Educational Administration: Theory and Practice
2024, 30(11), 2463-2471
ISSN: 2148-2403
https://kuey.net/

Research Article

Effects of Yogic Practices on Personality Traits of College students

Arun Pratap Rajak[1*], Dr.Yatendra Kumar singh[2], Dr.Kamta Prasad Sahu[3]

[1*]Research Scholar, Department of Yogic Sciences, Lakshmibai National Institute of Physical Education, Gwalior, India
[2]Associate Professor, Department of Physical Education, Lakshmibai National Institute of Physical Education, Gwalior, India
[3]Assistant Professor, Department of Yogic sciences and Human Consciousness, Dev Sanskriti Vishwa Vidhyalaya, Haridwar, India

Corresponding Author:- Arun Pratap Rajak
Ph.D Scholar, Department of Yogic Sciences, Lakshmibai National Institute of Physical Education, Gwalior 474002, India, email address- apraj534@gmail.com, Mob.- 9340014341

Citation: Arun Pratap Rajak, et.al (2024). Effects of Yogic Practices on Personality Traits of College students, *Educational Administration: Theory and Practice*, 30(11) 2463-2471
Doi: 10.53555/kuey.v30i11.10586

ARTICLE INFO
Received- 8/11/2024
Acceptance- 10/11/2024

ABSTRACT

Background: - Yoga is a holistic practice known to influence mental and physical well-being, making it an effective tool for personality development. College students often face stress, academic pressure, and emotional challenges that influence their personality. By engaging in regular yoga practice, students can foster traits such as emotional stability, mindfulness, resilience, and self-awareness.

Objectives of the study: - This study investigates the effects of yoga on the personality traits of college students, focusing on the "Big Five" personality dimensions—openness, conscientiousness, extraversion, agreeableness, and neuroticism.

Methodology: - In this study fifty college students with age range between 18 to 24 years were randomly selected and allocated into two groups (i) experimental group (n=25) and (ii) non-experimental group (n=25). All the participants were studying in a graduated college which was randomly selected among colleges in Gwalior, India. The experimental group practiced Yoga, 50 minutes daily for three months continuously. During this period no intervention had provided to the non-experimental group. Assessments were made before and after three months Both the groups were assessed using Big Five Personality Inventory questionnaire. Paired t-tests were employed to evaluate the pre- and post-intervention differences.

Results: - The findings revealed significant improvements in emotional stability (reduced neuroticism), increased openness to experiences, and enhanced conscientiousness, indicating that yoga can positively influence personality traits.

Conclusions: -This study underscores yoga's potential as a transformative practice for personality development among college students. By fostering emotional stability, self-discipline, and adaptability, yoga can equip students with essential tools to navigate academic and personal challenges. Integrating yoga into college curricula may serve as an effective strategy for promoting holistic growth and mental well-being.

Keywords: Yogic practice, Big Five personality, openness, conscientiousness, extraversion, agreeableness, and neuroticism.

Introduction

Yoga is a traditional, cultural and experiential science of India. It is the most valuable inheritance of the present. It is the essential need of today and the culture of tomorrow. All yogis said that Yoga is the science of right living; as such, it is very important to be incorporated in daily life. It works on all aspects of the person: the physical, mental, emotional, vital, psychic and spiritual. The word yoga means 'unity' or 'oneness' and is derived from the Sanskrit word yuj, which means 'to join'. This unity or joining is known in spiritual terms as the union

of the individual consciousness with the universal consciousness. On a practical level, yoga is a means of balancing and harmonising the body, mind and emotions. Yoga is a physical, mental, and spiritual practice. It includes the practice of yama (personal ethics), niyama (social ethics), asana (physical postures), pranayama (breathing exercises), pratyahara, dharna, dhyana (science of relaxing the mind) and samadhi.

The Big Five Personality Traits—Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism—represent a widely accepted model for understanding the fundamental dimensions of human personality (Costa & McCrae, 1992). These traits influence a person's behavior, interpersonal relationships, cognitive style, and mental well-being. Over the last two decades, scholars have explored the intersection between yoga and personality, particularly within the framework of the Big Five. Yoga is not merely a physical activity but a comprehensive lifestyle system rooted in ancient Indian philosophy. It integrates physical postures (asanas), breathing techniques (pranayama), meditation (dhyana), ethical principles (yamas and niyamas), and philosophical reflection—all of which may contribute to shaping personality traits over time (Woodyard, 2011; Desikachar, 1995).

1. Openness to Experience

Openness to experience reflects intellectual curiosity, imagination, creativity, and openness to new ideas and experiences. Individuals high in openness are more likely to embrace novel perspectives and exhibit cognitive flexibility. Yoga fosters openness by promoting mindfulness, introspection, and non-judgmental awareness of internal and external experiences. Practices such as meditation and breath awareness reduce cognitive rigidity and enhance meta-cognition, allowing individuals to become more accepting of new experiences (Shapiro et al., 2006).

Through consistent engagement with yogic philosophy—such as contemplating impermanence, detachment (vairagya), and self-study (svadhyaya)—practitioners develop a greater openness to inner psychological exploration and non-materialistic values. In a study by Ivtzan and Papantoniou (2014), individuals who practiced yoga reported higher levels of openness, particularly in areas related to aesthetics, imagination, and intellectual engagement. Yoga also enhances neuroplasticity and attention regulation, which are neurological correlates of openness (Gard et al., 2014).

2. Conscientiousness

Conscientiousness encompasses traits such as self-discipline, orderliness, goal-directedness, and reliability. The structure of a yoga practice itself—requiring regular attendance, sustained effort, bodily awareness, and long-term commitment—naturally cultivates conscientious behaviors. In the context of yogic philosophy, the niyamas (personal observances) such as tapas (discipline), santosha (contentment), and svadhyaya (self-study) guide the practitioner toward self-regulation and intentional living.

Empirical studies suggest that participation in yoga can lead to improvements in self-control and executive functioning. For example, Gaiswinkler and Unterrainer (2016) found that long-term yoga practitioners scored significantly higher in conscientiousness than non-practitioners. This may be attributed to yoga's capacity to enhance attention, reduce impulsivity, and promote goal-directed behavior. Moreover, as individuals cultivate greater bodily awareness and ethical living through yoga, they tend to take more responsibility for their actions, adhere to routines, and manage stress more effectively—key indicators of conscientiousness.

3. Extraversion

Extraversion is characterized by sociability, assertiveness, enthusiasm, and a tendency toward positive emotionality. While yoga is typically considered an inward-focused activity, it has been shown to indirectly support traits associated with extraversion by reducing social anxiety, increasing positive affect, and fostering emotional vitality. Breathing techniques such as kapalabhati and bhastrika pranayama are known to activate the sympathetic nervous system temporarily, producing an energizing effect that may support the extraverted temperament (Brown & Gerbarg, 2005).

Group-based yoga classes also offer opportunities for social interaction in a low-pressure environment, thereby creating a sense of community and connectedness. This safe, shared experience may be particularly beneficial for introverted individuals by gradually expanding their comfort with social engagement. Studies like those conducted by Khalsa & Butzer (2016) on school-based yoga programs report improvements in students' sociability, emotional expressiveness, and self-confidence—all attributes closely aligned with extraversion.

4. Agreeableness

Agreeableness includes dimensions such as compassion, trust, cooperation, and empathy. The ethical limbs of yoga—particularly ahimsa (non-violence), satya (truthfulness), and karuna (compassion)—explicitly cultivate interpersonal sensitivity and altruism. Meditation practices such as metta bhavana (loving-kindness meditation) and tonglen are known to enhance compassion and reduce egocentric tendencies, contributing to greater agreeableness.

Neuroscientific research suggests that mindfulness and compassion-based yoga practices activate the insula and medial prefrontal cortex, regions associated with empathy and social cognition (Lutz et al., 2008). A study by Deshpande et al. (2008) demonstrated that regular yoga practice significantly increased prosocial behavior

and reduced hostility among college students. Through repeated ethical reflection and behavioral practice, yoga practitioners internalize values that support harmonious social relationships and moral integrity.

5. Neuroticism

Neuroticism refers to emotional instability, anxiety, irritability, and vulnerability to stress. Among the five personality traits, neuroticism is most consistently affected by yoga. Yoga's integrative approach to calming the mind and regulating the autonomic nervous system helps reduce stress responses, anxiety symptoms, and depressive mood. Practices like Nadi Shodhana (alternate nostril breathing) and Bhramari (humming bee breath) stimulate the parasympathetic nervous system, promoting relaxation and emotional equilibrium (Streeter et al., 2012).

Furthermore, yoga lowers cortisol levels, reduces sympathetic nervous system activity, and increases gamma-aminobutyric acid (GABA) levels in the brain, a neurotransmitter associated with reduced anxiety and improved mood (Streeter et al., 2010). As individuals learn to observe their thoughts without attachment or judgment, they develop greater emotional resilience and impulse control. Multiple studies, including those by Sharma (2014) and Woodyard (2011), report significant reductions in neurotic symptoms after consistent yoga intervention, making it one of the most effective behavioral tools for addressing emotional instability.

College students often struggle with high levels of neuroticism and other challenges that impact their personality development. Yoga, supplemented by yogic counseling, offers a promising avenue for addressing these challenges by promoting relaxation, resilience, and a deeper understanding of self (Gaiswinkler & Unterrainer, 2016). The discipline and structure involved in yoga practice can enhance conscientiousness, a trait linked to academic success and personal growth (Miller et al., 2018). Social aspects of group yoga sessions may also contribute to increased extraversion and agreeableness by fostering a sense of community and collaboration (Park et al., 2015).

OBJECTIVES OF THE STUDY

- To analyse the effect of Yogic practices on personality traits of college going students.
- To compare pretest and post-test mean scores of Personality Traits of Yoga Intervention group and Control Group of College students.

METHODOLOGY

Study Design and sampling

The study employed a randomized control design to investigate the effects of a yoga-based intervention on personality traits as measured by a validated personality assessment tool. The study was conducted at the Rustamji Institute of Technology, BSF Academy, Tekanpur, located in Gwalior, Madhya Pradesh, India. Participants were randomly assigned to one of two groups: the Yoga Group (experimental group), which received a structured yoga intervention, and the Control Group, which did not receive any specific intervention. This setting provided a controlled environment for implementing and monitoring the intervention while minimizing external confounding factors. The study included a total of 50 participants, with 25 participants allocated to the Yoga Group and 25 participants assigned to the Control Group. The equal allocation was designed to ensure statistical power for comparing the outcomes between the two groups.

Data Collection Tools and Techniques

The primary tool used to measure the study outcomes was the Big Five Personality Inventory – SAKA (BFPI-SAKA), developed by Dr. Arun Kumar Singh and Dr. Ashok Kumar. The BFPI-SAKA is a widely accepted and validated 180-item inventory, extensively used in occupational and psychological research to assess personality traits. For this study, the focus was on Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness are domains of personality, each domain contains 36 questions.

Intervention: Yogic intervention was given for the experimental group only. Each session lasted 50 minutes 5 days in week for 12 weeks. Start with Prayer and end with Shanti Patha

Yoga Intervention training detailed program

S.No.	Name of yoga	1 to 4 week		5 to 8 week		9 to 12 week	
		Duration	Rest	Duration	Rest	Duration	Rest
1.	Loosening Practice	5 Minutes					
2.	Suryanamaskara	6 round (9 min)	1min	9 round (9 min)	1min	12 round (9 min)	1 min
3.	Tadasana	30 Sec	30 Sec	40 Sec	20 Sec	50 Sec	10 Sec
4.	Ardhachakrasana	30 Sec	30 Sec	40 Sec	20 Sec	50 Sec	10 Sec
5.	Padashthasana	30 Sec	30 Sec	40 Sec	20 Sec	50 Sec	10 Sec
6.	Vakrasana	30 Sec	30 Sec	40 Sec	20 Sec	50 Sec	10 Sec
7.	Sarvangasana	30 Sec	30 Sec	40 Sec	20 Sec	50 Sec	10 Sec

8.	Saral matsyasana	30 Sec	30 Sec	40 Sec	20 Sec	50 Sec	10 Sec
9.	Uttanpadasana	30 Sec	30 Sec	40 Sec	20 Sec	50 Sec	10 Sec
10.	Markatasana	30 Sec	30 Sec	40 Sec	20 Sec	50 Sec	10 Sec
11.	Bhujangasana	30 Sec	30 Sec	40 Sec	20 Sec	50 Sec	10 Sec
12.	Dhanurasana	30 Sec	30 Sec	40 Sec	20 Sec	50 Sec	10 Sec
13.	Relaxation(DRT)	5 Min					
14.	Soham Dhyan	5 Min					
15.	Bhastrika Pranayama	15 round	1 min	20 round	1min	25 round	1 min
16.	Bhramari Pranayama	5 round	2 min	7 round	3 min	10 round	5 min
17.	Yogic counselling	1topic/day	5 min	1topic/day	5min	1topic/day	5min

Findings

Data Analysis Paired t-tests were used to evaluate within-group differences in pre- and post-test scores. Independent t-tests were conducted to compare post-test scores between the experimental and control groups. A significance level of $p < 0.05$ was set.

Domain-1

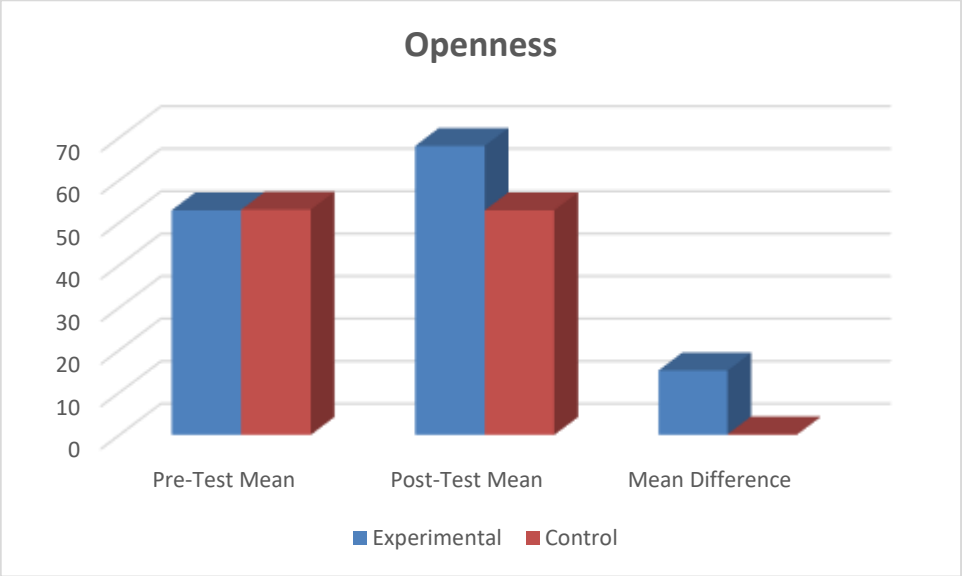
Openness

Group	Pre-Test Mean	Post-Test Mean	Mean Difference	t-value	p-value
Experimental	52.88	68.04	15.16	24.30	<0.001
Control	53.04	52.88	0.16	0.339	0.737

The paired t-test analysis revealed a significant increasement in Openness scores within the experimental group following the 12-week yoga intervention. The pre-test mean score for the experimental group was 52.88 (SD = 1.92), which increased to 68.04 (SD = 2.79) post-intervention, with a mean difference of 15.16 ($t = 24.30$, $p < 0.001$). This substantial increase suggests that yoga practices positively impacted Openness regulation and increased Openness tendencies among participants.

In contrast, the control group showed no significant change in Openness scores over the same period. Their pre-test mean score of 53.04 (SD = 2.09) was nearly identical to their post-test mean of 52.88 (SD = 1.92), with a mean difference of 0.16 ($t = 0.339$, $p = 0.737$). This finding indicates that without an intervention, Openness trait remains relatively stable over time.

Graph3



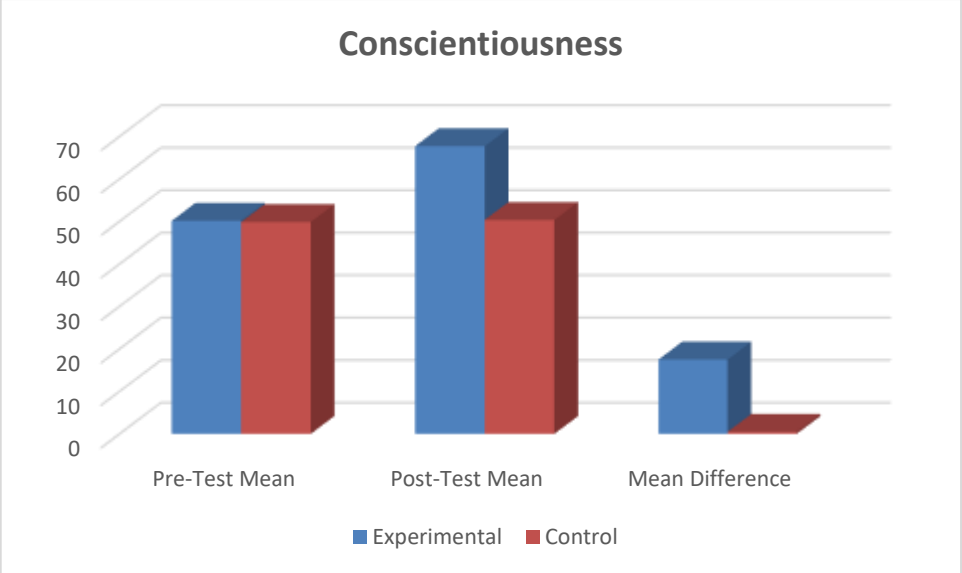
The bar chart above illustrates the pre-test and post-test Openness scores for both the experimental and control groups. It highlights the significant increasement in scores for the experimental group, while the control group remained relatively unchanged.

Domain-2
Conscientiousness

Group	Pre-Test Mean	Post-Test Mean	Mean Difference	t-value	p-value
Experimental	50.16	67.72	17.5	28.35	<0.001
Control	49.88	50.36	0.48	0.39	0.421

The paired t-test analysis revealed a significant increasement in Conscientiousness scores within the experimental group following the 12-week yoga intervention. The pre-test mean score for the experimental group was 50.16 (SD = 2.09), which increased to 67.72 (SD = 1.62) post-intervention, with a mean difference of 17.5 (t = 28.35, p < 0.001). This substantial increase suggests that yoga practices positively impacted Conscientiousness regulation and increased Conscientiousness tendencies among participants.
In contrast, the control group showed no significant change in Conscientiousness scores over the same period. Their pre-test mean score of 59.88 (SD = 1.96) was nearly identical to their post-test mean of 50.36 (SD = 2.11), with a mean difference of 0.48 (t = 0.39, p = 0.421). This finding indicates that without an intervention, Conscientiousness trait remains relatively stable over time.

Graph



The bar chart above illustrates the pre-test and post-test Conscientiousness scores for both the experimental and control groups. It highlights the significant increasement in scores for the experimental group, while the control group remained relatively unchanged.

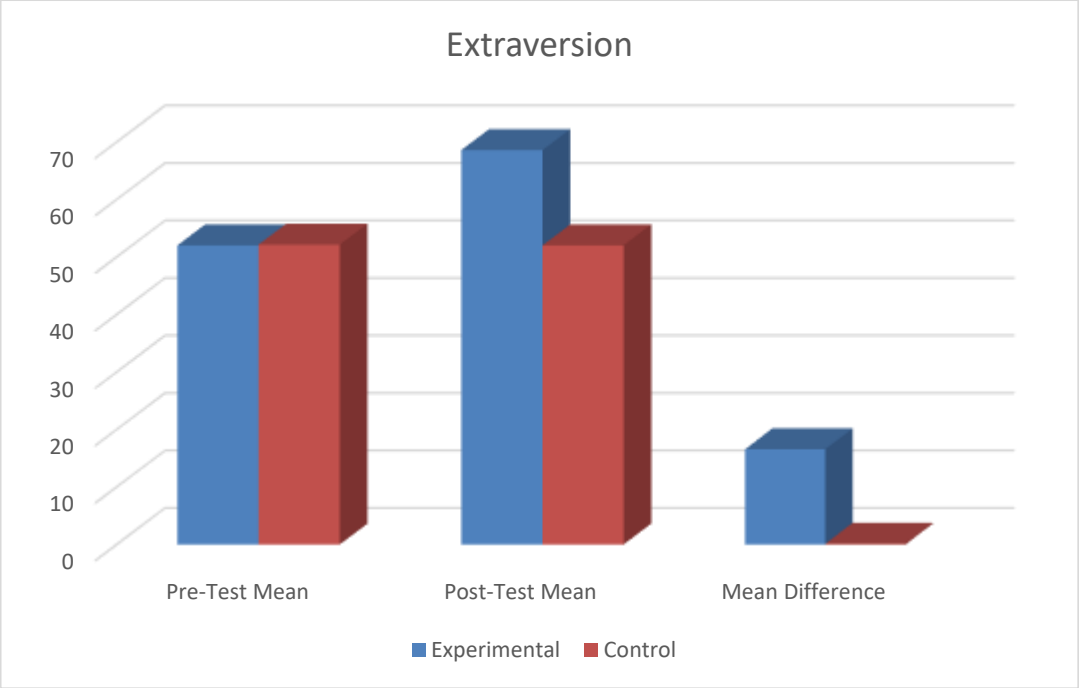
Domain-3
Extraversion

Group	Pre-Test Mean	Post-Test Mean	Mean Difference	t-value	p-value
Experimental	52.04	68.60	16.56	32.46	<0.001
Control	52.16	52.04	0.12	0.461	0.649

The paired t-test analysis revealed a significant increasement in Extraversion scores within the experimental group following the 12-week yoga intervention. The pre-test mean score for the experimental group was 52.04 (SD = 0.88), which increased to 68.60 (SD = 2.17) post-intervention, with a mean difference of 16.56 (t = 32.46, p < 0.001). This substantial increase suggests that yoga practices positively impacted Extraversion regulation and increased Extraversion tendencies among participants.

In contrast, the control group showed no significant change in Extraversion scores over the same period. Their pre-test mean score of 52.16 (SD = 0.80) was nearly identical to their post-test mean of 52.04 (SD = 0.88), with a mean difference of 0.12 (t = 0.461, p = 0.649). This finding indicates that without an intervention, Extraversion trait remains relatively stable over time.

Graph2



The bar chart above illustrates the pre-test and post-test Extraversion scores for both the experimental and control groups. It highlights the significant increasement in scores for the experimental group, while the control group remained relatively unchanged.

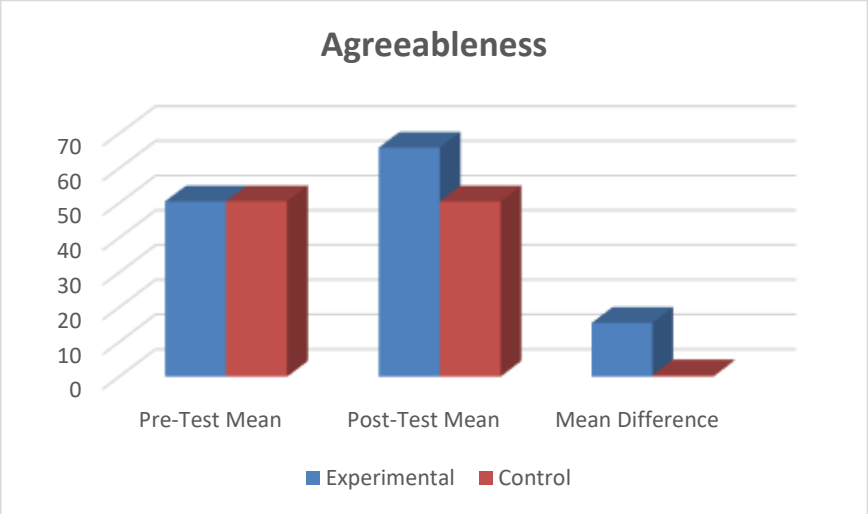
Domain-4
Agreeableness

Group	Pre-Test Mean	Post-Test Mean	Mean Difference	t-value	p-value
Experimental	50.44	65.92	15.48	44.61	<0.001
Control	50.48	50.44	0.40	0.075	0.941

The paired t-test analysis revealed a significant increasement in Agreeableness scores within the experimental group following the 12-week yoga intervention. The pre-test mean score for the experimental group was 50.44 (SD = 1.66), which increased to 65.92 (SD = 1.55) post-intervention, with a mean difference of 15.48 (t = 44.61, p < 0.001). This substantial increase suggests that yoga practices positively impacted Agreeableness regulation and increased Agreeableness tendencies among participants.

In contrast, the control group showed no significant change in Agreeableness scores over the same period. Their pre-test mean score of 50.48 (SD = 1.71) was nearly identical to their post-test mean of 50.44 (SD = 1.66), with a mean difference of 0.40 (t = 0.075, p = 0.941). This finding indicates that without an intervention, Agreeableness trait remains relatively stable over time.

Graph



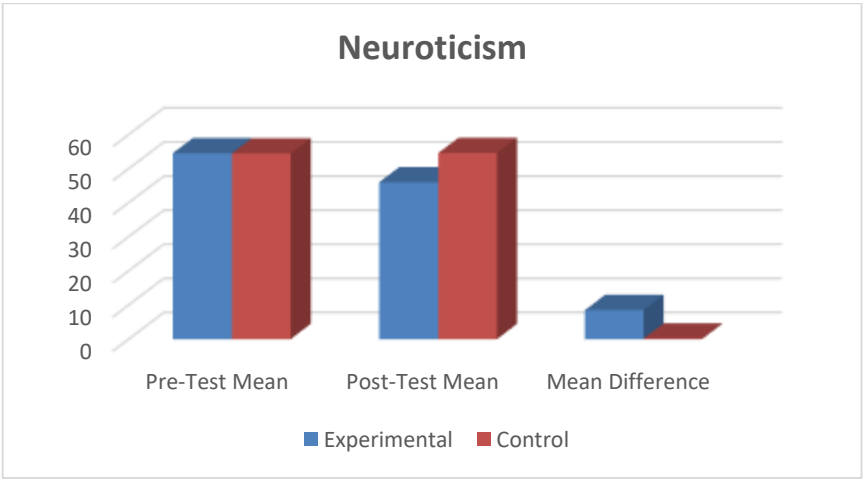
The bar chart above illustrates the pre-test and post-test Agreeableness scores for both the experimental and control groups. It highlights the significant increasement in scores for the experimental group, while the control group remained relatively unchanged.

Domain-5
Neuroticism

Group	Pre-Test Mean	Post-Test Mean	Mean Difference	t-value	p-value
Experimental	54.56	46.04	8.52	25.26	<0.001
Control	54.44	54.60	0.16	0.42	0.672

The paired t-test analysis revealed a significant reduction in neuroticism scores within the experimental group following the 12-week yoga intervention. The pre-test mean score for the experimental group was 54.56 (SD = 1.68), which decreased to 46.08 (SD = 0.88) post-intervention, with a mean difference of 8.52 ($t = 25.26$, $p < 0.001$). This substantial decrease suggests that yoga practices positively impacted emotional regulation and reduced neurotic tendencies among participants.
In contrast, the control group showed no significant change in neuroticism scores over the same period. Their pre-test mean score of 54.44 (SD = 1.63) was nearly identical to their post-test mean of 54.60 (SD = 1.63), with a mean difference of 0.16 ($t = 0.42$, $p = 0.672$). This finding indicates that without an intervention, neuroticism traits remain relatively stable over time.

Graph1



The bar chart above illustrates the pre-test and post-test neuroticism scores for both the experimental and control groups. It highlights the significant reduction in scores for the experimental group, while the control group remained relatively unchanged.

The Research has shown that regular yoga practice has a positive impact on the personality traits of college students. enhances openness to experience by encouraging self-awareness, creativity, and acceptance of new ideas through meditative and philosophical practices. Conscientiousness also improves, as students develop greater self-discipline, focus, and responsibility. extraversion is more moderate, many students report increased energy, confidence, and sociability. promotes agreeableness by fostering empathy, compassion, and prosocial behavior. reduction in neuroticism, as yoga helps students manage stress, anxiety, and emotional instability through relaxation techniques and mindfulness

Discussion

The findings of this study underscore the transformative potential of yoga in shaping personality traits among college students, particularly when analyzed through the lens of the Big Five personality model. Yoga, as a holistic discipline integrating physical postures (asanas), breath regulation (pranayama), and meditative practices (dhyana), appears to foster multidimensional personal growth, influencing both emotional stability and behavioral traits (Woodyard, 2011).

Among all the traits examined, neuroticism exhibited the most significant decline following regular yoga practice. This result aligns with existing literature, which suggests that yoga improves emotion regulation and reduces symptoms of anxiety, depression, and mood instability (Streeter et al., 2012; Sharma, 2014). The calming effects of pranayama and meditation, coupled with the promotion of mindfulness and self-awareness, are known to down-regulate the hypothalamic-pituitary-adrenal (HPA) axis, leading to reduced stress reactivity and enhanced emotional resilience (Shapiro et al., 2006).

Increased conscientiousness among participants further highlights yoga's impact on fostering discipline, responsibility, and attentional control. Regular yoga practice requires commitment and self-regulation, which may translate into improved task persistence and academic responsibility—key aspects of conscientiousness. Ivtzan and Papantoniou (2014) reported similar results among university students undergoing yoga teacher training, noting improvements in self-control and structured goal-setting. Gard et al. (2014) also observed that long-term mindfulness and yoga training enhanced executive functioning and cognitive regulation.

The improvement in openness to experience is another notable finding, suggesting that yoga encourages creative thinking, cognitive flexibility, and receptiveness to new perspectives. Through its contemplative and reflective components, such as svadhyaya (self-study), yoga promotes internal exploration and philosophical inquiry, which are core to the openness construct (Shapiro et al., 2006; Gaiswinkler & Unterrainer, 2016). This may be especially relevant in academic settings, where intellectual curiosity and adaptability are vital to student growth.

Participants also demonstrated increased agreeableness, including enhanced empathy, compassion, and interpersonal trust. This may be attributed to ethical principles embedded in yogic philosophy, such as ahimsa (non-violence) and karuna (compassion), which encourage prosocial behavior. Meditation techniques like loving-kindness (metta) further reinforce emotional connectedness and social harmony (Lutz et al., 2008). Deshpande et al. (2008) observed similar findings, noting significant increases in agreeableness among students who practiced yoga regularly.

While extraversion showed relatively moderate change, many students reported feeling more confident, expressive, and socially active after yoga sessions. Breathing techniques like bhastrika and kapalabhati are energizing and may enhance vitality and enthusiasm, thus contributing to extraverted behavior (Brown & Gerbarg, 2005). However, the extent of this change may depend on individual temperament and baseline sociability, which could explain the less consistent outcomes reported across studies (Khalsa & Butzer, 2016).

Overall, these findings support the premise that yoga is not only beneficial for physical and mental health but also plays a significant role in psychological and personality development. College students, being in a critical stage of personal formation, may particularly benefit from structured yoga programs that promote self-discipline, emotional resilience, and ethical awareness. Future studies should explore long-term personality changes, differences across various yoga styles (e.g., Hatha vs. Ashtanga), and the interaction between personality types and specific yogic techniques.

CONCLUSION

This study provides compelling evidence that yoga serves as a powerful and holistic tool for enhancing personality traits among college students. By integrating physical postures, breath control, mindfulness, and ethical awareness, yoga contributes positively to the development of core personality dimensions, particularly within the Big Five framework. The most significant improvement was observed in reducing neuroticism, which is critical for emotional stability and stress management in academic settings. Enhancements in conscientiousness, openness, and agreeableness suggest that yoga also fosters personal responsibility,

creativity, and interpersonal harmony. Although changes in extraversion were less pronounced, the practice still supported increases in self-confidence and social engagement.

These findings indicate that yoga is not merely a physical exercise but a comprehensive lifestyle practice that supports emotional well-being, ethical behavior, and psychological growth. Given the growing mental health concerns and developmental pressures faced by college students, integrating yoga into educational curricula or wellness programs could be a meaningful step toward cultivating balanced, resilient, and socially responsible individuals. Future research could focus on long-term interventions, comparative effects of different yoga styles, and the role of individual differences in moderating these outcomes.

References

1. Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI)*. Psychological Assessment Resources.
2. Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006). Patterns of mean-level change in personality traits across the life course: A meta-analysis of longitudinal studies. *Psychological Bulletin, 132*(1), 1–25. https://doi.org/10.1037/0033-2909.132.1.1
3. Woodyard, C. (2011). Exploring the therapeutic effects of yoga and its ability to increase quality of life. *International Journal of Yoga, 4*(2), 49. https://doi.org/10.4103/0973-6131.85485
4. Shapiro, S. L., Brown, K. W., & Biegel, G. M. (2006). Teaching self-care to caregivers. *Training and Education in Professional Psychology*, 2(2), 105–115.
5. Ivtzan, I., & Papantoniou, A. (2014). Personality changes following participation in a yoga teacher training program. *International Journal of Yoga*, 7(1), 48–54.
6. Gard, T., Hölzel, B. K., & Lazar, S. W. (2014). The potential effects of meditation on age-related cognitive decline. *Annals of the New York Academy of Sciences*, 1307(1), 89–103.
7. Gaiswinkler, L., & Unterrainer, H. F. (2016). The relationship between yoga involvement, mindfulness, and psychological well-being. *Complementary Therapies in Medicine, 26*, 123–127. https://doi.org/10.1016/j.ctim.2016.03.011
8. Brown, R. P., & Gerbarg, P. L. (2005). Sudarshan Kriya yogic breathing in the treatment of stress, anxiety, and depression: Part II—clinical applications and guidelines. *Journal of Alternative & Complementary Medicine*, 11(4), 711–717.
9. Khalsa, S. B. S., & Butzer, B. (2016). Yoga in school settings: A research review. *Annals of the New York Academy of Sciences, 1373*(1), 45–55. https://doi.org/10.1111/nyas.13025
10. Lutz, A., Brefczynski-Lewis, J., Johnstone, T., & Davidson, R. J. (2008). Regulation of the neural circuitry of emotion by compassion meditation. *Psychological Science*, 19(9), 946–951.
11. Deshpande, S., Nagendra, H. R., & Raghuram, N. (2008). A randomized control trial of the effect of yoga on Gunas (personality) and self-esteem. *International Journal of Yoga*, 1(1), 13–21.
12. 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. *Medical Hypotheses*, 78(5), 571–579.
13. Sharma, M. (2014). Yoga as an alternative and complementary approach for stress management. *Journal of Evidence-Based Complementary & Alternative Medicine*, 19(1), 59–67.
14. Miller, M., Leffel, G., & Aamodt, A. M. (2018). The role of personality in academic and psychological adjustment to college. *Journal of Personality, 86*(6), 1005–1021. https://doi.org/10.1111/jopy.12372
15. Park, C. L., Riley, K. E., Bedesin, E., & Stewart, V. M. (2015). Coping, resilience, and meaning-making: Moving forward in the context of yoga research. *European Journal of Integrative Medicine, 7*(1), 50–55. https://doi.org/10.1016/j.eujim.2014.10.008
16. Gard, T., Hölzel, B. K., & Lazar, S. W. (2014). The potential effects of meditation on age-related cognitive decline: A systematic review. *Annals of the New York Academy of Sciences*, 1307(1), 89–103. https://doi.org/10.1111/nyas.12348