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# Effects of the meditations from Indian psychology on stress

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**Abstract**
This study explores the efficacy of Indian psychological meditative practices—specifically yoga, tantra, and mindfulness—in alleviating stress among individuals in modern society. Rooted in the ancient Panchakosha model of Indian philosophy, the research employs a structured intervention program addressing five layers of human existence: physical, emotional, energy, knowledge, and bliss. A quasi-experimental pre-post design was employed involving 81 participants with stress-related symptoms identified through psychological clinics. Over a period of three months, participants underwent a daily 40-minute guided regimen incorporating asanas, pranayama, mindfulness-based stress reduction (MBSR), and tantric archetype meditation drawn from Srividya traditions. Pre- and post-intervention stress levels were assessed using the Perceived Stress Scale (PSS-10), revealing a statistically significant reduction in perceived stress (mean reduction = 11.44, $p < 0.0001$), affirming the hypothesis that Indian meditative practices reduce stress effectively. No significant correlation was found between stress reduction and gender or age, indicating the universality of the method's effectiveness. Further, the use of positive archetype implantation in tantra was found to influence cognitive function and emotional balance, aligning with Carl Jung's theories on archetypes and their neurological correlates. Complementary literature supports the influence of yoga and chanting on neurobiological and gut-brain axis regulation. The study concludes that these integrated Indian meditative practices offer a promising, non-pharmacological alternative for stress management with holistic psychological benefits. Though limited by a short duration and lack of EEG validation, the findings provide a foundation for future longitudinal and neurocognitive research in cognitive-neural psychology, and suggest the potential of ancient Indian wisdom in contemporary therapeutic paradigms.

**Keywords:** Indian psychology, yoga, tantra, mindfulness, stress reduction, panchakosha, archetypes, perceived stress scale (pss), meditation, cognitive function, srividya, non-pharmacological therapy.

## Introduction

In contemporary society, stress has become a pervasive concern affecting people across age groups, socioeconomic strata, and cultures. The World Health Organization recognizes stress as the health epidemic of the 21st century due to its impact on psychological and physiological functioning. Chronic stress can alter the hypothalamic-pituitary-adrenal axis and compromise the immune system, leading to disorders such as depression, anxiety, cardiovascular issues, and metabolic syndromes (Dalpati *et al*., 2022) [11]. The modern therapeutic focus is increasingly shifting toward integrative approaches, particularly those that combine physical movement, breath regulation, and mindfulness—domains extensively covered by Indian meditative practices. Yoga, tantra, and mindfulness are pillars of Indian psychology and represent systematic methods for mental equilibrium and emotional regulation.

Meditative practices rooted in Indian psychology provide a holistic understanding of human consciousness. Indian meditation techniques such as Ashtanga yoga, Vipassana, and Srividya tantra are built upon experiential frameworks that extend beyond relaxation. These modalities are based on philosophical constructs such as dhyana (meditation), pratyahara (withdrawal of senses), and pranayama (breath control), which are proven to influence neurophysiological markers of stress such as heart rate variability and cortisol levels (Woodyard, 2011) [8]. Empirical studies have validated the efficacy of these interventions in improving affect regulation, cognitive flexibility, and resilience to stressors. Mindfulness-based stress reduction (MBSR), derived in part from Buddhist Vipassana and yogic philosophy, has been widely researched and acknowledged as a non-pharmacological intervention to combat chronic stress and psychological discomfort (Kabat-Zinn *et al*., 1992) [9].

From a neuroscientific perspective, regular meditation alters brain structures associated with attention, self-regulation, and emotional processing. Research using magnetic resonance imaging (MRI) has demonstrated increased cortical thickness in areas related to executive functioning and emotional stability among long-term meditators. Furthermore, meditative chanting as practiced in tantra and yoga has been shown to activate the vagus nerve and improve parasympathetic nervous system activity, contributing to a calming physiological response (Perry *et al*., 2022) [10]. These findings substantiate the foundational claims of Indian psychology that place consciousness and internal archetypes at the center of therapeutic transformation.

The conceptualization of stress and its antidotes within Indian psychology aligns with the Panchakosha model found in the Taittiriya Upanishad, which outlines five sheaths or koshas of the human experience: physical (Annamaya), energy (Pranamaya), mental (Manomaya), intellectual (Vijnanamaya), and bliss (Anandamaya). This model parallels modern biopsychosocial approaches but

offers an additional spiritual dimension. Through structured interventions targeting these koshas, individuals can recalibrate their cognitive-emotional systems and promote integrated healing (Bana *et al*., 2022) [7]. The synthesis of ancient Indian spiritual frameworks and contemporary psychological inquiry presents a promising paradigm for stress management.

As urban lifestyles become increasingly mechanized and emotionally disconnected, the prevalence of psychosomatic disorders has surged. Indian psychology, with its intrinsic focus on consciousness, mindfulness, and breath-energy mechanisms, offers not only symptom alleviation but also long-term strategies for emotional clarity and psychological resilience. This paper investigates the effectiveness of yoga, tantra, and mindfulness-based interventions in reducing stress through a structured Panchakosha-based model, contributing empirical evidence to the growing field of integrative mental health interventions.

**Research Background and Rationale**

The alarming rise in stress-related disorders globally has prompted researchers and clinicians to explore alternative, culturally rooted models for stress reduction. Traditional pharmacological methods often target symptom relief without addressing the core psycho-emotional disturbances that underlie chronic stress. Indian psychology, through its rich heritage of meditative practices like yoga, tantra, and mindfulness, offers a multidimensional approach that targets not only physical and mental symptoms but also energy and consciousness layers of human experience. The rationale for this study lies in the necessity to evaluate non-pharmacological, integrative frameworks that have shown promise in enhancing emotional resilience and cognitive regulation (Woodyard, 2011) [8].

Meditation practices in Indian psychology are not monolithic but are categorized into distinct methods with specific goals. Ashtanga yoga, for instance, integrates physical postures with breath control and meditative absorption to stabilize the body and mind. Tantra, on the other hand, focuses on activating latent energy and reprogramming the subconscious through archetypal imprinting and mantra-based vibrations. Mindfulness, with its roots in Vipassana meditation, cultivates meta-awareness and equanimity toward moment-to-moment experiences. These practices share a common foundation of altering habitual thought patterns and restoring psychophysiological harmony (Kabat-Zinn *et al*., 1992) [9]. The effectiveness of these systems in reducing psychological distress has been well-documented in both traditional texts and empirical research, but few studies have attempted to unify them within a structured, Panchakosha-based intervention.

Modern neuroscience has affirmed the transformative potential of meditative techniques by showing alterations in cortical thickness, increased connectivity in the default mode network, and improved autonomic regulation. Chanting-based tantric meditation, for example, has been shown to improve attention and emotional balance through vagal stimulation and the entrainment of the limbic system (Perry *et al*., 2022) [10]. These physiological changes validate the traditional Indian concept of energy regulation via prana and support the use of meditation as a neuroplasticity-inducing modality. Integrating such practices into mainstream psychological treatment could address the gaps left by Western-centric models of stress therapy that often overlook the experiential and somatic dimensions of healing.

The rationale for the present study also stems from the need to contextualize meditation-based interventions within Indian cultural and spiritual frameworks rather than appropriating them into secular clinical formats. While global programs like MBSR have gained popularity, their derivation from Eastern practices is often divorced from the philosophical grounding that gives these techniques depth and continuity. By rooting this study in the Indian Panchakosha model and utilizing authentic meditative techniques such as Srividya tantra and yogic kriyas, the research ensures cultural fidelity while assessing therapeutic efficacy (Sroka & Sharman, 2022) [6]. This is particularly important in a country like India, where aligning clinical interventions with indigenous knowledge systems can increase acceptance, compliance, and psychosocial relevance.

Furthermore, existing research has not sufficiently addressed the integrated effect of yoga, tantra, and mindfulness when practiced together as a composite intervention. Most studies examine these practices in isolation, missing the synergistic benefits that may emerge from a holistic approach. The Panchakosha framework provides an ideal structure for such integration, offering a theoretical basis for targeting the different dimensions of stress response—ranging from muscular tension to cognitive rumination and existential anxiety. Thus, the present study aims to bridge this research gap by implementing a structured, daily regimen encompassing all three modalities over a three-month period and evaluating changes in perceived stress using validated psychometric tools like the PSS-10 (Siqueira *et al*., 2010) [13].

**Review of Literature**

Indian psychology, grounded in Vedic and Upanishadic traditions, has a long-standing engagement with understanding the mind and its afflictions through introspection, meditation, and spiritual awareness. Unlike Western psychology that evolved from a positivist and behaviorist tradition, Indian psychology emphasizes inner transformation and liberation from suffering through consciousness-based practices. The earliest articulations of psychological principles in India are found in texts like the *Bhagavad Gita*, *Mandukya Upanishad*, and *Patanjali's Yogasutras*, which offer a structured understanding of the self, mind, and behavior. The *Bhagavad Gita* presents detachment and equanimity as psychological tools to overcome stress and inner conflict (Bhawuk, 2011) [1], echoing the foundational emphasis of mindfulness and cognitive restructuring in contemporary therapeutic literature.

Post-independence Indian psychology initially modeled itself on Western paradigms, but subsequent scholars like Durganand Sinha and Ramakrishna Rao initiated a movement towards indigenous psychology that drew upon cultural and spiritual resources for psychological insight. Rao's extensive writings have emphasized the relevance of Vedic philosophy, particularly the notion of *Purusha* (pure consciousness), in psychological theory and practice. He argued for a balance between inner reflection and scientific empiricism, stressing that Indian psychological frameworks offer unique therapeutic modalities that engage with the subjective self as opposed to objectified symptoms (Rao &

Paranjape, 2016) [2]. This has found resonance in the growing field of contemplative neuroscience, which validates meditative practices for emotional regulation and attentional control.

Tantric meditation, particularly from traditions like *Srividya*, has emerged as a profound method for subconscious reprogramming through archetypal engagement. Carl Jung's analytical psychology supports the view that archetypes embedded in the collective unconscious can be activated for psychological transformation. Jung's notion that the absence of positive archetypes contributes to modern neurosis aligns with tantric practices that implant positive archetypal deities like *Tripurasundari* to balance emotions and restore mental harmony (Jung, 1958) [5]. Recent studies on chanting and mantra meditation show that these practices significantly alter emotional states, enhance attention, and activate neural structures related to memory and mood regulation, particularly within the limbic system (Perry *et al*., 2022) [10].

Yoga, especially as structured in Patanjali's Ashtanga system, remains central to the Indian psychological toolkit for stress management. A 2025 Sri Lankan study showed significant improvements in cardiovascular and respiratory functions, sleep, mood, and cognition following regular yoga practice, confirming its effectiveness in managing both physiological and psychological stress markers (Weerakoon, 2025). The integration of breathwork (pranayama), physical postures (asanas), and meditative absorption (dhyana) cultivates parasympathetic activation and downregulates stress-related hormones like cortisol. This aligns with the bioenergetic explanation of stress in Indian psychology where blocked or unregulated prana flow is seen as the root cause of emotional distress.

Mindfulness, though popularized in the West through MBSR, originates from Buddhist and Vedantic contemplative practices that were designed to train awareness and presence. Mindfulness-based cognitive therapy (MBCT) and MBSR have now been shown to reduce rumination, enhance attentional regulation, and increase psychological flexibility, all of which are critical in managing chronic stress (Roca *et al*., 2023) [14]. These findings validate the experiential claims of Indian psychology, particularly regarding the ability of sustained inner focus (dharana and dhyana) to dissolve the effects of negative thought loops and promote self-regulation.

## Conceptual Framework: Panchakosha and Indian Psychology

The Panchakosha framework, derived from the Taittiriya Upanishad, serves as a foundational concept in Indian psychology for understanding the multi-layered constitution of human beings. It categorizes existence into five concentric layers or koshas—Annamaya (physical), Pranamaya (energy), Manomaya (mental), Vijnanamaya (intellectual), and Anandamaya (bliss). This model provides an integrative approach to health and stress management by targeting the physical, energetic, emotional, intellectual, and spiritual dimensions of experience simultaneously. Unlike Western psychological models that often emphasize cognition and behavior, the Panchakosha framework facilitates a comprehensive transformation by addressing the subtle energies and consciousness underlying human behavior (Rao & Paranjape, 2016) [2].

In the context of stress and psychological suffering, each kosha represents a domain where stress manifests and can be therapeutically addressed. The Annamaya kosha relates to the physical body and is the entry point for stress-induced somatic symptoms such as muscle tension, fatigue, and poor sleep. Practices such as yoga asanas and mindful body scans work on this sheath to release physical tension and stimulate parasympathetic activity. The Pranamaya kosha deals with prana or life-force energy, often disrupted during chronic stress. Breathwork techniques such as pranayama help regulate this kosha by balancing sympathetic and parasympathetic responses, a mechanism well-documented in clinical psychophysiology studies (Bana *et al*., 2022) [7].

The Manomaya kosha encompasses thoughts and emotions, serving as the mental layer where cognitive distortions and emotional reactivity dominate during stress. Mindfulness-based interventions and meditation practices focusing on emotional awareness and acceptance modulate this kosha by enhancing the function of prefrontal regions responsible for self-regulation. Scientific studies demonstrate that consistent meditation leads to decreased amygdala activation and increased gray matter in areas associated with attentional and emotional control (Roca *et al*., 2023) [14].

The Vijnanamaya kosha, representing the intellect and wisdom, is activated through reflective practices, ethical introspection, and archetypal engagement. Tantric meditations that use mantra affirmations and deity archetypes like *Tripurasundari* act upon this kosha, realigning distorted belief systems and enhancing clarity of purpose. Archetypal psychology supports the idea that structured engagement with symbolic forms can restructure personality at a subconscious level (Jung, 1958) [5].

The Anandamaya kosha, representing the bliss body, is the most subtle layer and correlates with deep contentment and spiritual realization. It becomes accessible through deep meditative absorption (samadhi), devotional surrender (bhakti), or through the realization of unity consciousness. This kosha has no direct therapeutic methods in conventional psychology, yet Indian meditative traditions have long cultivated experiential access to it. Regular contact with the Anandamaya kosha is said to produce spontaneous joy, dissolution of ego-bound stressors, and a profound sense of meaning and connection with existence. Empirical research into peak experiences and spiritual well-being aligns with these descriptions and highlights the positive association between spiritual states and reduced perceived stress (Dalpati *et al*., 2022) [11].

Thus, the Panchakosha model not only guides the structure of the intervention in this study but also informs the interpretation of its outcomes. By applying meditation methods to systematically address each kosha, the intervention promotes comprehensive stress reduction and holistic healing. The model integrates the physical, psychological, and spiritual, bridging gaps between neuroscience, consciousness studies, and spiritual psychology.

## Objectives and Hypotheses of the Study

The primary objective of this study is to evaluate the effectiveness of integrated meditative practices rooted in Indian psychology—namely yoga, tantra, and mindfulness—in reducing perceived stress among individuals experiencing psychological distress. This study further aims to explore whether these interventions

demonstrate consistent efficacy across age groups and genders, and whether the Panchakosha-based conceptual model offers a valid framework for stress alleviation across physical, emotional, intellectual, and spiritual dimensions. In doing so, it also attempts to contribute to the growing body of scientific evidence supporting culturally grounded, non-pharmacological interventions for mental health (Dalpati *et al*., 2022) [11].

A secondary objective is to determine whether there exists any statistically significant difference in stress reduction outcomes between male and female participants, as well as among participants of different age brackets. The rationale for this objective stems from the observation that stress response and coping mechanisms often vary across demographic categories. However, Indian meditative practices, which focus on universal elements of consciousness and physiological regulation, may transcend these variations. This universality is emphasized in the ancient Indian notion of the self (Atman), which is inherently genderless and ageless, suggesting that meditative practices targeting deeper levels of consciousness should be equally effective across populations (Rao & Paranjape, 2016) [2].

A third objective involves the structured application of the Panchakosha model as the theoretical backbone for intervention. Unlike fragmented treatment models that focus solely on symptom elimination, this approach proposes a five-layered model of transformation—from the physical body to bliss consciousness. The objective here is to observe whether integrated practices, arranged according to these five koshas, can bring measurable psychological change over a short intervention period. Prior studies have indicated that such structured, multi-layered meditation models are likely to affect not just mental health but also gut-brain regulation, hormonal balance, and immune response (Bana *et al*., 2022) [7].

**To meet these objectives, the study hypothesizes the following**

**H1:** There will be a statistically significant reduction in the Perceived Stress Scale (PSS-10) scores following a three-month Panchakosha-based meditation intervention.

**H2:** There will be no significant difference in the stress reduction scores between male and female participants.

**H3:** There will be no significant correlation between age and the level of stress reduction experienced.

These hypotheses were framed based on previous studies showing the efficacy of yoga and mindfulness-based interventions across diverse demographics, suggesting that consistent practice may yield uniform benefits in psychological well-being regardless of sex or age (Kabat-Zinn *et al*., 1992) [9].

The study also hypothesizes that tantric practices involving archetypal activation can enhance the impact of the intervention by engaging the subconscious and emotional layers, particularly the Vijnanamaya and Anandamaya koshas. Archetypes serve as psychological templates and are known to influence behavior, emotional state, and perception, as elaborated by Jungian psychology (Jung, 1958) [5]. By integrating these elements into a daily practice regimen, this study aims to offer a comprehensive model that not only reduces stress but also enhances inner coherence, emotional clarity, and cognitive resilience.

**Scope, Significance, and Limitations of the Study**

The scope of this study extends across psychological, physiological, and spiritual dimensions of stress as interpreted through the Indian psychological lens. By utilizing yoga, tantra, and mindfulness practices structured around the Panchakosha model, the research seeks to offer a holistic framework for stress reduction that addresses the root causes rather than surface-level symptoms. The scope also includes examining the influence of these practices on different demographic variables such as age and gender, making the findings applicable to a wide population. Unlike standard clinical approaches that treat stress through pharmacological or cognitive-behavioral pathways, this study employs a consciousness-based model that recognizes the interconnectedness of body, energy, mind, intellect, and spirit (Rao & Paranjape, 2016) [2].

The significance of this study lies in its cultural grounding and evidence-based methodology. Stress-related disorders are increasingly prevalent in urban populations due to lifestyle changes, digital overload, and social alienation. While Western models of psychotherapy have made significant advances, they often lack resonance with Indian cultural and spiritual contexts. By using native Indian meditative systems, this study not only upholds cultural relevance but also expands the global discourse on non-pharmacological interventions for mental health. Research has shown that culturally congruent interventions lead to higher levels of engagement, internalization, and behavioral change among participants (Dalpati *et al*., 2022) [11]. The Panchakosha-based design also provides a new schema for future studies aiming to integrate consciousness science with empirical psychology.

Another area of significance is the intervention's potential impact on gut-brain communication, immune function, and neuroendocrine regulation. Studies have indicated that yoga and breath-based practices influence not just the mind but also biological markers like vagal tone, gut microbiota balance, and cortisol rhythms (Cronin *et al*., 2016) [12]. This suggests that stress interventions grounded in Indian psychology may be capable of inducing systemic physiological changes, beyond what is measured through psychological scales alone. These findings could inform the development of multi-system interventions for psychosomatic illnesses, which are otherwise resistant to conventional treatments.

Despite its scope and significance, the study acknowledges several limitations. The most notable is the relatively short duration of the intervention—limited to a three-month period. While results may indicate positive short-term effects, the long-term sustainability of stress reduction and behavioral transformation remains unknown without follow-up data. Additionally, due to resource and design constraints, the study does not include neuroimaging data such as EEG or fMRI scans that could validate cognitive and neurological shifts objectively (Siqueira *et al*., 2010) [13]. The study is also dependent on self-reported measures such as the PSS-10, which, although validated, are subject to response bias.

Moreover, while participants were encouraged to practice daily, individual adherence may vary despite strict guidance and online support, introducing variability in outcomes. The sample size, though statistically sufficient, is not large enough to generalize findings across diverse geographic and

cultural backgrounds. Finally, the lack of a control group and reliance on a quasi-experimental design limit causal inferences. Future studies can improve upon these limitations by adopting randomized controlled trials, incorporating neurobiological markers, and conducting longitudinal follow-ups to assess enduring impact.

**Research Design and Methodology**

This study follows a quasi-experimental pre-post intervention design aimed at measuring the impact of Indian psychological meditative practices on stress levels. The selected intervention combines yoga, tantra, and mindfulness, structured through the Panchakosha model to provide a comprehensive multidimensional experience. The study spanned a three-month intervention period with a daily guided meditation session lasting 40 minutes, emphasizing consistency over intensity. A total of 81 participants experiencing moderate to high stress levels were recruited using a multistage cluster random sampling technique, ensuring demographic diversity across gender and age. Before inclusion, informed consent was obtained from each participant, and their eligibility was assessed through screening by licensed psychological consultants (Siqueira *et al*., 2010) [13].

Participants were introduced to the intervention through an initial orientation seminar, which explained the Panchakosha model and detailed the meditative practices corresponding to each kosha. The Annamaya kosha was addressed through yoga postures (asanas), the Pranamaya kosha through breathwork (pranayama), the Manomaya kosha through mindfulness, the Vijnanamaya kosha through reflective journaling and mantra recitation, and the Anandamaya kosha through archetypal visualization practices derived from Srividya tantra traditions. Regular online check-ins and group interactions were arranged to address participants' doubts and ensure compliance. The emphasis on a rhythmic daily routine was rooted in neuroplasticity research, which suggests that habitual practice creates stronger and more stable neural pathways compared to irregular sessions (Roca *et al*., 2023) [14].

The quantitative method was chosen for this study due to its reliability in measuring observable changes. Primary data was collected using the Perceived Stress Scale (PSS-10), a validated psychometric tool used widely for measuring subjective stress levels. Pre- and post-test data were collected and statistically analyzed using paired t-tests and Spearman correlation to determine significance in stress level reduction and explore possible demographic correlations. The PSS-10 has previously demonstrated strong internal consistency and test-retest reliability, especially in clinical and non-clinical populations (Siqueira *et al*., 2010) [13].

Secondary data sources included books and research papers related to yoga, tantra, and mindfulness from Indian scriptures and Scopus-indexed journals. These were used to design the intervention package in alignment with both traditional wisdom and modern scientific insight. To ensure credibility, the instructional content for tantra was sourced from the Parashurama Kalpa Sutra, and for yoga, from Patanjali's Yogasutras. Mindfulness practices were adapted from both Vipassana teachings and contemporary MBSR protocols, creating a hybrid model suitable for empirical testing (Kabat-Zinn *et al*., 1992) [9].

Limitations in methodology included the absence of a control group, lack of EEG or biological measurements, and reliance solely on self-reported data. However, methodological rigor was maintained by standardizing delivery, ensuring participant adherence, and using statistically robust tools. Future studies could build on this model by incorporating randomized control trials, neurophysiological metrics, and longitudinal follow-ups to measure the durability of outcomes. This research methodology, while not exhaustive, establishes a replicable, structured, and culturally integrated model for stress reduction through Indian psychological meditations.

**Description of the Intervention Package**

The intervention package developed for this study was a structured, integrative meditation program based on the Panchakosha model, encompassing physical, energetic, mental, intellectual, and blissful dimensions of existence. It combined traditional Indian practices of yoga, tantra, and mindfulness, each mapped to a specific kosha, to ensure comprehensive engagement of the participant's physiological and psychological faculties. The package was titled "Panchakoshashuddhi Sadhana", meaning purification of the five sheaths, and was implemented as a 40-minute daily practice over a period of three months. This intervention was both standardized and guided, ensuring uniformity across all participants with online access to instructors and support throughout the duration of the study (Rao & Paranjape, 2016) [2].

To target the Annamaya kosha (physical sheath), the first 10 minutes of each session involved simple yogasanas drawn from the Ashtanga yoga tradition. This segment included poses like Tadasana, Trikonasana, and Surya Namaskar, aimed at enhancing physical flexibility, releasing muscular tension, and initiating neuromuscular relaxation. Evidence shows that such physical routines help activate the parasympathetic nervous system, leading to immediate reductions in cortisol levels and heart rate (Woodyard, 2011) [8]. This phase served as a gateway to deeper psycho-spiritual work by calming the body and anchoring attention.

The Pranamaya kosha (energy sheath) was addressed in the next 8 minutes through pranayama techniques including Anulom Vilom, Ujjayi, and Bhramari. These breathing practices are known to regulate autonomic nervous system function and enhance vagal tone. Recent studies have validated their effects on improving emotion regulation, reducing anxiety, and boosting immune function (Bana *et al*., 2022) [7]. Participants were instructed to maintain breath awareness, synchronize movements, and focus on the sensation of airflow to facilitate pranic alignment.

The Manomaya kosha (mental sheath) was targeted using mindfulness techniques, especially Vipassana-inspired body scan and awareness-of-breath exercises. These methods were practiced for approximately 10 minutes. The goal was to cultivate non-reactivity, improve attentional stability, and interrupt negative cognitive loops commonly associated with chronic stress. Mindfulness-based interventions are widely endorsed for their role in strengthening cognitive control networks and downregulating limbic hyperactivity (Roca *et al*., 2023) [14].

The Vijnanamaya kosha (intellectual sheath) was approached through tantric mantra recitation and archetype visualization, occupying the next 7 minutes of the session. Mantras from the Srividya tradition—particularly

invocations to *Bala Tripurasundari*—were introduced using the Parashurama Kalpa Sutra as reference. Participants visualized the goddess archetype while mentally repeating affirmations, a process designed to install positive cognitive schemas and subconscious symbols. Jungian psychology aligns with this process, suggesting that archetypal engagement can unlock the deeper layers of the unconscious and initiate personality transformation (Jung, 1958) [5].

The final 5 minutes of each session addressed the Anandamaya kosha (bliss sheath) through a silent absorption phase, allowing participants to rest in a non-conceptual state of inner presence. This stage was critical for integrating the effects of the prior practices and facilitating neurophysiological coherence. Although subjective, this bliss phase aligned with participants' reports of stillness, spaciousness, and emotional clarity, experiences consistent with studies on deep meditative states and their effects on stress and well-being (Perry *et al*., 2022) [10].

**Tools and Data Collection Methods**

The study employed a systematic and multidimensional data collection strategy to evaluate the effectiveness of the Indian psychological meditation package in reducing stress. Data was gathered through both primary and secondary sources, structured around a quantitative research design. The primary data was collected directly from participants using validated psychometric instruments, while secondary data was drawn from scholarly literature, Indian scriptural texts, and Scopus-indexed journal articles to inform the development of the intervention package and support the interpretation of outcomes (Rao & Paranjape, 2016) [2].

The primary instrument used for assessing stress levels was the Perceived Stress Scale-10 (PSS-10), a widely recognized and empirically validated tool developed by Cohen *et al*. and adapted for different populations across languages. This 10-item scale evaluates the degree to which individuals perceive their lives as unpredictable, uncontrollable, and overloaded—dimensions that are core indicators of chronic stress. Participants rated their experiences over the past month on a 5-point Likert scale, ranging from 0 (never) to 4 (very often). The total score range of 0–40 enabled the categorization of low, moderate, or high perceived stress. The scale's psychometric strength has been affirmed in global and Indian contexts, with Cronbach's alpha coefficients ranging from 0.76 to 0.87, indicating high reliability (Siqueira *et al*., 2010) [13].

Before the intervention, participants completed the pre-test PSS-10, and after three months of daily meditation, the post-test PSS-10 was administered. To ensure consistency in responses, each participant was briefed on how to interpret and answer the items. Data was collected digitally through structured Google Forms and backed by weekly verbal check-ins to monitor compliance and clarify ambiguities. These tools also captured basic demographic information such as age, gender, prior meditation experience, and professional background. This was vital to correlate the outcomes with participant characteristics and verify whether stress reduction was influenced by these variables.

In addition to the PSS-10, participants were also provided with a personal data schedule, developed for this study to assess lifestyle, sleep patterns, subjective well-being, and perceived transformation in cognition and emotional regulation. This tool, though non-standardized, offered valuable qualitative insight into participant experiences and supplemented the quantitative outcomes with anecdotal narratives and subjective shifts reported by the meditators. These subjective responses were analyzed for thematic patterns to help interpret the effect of the intervention beyond numerical scores.

For data management and analysis, the entries were organized using Microsoft Excel, and statistical operations were performed using SPSS software (v26). Data analysis included paired sample t-tests to compare pre- and post-intervention stress scores, and Spearman's correlation to assess the relationship between stress reduction and variables like age and gender. While biological tools like EEG, cortisol testing, or heart rate variability measurement could have enriched the objectivity of the findings, they were excluded due to resource limitations. However, future studies are encouraged to integrate such instruments to verify mind-body correlations and neurophysiological changes resulting from meditation practices (Perry *et al*., 2022) [10].

The data collection strategy was robust in its methodological clarity and cultural relevance, offering both breadth and depth in understanding the psychological impact of Indian meditative practices. The use of standardized tools, supported by structured digital formats and interactive participant support, ensured both high reliability and validity in the data gathered for this study.

**Statistical Analysis and Interpretation**

The data collected from participants before and after the intervention was analyzed using quantitative statistical methods to determine the efficacy of the Panchakosha-based meditation program in reducing perceived stress levels. The main tool for measurement was the Perceived Stress Scale (PSS-10), and the statistical analysis was carried out using SPSS Version 26. The central analytic technique employed was the paired sample t-test, which allowed comparison of mean stress scores before and after the intervention to determine whether the observed changes were statistically significant (Siqueira *et al*., 2010) [13].

The overall results demonstrated a statistically significant reduction in stress levels after the three-month intervention. The mean PSS score reduction was 11.44 points, with a 95% confidence interval ranging from 9.87 to 13.02. The p-value was $< 0.0001$, indicating that the change was not due to chance and confirming the primary hypothesis that Indian psychological meditations are effective in stress reduction. The strength of this result suggests a large effect size, which is consistent with previous research that has found significant stress reduction following mindfulness and yoga-based interventions (Kabat-Zinn *et al*., 1992) [9].

To further examine demographic influences, subgroup analyses were performed. For gender-based comparisons, stress scores of males (n=60) and females (n=21) were analyzed separately. Both subgroups showed significant reduction in PSS scores with no statistically significant difference between them. The male group had a mean reduction of 11.45 points ($p < 0.0001$), and the female group showed a similar reduction (mean = 11.43, $p < 0.0001$). These findings support the second hypothesis that the effectiveness of the intervention is not moderated by gender and align with research showing that mindfulness and yoga practices have cross-gender applicability (Dalpati *et al*., 2022) [11].

Age-related variations in outcome were analyzed using Spearman's rank correlation coefficient to identify any potential linear association between participant age and degree of stress reduction. The result indicated a Spearman r value of –0.1168 with a p-value of 0.2997, suggesting no statistically significant correlation. Thus, stress reduction was observed across age groups, confirming the third hypothesis of the study. These findings reinforce the idea that Indian meditative practices, especially when structured using a comprehensive model like Panchakosha, may offer universal benefits regardless of demographic characteristics (Roca *et al*., 2023) [14].

In addition to statistical significance, participant feedback was collected through optional open-ended questions embedded in the post-intervention form. Many participants reported improved sleep, increased emotional clarity, and a heightened sense of inner calm, validating the psychological impact observed through the PSS-10. Though qualitative data was not subjected to rigorous thematic coding, preliminary observation aligned with the quantitative outcomes.

While these results affirm the intervention's efficacy, it is important to note the limitations in generalizability due to the absence of a control group and reliance on self-reported data. Moreover, biological or neurophysiological markers such as heart rate variability, cortisol levels, or EEG data were not recorded, which could have provided more objective correlates of stress reduction. Future studies could incorporate randomized controlled trial designs and physiological metrics to triangulate self-reported findings with biological data, as supported by recent neuroimaging research in contemplative science (Perry *et al*., 2022) [10].

## Results and Discussion

The findings of the study affirm the central hypothesis that Indian psychological meditative practices rooted in the Panchakosha framework are effective in reducing perceived stress. Quantitative analysis using the Paired Sample t-test demonstrated a statistically significant reduction in PSS-10 scores following a three-month guided meditation intervention. The mean reduction of 11.44 points ($p < 0.0001$) reflects a substantial decline in stress levels, supporting the robustness of the model and its relevance to modern psychological intervention strategies. These outcomes are consistent with prior literature on mindfulness and yoga-based therapies, which also report large effect sizes in reducing anxiety, depression, and stress (Kabat-Zinn *et al*., 1992) [9].

The results across subgroups revealed that both male and female participants benefited equally, as evidenced by near-identical average reductions in stress scores (11.45 and 11.43 respectively, $p < 0.0001$). This finding is important as it counters the commonly held notion that emotional regulation techniques may vary in efficacy across genders. The lack of significant gender-based differences affirms the universal applicability of the Panchakosha approach. This is in line with research that highlights how practices involving breath regulation, mindfulness, and somatic awareness operate on fundamental physiological pathways that are not gender-specific (Dalpati *et al*., 2022) [11].

Age-related analysis using Spearman's correlation yielded no significant relationship between participant age and the extent of stress reduction ($r = –0.1168$, $p = 0.2997$). This suggests that the benefits of the intervention were not confined to a particular age cohort, supporting the idea that consciousness-based models like Panchakosha operate independently of age-related neuroplastic constraints. Such age neutrality is critical in mental health strategies, as it enhances the scope of applicability across adolescence, adulthood, and aging populations. These outcomes align with studies showing that mindfulness and yoga-based interventions are effective across diverse age groups in both clinical and non-clinical settings (Roca *et al*., 2023) [14].

Beyond statistical findings, participant feedback provided anecdotal evidence of improvement in emotional clarity, self-awareness, sleep quality, and interpersonal relationships. Many reported a newfound sense of inner grounding and reduced reactivity to external stressors. These subjective experiences correlate with the activation of the Vijnanamaya and Anandamaya koshas, as intended in the intervention model. Archetypal visualization and mantra recitation—especially those invoking Srividya tantric deities—appeared to foster emotional integration and symbolic reprogramming. This process mirrors Jungian theory, which suggests that active engagement with archetypes can reorganize internal psychic structures and produce lasting transformation (Jung, 1958) [5].

However, it is important to interpret the results within the context of certain limitations. The absence of a control group restricts definitive causal conclusions, and the use of self-report instruments introduces potential bias. Moreover, while statistically and experientially significant, the findings are limited by the lack of neurophysiological validation such as EEG or HRV data. Future research should consider integrating biomarkers to complement self-reported stress metrics and provide a neurocognitive understanding of meditation-induced changes (Perry *et al*., 2022) [10].

Despite these limitations, the current study contributes meaningfully to both psychological science and contemplative research by demonstrating that Indian meditative practices—when applied within a structured Panchakosha framework—can significantly reduce stress across age and gender. It presents a culturally rooted, evidence-based intervention model with potential for scalable application in clinical and non-clinical settings.

## Conclusion and Recommendations

This study provides compelling evidence that meditative practices drawn from Indian psychology—specifically yoga, tantra, and mindfulness—when structured through the Panchakosha model, are highly effective in reducing perceived stress across age and gender demographics. The statistically significant reduction in PSS-10 scores (mean = 11.44, $p < 0.0001$) supports the central hypothesis and reinforces existing literature on the therapeutic value of contemplative practices in psychological well-being (Kabat-Zinn *et al*., 1992) [9]. The universality of benefit, regardless of age or gender, underscores the potential of consciousness-based interventions for broad-spectrum mental health application. Moreover, the integration of archetypal visualization and mantra recitation in the intervention design points to the transformative power of symbolic engagement in emotional regulation and subconscious reprogramming, in alignment with Jungian frameworks (Jung, 1958) [5]. Participants also reported qualitative improvements in inner calm, emotional clarity, and cognitive resilience, indicating that the practices worked beyond symptom relief to foster psychological coherence.

While the absence of biological metrics such as cortisol levels or EEG data limits physiological inference, the strong psychometric outcomes suggest that the Panchakosha approach could be an effective, non-pharmacological model for stress management. Therefore, it is recommended that future research adopt longitudinal and randomized controlled trial designs, integrate neurobiological assessments, and test the intervention in clinical populations. Institutions and mental health practitioners should consider incorporating culturally rooted contemplative practices like these into standard therapeutic protocols. Given the global rise in stress-related disorders, the revival and empirical validation of ancient Indian meditative knowledge offer not only a complementary therapeutic modality but also a pathway toward more holistic, integrative mental health systems (Dalpati *et al*., 2022; Perry *et al*., 2022) [11, 10].

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