical approach does not, aligning with the comparative study's result of lower stress in the yoga group.

CONCLUSION

The results of our study confirmed that Yoga practitioners generally report higher positive emotions and lower perceived stress than HIIT practitioners, supporting the benefits of Yoga in enhancing positive emotions and reducing stress. However, there was no significant difference found between the two groups for emotional dysregulation and negative affect, meaning that both Yoga and HIIT practitioners showed similar levels of emotional difficulty and negative emotions.

Limitations:

1. Small Sample Size: The study had a sample size of 80 participants only. A larger sample could help make the results more reliable and generalizable to the broader population.
2. Cross-Sectional Design: The study was cross-sectional, meaning data was collected at a single point in time. To help get a better understanding of the long-term effects of Yoga and HIIT on emotional well-being, a longitudinal study would be more helpful.
3. Uncontrolled Variables: The study did not take into account factors like individual differences in mental health or the participants' previous experience with exercise. These factors could have influenced how participants responded to Yoga and HIIT. Future studies should consider these variables to get a more accurate picture of how these exercises impact emotions.

Suggestions for Further study:

1. Exploring the Long-Term Impact of Yoga and HIIT on Emotional Health: Since this study used a cross-sectional design, it only measured the participants' emotional states at one point in time. Future researchers could adopt a longitudinal approach to track the long-term effects of Yoga and HIIT on emotional regulation, stress, and affect. This would help determine whether the benefits of Yoga and HIIT are sustained over time or if they diminish once the exercise routine is stopped.
2. Investigating the Specific Mechanisms of Emotional Regulation: Future studies could examine the specific biological, psychological, or social mechanisms behind the emotional benefits of Yoga and HIIT. For example, researchers could investigate how neurobiological factors like changes in cortisol levels, the release of endorphins or brain activity during Yoga or HIIT might contribute to the observed effects on emotional dysregulation and negative affect. Understanding these underlying processes could lead to more effective interventions for emotional health.
3. Incorporating a Broader Range of Participants: This study focused on young adults within the ages of 20-30 years. Future research could include participants from different age groups, such as older adults or adolescents, to explore whether the effects of Yoga and HIIT on emotional regulation and stress vary across the lifespan. Additionally, including participants from diverse cultural and socioeconomic backgrounds could also help to generalize the findings to the broader population.
4. Comparing the Effects of Yoga with Other Forms of Exercise: This study focused on comparing Yoga and HIIT. Future studies could compare Yoga with other types of exercise, such as strength training, aerobic exercise, or walking, to see how these different forms of exercise impact emotional well-being and stress. This would help to identify which type of exercise is most effective for improving emotional regulation and mental health.
5. Investigating the Role of Individual Differences: Future research could explore how individual differences, such as personality traits, mental health history, and previous experience with exercise might influence how people respond to Yoga and HIIT. For example, some individuals might benefit more from the relaxation-focused aspects of Yoga, while others may find the high intensity of HIIT more effective for emotional regulation.
6. Exploring the Impact of Combined Exercise Programs: It would be valuable to explore how a combination of different exercise forms, such as Yoga and HIIT, might affect emotional regulation and stress. Future studies could investigate

whether a mixed approach that combines the mindfulness of Yoga with the intensity of HIIT might offer more comprehensive benefits for mental health.

REFERENCES

Amaranath, B., Nagendra, H. R., & Deshpande, S. (2016). Effect of integrated yoga module on positive and negative emotions in Home Guards. International Journal of Yoga, 9 (1), 35–43. https://doi.org/10.4103/0973-6131.171710.

Brown, L. A., & Lee, S. (2018). The relationship between emotional dysregulation, positive affect, and stress in young adults. Journal of Youth and Adolescence, 47 (5), 1067–1077.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health and Social Behavior, 24 (4), 385–396. https://doi.org/10.2307/2136404

Creswell, J. D. (2017). Mindfulness interventions. Annual Review of Psychology, 68, 491–516.

Field, T. (2016). Yoga clinical research review: Impact on emotional regulation and stress. International Journal of Yoga, 9 (2), 76–79.

Fredrickson, B. L. (1998). What good are positive emotions? Review of General Psychology, 2 (3), 300–319.

Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. American Psychologist, 56 (3), 218–226.

Govindaraj, R., Karmani, S., Varambally, S., & Gangadhar, B. N. (2016). Yoga and physical exercise – a review and comparison. International Review of Psychiatry, 28 (3), 242–253. https://doi.org/10.3109/09540261.2016.1160878

Goyal, M., Singh, S., Sibinga, E. M., et al. (2014). Meditation programs for stress and well-being: A systematic review. JAMA Internal Medicine, 174 (3), 357–368.

Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences. Psychophysiology, 39 (3), 281–291. https://doi.org/10.1017/S0048577201393198

He, Z., Qi, X., Tong, J., Chen, S., & He, S. (2018). The acute effect of a single yoga lesson on mood and stress among college students. Medicine & Science in Sports & Exercise, 50 (5S), 54.

Joshi, S. J., Khan, S. N., Kantharia, J. S., Mhase, S., Pashine, A. A., & Umate, R. (2022). A pragmatic comparison between aerobic exercise and Suryanamaskar in stress management. Cureus, 14 (9), e29414. https://doi.org/10.7759/cureus.29414

Kim, H., Kim, J., Woo, M., & Kim, T. (2022). Changes in inhibitory control, craving and affect after yoga vs. aerobic exercise. Frontiers in Psychiatry, 13, 940415. https://doi.org/10.3389/fpsyt.2022.940415.

Kim, S., & Lee, H. (2019). Perceived stress and emotion regulation in young adults: A cross-sectional study. Journal of Youth and Adolescent Mental Health, 22 (1), 28–38.

Kumar, K., & Telles, S. (2009). Meditation on OM: Relevance from ancient texts and contemporary science. International Journal of Yoga, 2 (1), 2–5.

Kumar, R., & Sharma, M. (2021). Emotional regulation, affect, and stress in young adults: A comparative study of yoga and HIIT. Journal of Indian Behavioral Studies, 29 (4), 189–198.

Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. Springer Publishing Company.

Linehan, M. M. (1993). Cognitive-behavioral treatment of borderline personality disorder. Guilford Press.

Pascoe, M. C., Thompson, D. R., Jenkins, Z. M., & Ski, C. F. (2017). Mindfulness mediates the physiological markers of stress: A meta-analysis. Journal of Psychiatric Research, 95, 156–178.

Porges, S. W. (1995). Orienting in a defensive world: Mammalian modifications of our evolutionary heritage. A polyvagal theory. Psychophysiology, 32 (4), 301–318.

Saanijoki, T., et al. (2018). Opioid release after high-intensity interval training in healthy human subjects. Neuropsychopharmacology, 43 (2), 246–254. https://doi.org/10.1038/npp.2017.181

Salovey, P., Rothman, A. J., Detweiler, J. B., & Steward, W. T. (2000). Emotional states and physical health. American Psychologist, 55 (1), 110–121.

Sharma, S., & Gopalan, M. (2021). Effects of yoga on emotional dysregulation, affect, and stress in Indian students. Indian Journal of Psychology, 34 (3), 162–170.

Snyder, C. R., & McCullough, M. E. (2019). The role of emotional dysregulation in positive and negative affect and stress management. Journal of Psychological Health, 50 (3), 204–211.

Streeter, C. C., Gerbarg, P. L., Saper, R. B., Ciraulo, D. A., & Brown, R. P. (2012). Effects of yoga on the autonomic nervous system, GABA, and allostasis in epilepsy, depression, and PTSD. Medical Hypotheses, 78 (5), 571–579.

Thayer, R. E., & Lane, R. D. (2000). A model of mood and emotion regulation: A neurobiological perspective. Psychological Science, 11 (4), 160–165.

United Nations. (2015). Resolution adopted by the General Assembly on International Day of Yoga. Retrieved from https://www.un.org/en/observances/yoga-day.

Van den Berg, P., & Westerhof, G. J. (2019). Mindfulness meditation and emotional dysregulation in individuals with depression. Psychiatry Research, 276, 128–135.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. Journal of Personality and Social Psychology, 54 (6), 1063–1070. https://doi.org/10.1037/0022-3514.54.6.1063

Zeman, J., & Garber, J. (2017). Emotion regulation and depression in children and adolescents: A meta-analytic review. Developmental Psychology, 53 (7), 1248–1261

Acknowledgment

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Jadhav, R.P. & Brahme, A. (2025). A Comparative Study of HIIT and Yoga Practitioners on Emotional Dysregulation, Positive and Negative Affect and Perceived Stress. *International Journal of Indian Psychology*, *13*(3)*,* 1612-1623. DIP:18.01.148.20251303, DOI:10.25215/1303.148