



## The happiness shift: Effects of a psycho-spiritual intervention

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### Abstract

In recent years, psychology has increasingly explored the integration of meditative and psycho-spiritual interventions as mechanisms to enhance emotional wellbeing. This study investigates the impact of a structured psycho-spiritual meditative practice on self-reported happiness levels and perceived stress among Indian adults over a 3-month period. A total of 108 participants were assessed using standardized happiness and stress inventories before and after the intervention. The results demonstrated a highly significant increase in happiness scores (mean difference = 22.20 points, 95% CI: 18.21 to 26.20,  $p < 0.0001$ ) and a parallel significant reduction in stress scores (mean difference = 11.44 points, 95% CI: 9.87 to 13.02,  $p < 0.0001$ ), as determined by paired t-tests.

Gender-based subgroup analysis revealed that both male ( $n = 73$ ) and female ( $n = 35$ ) participants exhibited substantial improvements in happiness, with mean increases of 20.03 and 26.74 points respectively. However, an unpaired t-test with Welch's correction indicated no statistically significant gender difference ( $p = 0.1506$ ). Similarly, stress reduction scores showed no significant difference between males ( $n = 60$ ) and females ( $n = 21$ ), suggesting the intervention's efficacy across gender lines.

Age-related correlation analysis showed a weak negative association between age and happiness gains ( $r = -0.2192$ ,  $p = 0.024$ ), indicating that younger participants may benefit slightly more, although the effect size is small. No significant correlation was found between age and stress reduction ( $r = -0.1168$ ,  $p = 0.2997$ ).

These findings underscore the transformative potential of psycho-spiritual interventions in promoting positive emotional states and mitigating stress, independent of demographic variables. The research contributes to the growing evidence base advocating for integrative mind-body approaches within the psychological wellness paradigm.

**Keywords:** Happiness, psycho-spiritual intervention, stress reduction, meditation, emotional wellbeing, gender differences, age correlation

### Introduction

Happiness, traditionally explored through philosophical and theological lenses, has emerged in the 21st century as a critical domain in psychological science. The paradigm shift began with the advent of positive psychology, which reoriented research from pathology to flourishing and wellbeing. Martin Seligman's foundational work helped categorize happiness into pleasure, engagement, and meaning, grounding it in empirical evaluation rather than abstract speculation (Seligman, 2011). This scientific framing enabled happiness to be studied systematically across populations, measuring subjective wellbeing (SWB) with reliable psychometric tools such as the Oxford Happiness Questionnaire and Positive and Negative Affect Schedule (PANAS).

A deeper understanding of happiness now incorporates not only hedonic elements but also eudaimonic aspects—meaning, virtue, and self-realization. Psychological theories posit that sustainable happiness arises from inner contentment and emotional regulation rather than transient pleasures. Lyubomirsky *et al.* demonstrated through longitudinal data that intentional activities such as gratitude, optimism, and spiritual practice play a more significant role in sustaining happiness than demographic factors or life circumstances (Lyubomirsky *et al.*, 2005). This insight broadened the conversation from “how happy are you?” to “how can happiness be cultivated?”

Neuroscience has further enriched the discourse by identifying happiness-related circuits in the brain,

particularly in the prefrontal cortex and default mode network. Studies using fMRI reveal that mindfulness and meditation practices activate these neural networks, resulting in reduced anxiety and increased life satisfaction. Davidson and colleagues found that individuals practicing meditation showed increased activity in the left prefrontal cortex—a region associated with positive affect and resilience (Davidson *et al.*, 2003). This evidence supports the proposition that happiness is not a static trait but a trainable state.

Spirituality has been increasingly integrated into the happiness discourse, suggesting that spiritual well-being—whether rooted in religious beliefs or secular existentialism—enhances psychological flourishing. A global study by Holder *et al.* found that spirituality significantly predicted happiness among children and adolescents, independent of religious participation (Holder *et al.*, 2010). These findings align with adult research showing that people with high spiritual orientation report greater life satisfaction, emotional balance, and resilience.

The field has also begun addressing cultural differences in happiness paradigms. In collectivist societies, such as India and Japan, happiness is often associated with social harmony and spiritual growth rather than personal achievement. A study by Uchida *et al.* revealed that Japanese respondents often linked happiness with interdependence, modesty, and emotional suppression, in contrast to the Western emphasis on self-expression (Uchida *et al.*, 2004). This diversity underscores the need for

culturally nuanced approaches in happiness science, particularly when designing interventions.

Finally, the intersection of happiness with health has gained prominence. Numerous studies indicate a strong bidirectional relationship between positive affect and physical well-being. Happy individuals tend to exhibit stronger immune response, lower inflammation markers, and better cardiovascular profiles (Steptoe *et al.*, 2005). This convergence of biology, psychology, and spirituality sets the stage for a more holistic science of happiness that transcends disciplinary boundaries.

### **From Silence to Science: Mapping the Terrain**

For centuries, the human pursuit of happiness was largely embedded within philosophical, religious, and spiritual traditions, often articulated through mystical texts and contemplative silence. Concepts of bliss, moksha, and nirvana served as aspirational ideals, yet lacked empirical frameworks for measurement and application. The modern psychological sciences, however, have gradually transitioned from this metaphorical silence into a rigorous exploration of wellbeing, particularly through the emergence of positive psychology. The transformation from abstract speculation to quantifiable constructs began in earnest with the work of Diener and colleagues, who formalized the term “Subjective Well-Being” (SWB) and introduced psychometric instruments to operationalize happiness as a measurable state (Diener *et al.*, 1985). This was a defining moment that brought happiness out of contemplative realms into scientific observability.

Over time, the empirical terrain of happiness research expanded to integrate neurological, behavioral, and socio-cultural dimensions. With the advent of neuroimaging and affective neuroscience, previously intangible states such as joy and contentment were linked to neuroanatomical substrates and neurotransmitter pathways. Davidson *et al.* demonstrated that mindfulness practices could induce measurable changes in brain regions associated with positive emotions, notably the left prefrontal cortex (Davidson *et al.*, 2003). These findings were pivotal in aligning contemplative practices—previously grounded in spiritual silence—with verifiable biological correlates.

Cross-cultural research has further mapped the diverse expressions and determinants of happiness, underscoring that wellbeing is not a monolithic construct. Studies comparing Eastern and Western populations reveal that while Western models emphasize autonomy and personal achievement, Eastern traditions often highlight harmony, social connectedness, and inner tranquility. Uchida and Kitayama’s landmark study on cultural construals of happiness in Japan and the U.S. showed stark contrasts in the sources and emotional consequences of happiness across societies (Uchida *et al.*, 2004). These cultural nuances serve as essential coordinates on the terrain of global happiness research, informing intervention designs that are culturally sensitive and psychologically effective.

The terrain of happiness research has also extended into the domains of physical health, occupational functioning, and social policy. A longitudinal study by Steptoe and Wardle found that individuals with higher levels of happiness demonstrated significantly lower cortisol levels, suggesting that positive affect acts as a buffer against chronic stress (Steptoe *et al.*, 2005). The policy implications of such research are vast, prompting governments like Bhutan and

New Zealand to adopt happiness indices as part of their national development goals, shifting public discourse from economic growth alone to holistic wellbeing.

In recent years, spirituality and its role in happiness have become a focal point in the scientific terrain. Holder *et al.*, in a multi-country study involving children and adolescents, found that personal and communal dimensions of spirituality were among the strongest predictors of happiness, more so than religious practices or rituals (Holder *et al.*, 2010). This insight validated ancient contemplative wisdom within modern psychological inquiry, bridging metaphysical introspection with empirical science.

In mapping this terrain, it becomes clear that the science of happiness is not limited to affective ratings or biochemical markers, but is deeply entwined with meaning-making, transcendence, and existential balance. The journey from silence to science reflects not only a methodological evolution but also a paradigmatic one—where psychological wellbeing is seen as both an individual achievement and a collective imperative. The challenge now lies in continuing to refine these scientific maps while honoring the inner landscapes from which the quest for happiness originally emerged.

### **Theoretical Lens: Where Mind Meets Meaning**

The pursuit of happiness has long been a psychological and philosophical endeavor, but contemporary science has anchored this exploration within robust theoretical models that reveal the interplay between cognitive processes, emotional regulation, and existential meaning. Among the foundational frameworks, Self-Determination Theory (SDT) by Deci and Ryan offers a particularly comprehensive lens, positing that human wellbeing hinges on the fulfillment of three innate psychological needs: autonomy, competence, and relatedness (Ryan & Deci, 2000). This theory integrates both hedonic and eudaimonic aspects of wellbeing, suggesting that happiness is not merely the presence of pleasure but the active engagement with a life imbued with meaning and personal growth.

Another key theoretical approach comes from the PERMA model proposed by Martin Seligman, which structures flourishing around five dimensions: Positive emotions, Engagement, Relationships, Meaning, and Accomplishment. This model is particularly useful in explaining how individuals derive sustained happiness from goal-directed behavior and intrinsic motivation rather than fleeting pleasures (Seligman, 2011). By positioning meaning as a core component, the PERMA framework bridges traditional psychological theories with more holistic, often spiritual, constructs of wellbeing.

Spirituality, though historically aligned with religious doctrine, is increasingly recognized in psychology as a distinct dimension of human functioning that contributes to meaning-making and psychological resilience. Research by Holder *et al.* demonstrates that even among children, the personal and interpersonal components of spirituality significantly predict happiness, independent of religious attendance (Holder *et al.*, 2010). This supports the view that spirituality provides a framework through which individuals interpret suffering, cultivate purpose, and sustain inner equilibrium—functions directly aligned with the goals of positive psychological interventions.

The Existential Psychology perspective, grounded in the work of Viktor Frankl, posits that meaning is not only

central to human happiness but essential for survival in adversity. Frankl's logotherapy argues that the search for meaning is a primary motivational force and that suffering can be transcended when contextualized within a greater existential purpose (Frankl, 1985). Empirical studies have supported this, showing that individuals with a clear sense of purpose report lower stress, greater happiness, and higher resilience—particularly in cross-cultural and trauma-exposed populations.

In more recent developments, the Meaning Maintenance Model (MMM) by Heine *et al.* suggests that the human cognitive system is fundamentally designed to detect and respond to disruptions in meaning. According to this model, when individuals encounter inconsistencies or uncertainty, they compensate by reaffirming meaning in other domains such as relationships, beliefs, or values (Heine *et al.*, 2006). This compensatory mechanism supports the therapeutic use of spiritual or meditative practices in restoring psychological homeostasis, particularly during life transitions or crises.

Bridging neuroscience with meaning-centered frameworks, studies on the brain's default mode network (DMN) have shown that meditative and reflective practices quiet regions of self-referential processing and rumination. These states are typically overactive in anxiety and depression and underactive during mindfulness, enabling individuals to access deeper states of clarity and contentment. Functional neuroimaging has confirmed that experiences of meaning and purpose activate regions such as the medial prefrontal cortex, linking inner awareness with measurable biological outcomes (Vago & Silbersweig, 2012) <sup>[13]</sup>. This convergence of meaning and mind reflects the growing sophistication of theoretical models that seek to understand happiness as both a subjective and neurobiological phenomenon.

### **The Happiness Shift: Research Rationale and Objectives**

In recent years, psychological science has witnessed a paradigmatic shift from disorder-focused models to strengths-based approaches that emphasize flourishing, resilience, and meaning. The rise of positive psychology signaled a deliberate redirection toward the scientific investigation of wellbeing, paving the way for structured investigations into happiness as a measurable and improvable state. Seligman's foundational work proposed that wellbeing could be nurtured through positive interventions, not merely by alleviating psychopathology but by enhancing character strengths and life meaning (Seligman, 2011). This paradigm forms the theoretical backbone for exploring interventions that operate at the intersection of psychological insight and spiritual practice.

Despite significant advances, a gap persists in understanding how happiness can be systematically cultivated through spiritual or meditative disciplines rooted in indigenous traditions. Western psychological models have predominantly focused on cognitive-behavioral or mindfulness-based protocols, yet culturally contextual spiritual practices, such as those derived from Indian traditions, remain underexplored. The Sri Vidya Sadhana intervention examined in this study represents a structured psycho-spiritual model integrating mantra, meditation, and self-inquiry—components theorized to influence emotional regulation and existential coherence. Neuroscientific

evidence shows that sustained meditative practice can modulate the hypothalamic-pituitary-adrenal (HPA) axis, reduce cortisol levels, and enhance prefrontal cortex activation, thereby fostering emotional resilience and wellbeing (Tang *et al.*, 2015) <sup>[10]</sup>.

India, with its deep philosophical and spiritual heritage, offers a unique setting to examine how psycho-spiritual interventions grounded in traditional wisdom impact modern psychological outcomes. Yet most empirical studies in the Indian context have been limited in scope, often lacking rigorous statistical analysis or ignoring culturally embedded frameworks of meaning. Integrating local spiritual practices with standardized psychological assessment tools offers an opportunity to bridge this gap. A recent cross-national study on adolescent wellbeing found that spiritual meaning-making, when reinforced through guided practice, led to substantial improvements in happiness across diverse cultural settings (Pandya, 2017) <sup>[21]</sup>, reinforcing the potential for similar models in adult populations.

The rationale for this research lies in expanding the empirical foundation for integrative interventions that synthesize psychological structure with spiritual depth. Happiness and stress are increasingly understood as interactive phenomena influenced by cognitive interpretation, emotional states, and existential frameworks. Studies show that individuals with high spiritual well-being report lower perceived stress and greater life satisfaction, a relationship supported by structural equation modeling and cross-sectional data (Rowold, 2011). These insights offer compelling justification for testing interventions like Sri Vidya Sadhana in diverse samples using robust research design.

Therefore, this study is guided by three primary objectives: First, to evaluate whether a three-month Sri Vidya Sadhana intervention significantly enhances self-reported happiness and reduces perceived stress among Indian adults. Second, to examine whether these effects differ across gender, using subgroup analysis. Third, to explore whether participant age correlates with the magnitude of change in happiness and stress scores. By addressing these objectives, the study aims to contribute to the growing body of cross-disciplinary literature supporting spiritually integrated mental health interventions, thereby offering scalable models for psychological wellbeing that are both evidence-based and culturally resonant.

### **Designing the Inner Journey: Methodology**

This study adopted a quasi-experimental pre-post design to assess the effects of a psycho-spiritual intervention—Sri Vidya Sadhana—on happiness and perceived stress among Indian adults. The research was structured to evaluate changes in psychological wellbeing over a 3-month intervention period, using validated psychometric instruments and inferential statistical methods. Such designs have been widely applied in psychological intervention studies to explore within-subject transformations over time (Creswell *et al.*, 2011). The decision to use a pre-post model without a control group was based on ethical and logistical considerations, allowing all participants to benefit from the potentially transformative intervention while maintaining statistical power through repeated measures. A total of 108 participants were recruited via purposive sampling from urban wellness centers and spiritual

communities in India. Inclusion criteria specified adults aged 18 years and above, with sufficient literacy to complete self-report measures in English or Hindi. Exclusion criteria included active psychiatric diagnoses, recent bereavement, or concurrent participation in other therapeutic programs. Prior research has supported the use of purposive sampling for exploratory interventions where engagement with spiritual or introspective practices is contextually relevant and self-selective (Etikan *et al.*, 2016). All participants provided written informed consent in accordance with institutional ethical guidelines.

The intervention protocol consisted of daily practice of Sri Vidya Sadhana, a structured meditative system that includes mantra chanting, breath regulation (pranayama), visualizations, and contemplative silence. The method draws from Vedic spiritual philosophy and has been systematized into secular delivery formats suitable for scientific evaluation. Participants received initial training through a certified instructor and were guided through weekly online reinforcement sessions. Research shows that spiritual practices rooted in attentional focus and emotional regulation, such as mantra meditation, produce neuroplastic changes and improved psychological wellbeing when practiced consistently for as little as eight weeks (Tang *et al.*, 2015) <sup>[10]</sup>.

Two standardized instruments were administered at baseline and post-intervention: The Oxford Happiness Questionnaire (OHQ) and the Perceived Stress Scale (PSS-10). The OHQ is a widely validated 29-item scale measuring subjective happiness, with robust internal consistency and cross-cultural applicability (Hills & Argyle, 2002) <sup>[11]</sup>. The PSS-10, a 10-item scale, quantifies perceived stress in response to everyday life circumstances and has been psychometrically validated in Indian populations.

Statistical analysis was performed using SPSS v26.0. Paired-samples t-tests were conducted to assess changes in happiness and stress scores. Gender-based subgroup comparisons were performed using unpaired t-tests with Welch's correction to account for sample size differences. Correlation analysis was used to examine the relationship between age and psychological change. This analytical framework mirrors methodologies used in prior happiness research and has demonstrated robustness in detecting intervention effects in psychosocial studies (Lyubomirsky *et al.*, 2011).

By combining traditional spiritual methodology with contemporary psychological assessment tools and statistical modeling, this research exemplifies a hybridized approach that is both culturally grounded and scientifically rigorous. The methodological structure not only aligns with best practices in intervention science but also offers a reproducible framework for future research into psycho-spiritual interventions globally.

### **Instruments of Insight: Tools for Measurement**

Measuring psychological variables such as happiness and stress requires standardized tools that are both reliable and valid. In this study, two primary instruments were employed: The Oxford Happiness Questionnaire (OHQ) and the Perceived Stress Scale (PSS). The OHQ, widely validated across cultures and age groups, offers a multidimensional assessment of individual happiness through items addressing positive affect, social engagement, and overall satisfaction with life. The PSS, on the other

hand, is designed to assess the perception of stress rather than objective stressful events, allowing for individualized and subjective responses that better capture psychological experiences. Both instruments have demonstrated high internal consistency and test-retest reliability in various intervention studies targeting emotional well-being (Kondori Fard *et al.*, 2021).

The OHQ has been extensively used in therapeutic studies, particularly in contexts involving cancer patients, caregivers, and elderly populations. It enables researchers to quantitatively assess fluctuations in well-being resulting from targeted interventions. In a study by Rhee *et al.* (2021), the OHQ was instrumental in evaluating the effects of a positive psychological intervention among college athletes, showing marked improvements post-treatment (Rhee *et al.*, 2021). Meanwhile, the PSS has been deployed in clinical and non-clinical samples alike, offering valuable insights into stress perception among populations facing chronic illness, academic pressure, or social adversity (Sargolzaei *et al.*, 2021).

Instruments such as these are critical in quantifying psychological constructs that are otherwise difficult to measure. For example, Sarath and Jaishwal (2022) used a five-facet mindfulness questionnaire alongside the PSS to explore the mediating effect of mindfulness practices on stress, demonstrating how multi-instrument approaches deepen analytical richness (Sarath & Jaishwal, 2022). The convergence of results across multiple tools improves confidence in outcome interpretation and supports cross-validation.

Moreover, psychometric evaluations continue to evolve, with recent research focusing on culturally sensitive adaptations of these tools. For example, validation studies in Iranian and Korean populations have shown both the OHQ and PSS to retain their factorial structure and predictive validity even after translation and cultural contextualization (Hemati *et al.*, 2017); (Kim *et al.*, 2016).

In summary, robust instruments such as the OHQ and PSS form the backbone of psychological research in happiness and stress. Their rigorous validation and adaptability across cultures and interventions make them indispensable in evaluating the efficacy of emotional well-being programs.

### **Calculating Calm: Data Analysis Framework**

The statistical analysis for this study was designed to rigorously evaluate the psychological impact of the Sri Vidya Sadhana intervention on happiness and perceived stress levels over a three-month period. A pre-post quantitative framework was used, leveraging both descriptive and inferential statistical methods to measure within-subject changes. The central hypothesis—whether psycho-spiritual practices significantly improve emotional wellbeing—was tested using paired-samples t-tests, a method suitable for comparing means across two time points within the same group. This technique has been widely applied in psychological intervention research due to its sensitivity to small- to moderate-sized effects within matched samples (Lakens, 2013) <sup>[13]</sup>.

To determine whether changes in happiness and stress were statistically significant, each variable was first tested for normality using the Shapiro-Wilk test. Normal distribution was assumed for both outcome variables based on skewness and kurtosis values falling within  $\pm 1.0$ , allowing the use of parametric tests. The Oxford Happiness Questionnaire

(OHQ) and Perceived Stress Scale (PSS) scores were then analyzed using paired t-tests, producing highly significant results for both constructs ( $p < 0.0001$ ). This analytic approach mirrors best practices in similar interventions exploring the psychological effects of mindfulness, gratitude, or cognitive reappraisal techniques (Grossman *et al.*, 2004) [8].

In addition to main effects, subgroup analyses were performed to examine differences across demographic lines, specifically gender and age. For gender comparisons, unpaired t-tests with Welch's correction were used, accounting for unequal variances between the male and female subgroups. This statistical adjustment ensures robust inference even when sample sizes differ—a situation common in psycho-social studies (Ruxton, 2006) [9]. No significant gender-based differences were found in happiness or stress outcomes, suggesting the intervention's broad applicability across sexes.

To further explore relational dynamics, Pearson's correlation coefficient was calculated between participant age and changes in happiness and stress. The results indicated a weak negative correlation between age and happiness improvement ( $r = -0.2192$ ,  $p = 0.024$ ), suggesting that younger participants may derive slightly more benefit. This finding aligns with prior meta-analyses, which note that younger adults often exhibit greater neuroplasticity and responsiveness to contemplative interventions (Tang *et al.*, 2015) [10]. Meanwhile, the relationship between age and stress reduction was not statistically significant ( $r = -0.1168$ ,  $p = 0.2997$ ), suggesting that perceived stress was uniformly impacted across age brackets.

All statistical analyses were performed using SPSS version 26.0, a widely used software for psychological research due to its user-friendly interface and robust capacity for handling complex datasets. Confidence intervals (CI) at the 95% level were calculated for all primary outcomes, providing both statistical and practical significance for observed changes. A mean increase of 22.20 points in OHQ scores and a mean decrease of 11.44 points in PSS scores were detected, both with narrow CIs and large effect sizes (Cohen's  $d > 0.8$ ), indicating strong practical relevance. Similar analysis structures have been used effectively in spiritual and yoga-based wellbeing interventions (Vancampfort *et al.*, 2018) [11].

In sum, the analytical design of this study ensures that observed improvements are both statistically valid and clinically meaningful. The combination of paired comparisons, subgroup analyses, and correlational assessments creates a multi-dimensional framework capable of revealing the nuanced impacts of psycho-spiritual interventions on human emotional states.

### The Shift Unfolds: Presentation of Results

The results of the three-month Sri Vidya Sadhana intervention revealed statistically and practically significant improvements in both happiness and stress levels among participants. Pre- and post-intervention scores on the Oxford Happiness Questionnaire (OHQ) demonstrated a mean increase of 22.20 points (95% CI: 18.21 to 26.20,  $p < 0.0001$ ), signifying a substantial positive shift in overall emotional well-being. The Perceived Stress Scale (PSS) scores concurrently showed a mean reduction of 11.44 points (95% CI: 9.87 to 13.02,  $p < 0.0001$ ). These findings are consistent with prior research demonstrating that regular

contemplative practices such as mindfulness, mantra meditation, and breath regulation can significantly enhance happiness and reduce perceived stress (Tang *et al.*, 2015) [10].

Gender-based subgroup analyses provided further insights into the differential outcomes of the intervention. Among the 108 participants, males ( $n = 73$ ) showed an average OHQ increase of 20.03 points, while females ( $n = 35$ ) exhibited an even higher mean gain of 26.74 points. Despite these numerical differences, an unpaired t-test with Welch's correction revealed that the gender-based difference in happiness improvement was not statistically significant ( $p = 0.1506$ ). Likewise, stress reduction was comparably experienced by both male ( $n = 60$ ,  $\Delta = 11.08$ ) and female ( $n = 21$ ,  $\Delta = 12.76$ ) participants, with no statistically significant difference ( $p = 0.4053$ ). These findings support the notion that gender does not moderate the efficacy of psycho-spiritual practices on psychological wellbeing—an observation supported by previous studies on yoga and contemplative practices across gender lines (de Manincor *et al.*, 2016) [12].

Correlation analysis between age and psychological outcomes yielded nuanced patterns. A weak negative correlation was found between age and happiness gains ( $r = -0.2192$ ,  $p = 0.024$ ), suggesting that younger participants experienced slightly greater increases in happiness. This trend aligns with findings that younger individuals may exhibit greater neuroplastic responsiveness to meditative practices and self-reflection (Vago & Silbersweig, 2012) [13]. No significant correlation was found between age and reduction in stress scores ( $r = -0.1168$ ,  $p = 0.2997$ ), indicating that stress relief from the intervention was consistent across age demographics.

The intervention's impact was also reflected in the effect sizes, with a Cohen's  $d$  value of over 1.0 for both happiness increase and stress reduction—indicative of a large effect. These outcomes mirror results from prior psycho-spiritual interventions that integrated yogic, Buddhist, or indigenous contemplative elements, which consistently demonstrated moderate-to-large effect sizes in improving affective wellbeing and reducing cortisol-related stress reactivity (Goyal *et al.*, 2014) [14].

Taken together, these results affirm that a structured psycho-spiritual practice such as Sri Vidya Sadhana can lead to significant improvements in happiness and stress, regardless of gender or age. The data not only confirm the internal validity of the study design but also contribute to the growing empirical literature validating spiritually integrated mental health strategies across diverse adult populations.

### Interpreting the Happiness Shift

Understanding the outcomes of psychological interventions aimed at enhancing happiness and reducing stress is critical to bridging theory with tangible well-being improvements. At the heart of such evaluations lies the need to interpret shifts in emotional and cognitive states, both quantitatively and qualitatively. Research repeatedly demonstrates an inverse relationship between perceived stress and happiness, highlighting how interventions targeting stress reduction often concurrently boost happiness levels (Schiffman & Nelson, 2009) [15]. This negative correlation has become a cornerstone for understanding how internal states change post-intervention.

The process of interpretation often begins with tracking statistical significance through well-validated psychometric

scales. Studies such as Berkland *et al.* (2017) <sup>[16]</sup> have used tools like the Subjective Happiness Scale and Perceived Stress Scale to show notable improvements in happiness and reductions in stress among healthcare workers following structured wellness programs (Berkland *et al.*, 2017) <sup>[16]</sup>. Such outcomes suggest that structured, replicable interventions can be reliably interpreted as beneficial, provided that the correct evaluative tools are employed. This strengthens the causal inference between intervention and emotional state changes.

Beyond quantitative evidence, understanding the interpretive layer requires attention to psychosocial dynamics. The concept of “subjective well-being” involves both hedonic and eudaimonic dimensions of happiness, the former rooted in pleasure and the latter in purpose. Lambert *et al.* (2018) <sup>[17]</sup> demonstrated that positive psychology programs addressing both components yielded sustained improvements in happiness and decreased fear of happiness among diverse university students (Lambert *et al.*, 2018) <sup>[17]</sup>. This suggests that effective interpretation must consider not just “how much” happiness increased, but also “what kind” of happiness was activated.

An important factor in interpreting results is the distinction between state-level and trait-level changes. State happiness is momentary and influenced by short-term factors, while trait happiness reflects enduring patterns. Longitudinal designs like the one used in “The Art of Happiness” intervention highlight that sustained improvements in stress and happiness are possible through repeated exposure to reflective and emotional training techniques (Greenawalt *et al.*, 2018) <sup>[18]</sup>. Therefore, interpretation must consider the durability of intervention effects across time to make valid conclusions.

Physiological indicators, when paired with self-reports, add a more nuanced dimension to interpretation. Feicht *et al.* (2013) <sup>[19]</sup> demonstrated that saliva cortisol, alongside happiness scores, could offer dual validation for the psychological impact of online well-being training (Feicht *et al.*, 2013) <sup>[19]</sup>. The alignment of biological and psychological measures strengthens the interpretative robustness, offering a holistic view of the intervention’s success.

In short, interpreting the happiness shift necessitates a layered approach: examining statistical outcomes, understanding qualitative changes in well-being, and incorporating both psychosocial and biological metrics. When triangulated effectively, these components provide a comprehensive understanding of how and why happiness improves in response to targeted interventions. The evidence consistently supports that structured psychological programs can meaningfully reduce stress and elevate happiness when interpreted through validated, multi-dimensional frameworks.

### **Therapeutic Ripples: Psychological and Social Implications**

The psychological and social implications of spiritual interventions, particularly those that foster happiness, extend far beyond individual well-being to influence collective resilience and community harmony. A pivotal study conducted among elderly women in a nursing home demonstrated that structured spiritual interventions—including active listening, supporting religious rituals, and promoting hope—led to statistically significant increases in

happiness as measured by the Oxford Happiness Questionnaire. Notably, happiness levels remained elevated even one-month post-intervention, reinforcing the sustained psychological benefits of such practices (Ayyari *et al.*, 2020) <sup>[20]</sup>. These findings illustrate that spiritual interventions are not merely transient emotional buffers but catalyze enduring improvements in affective states.

Expanding on this, research on adolescents participating in spiritually oriented programs revealed increased happiness, reduced depressive symptoms, and enhanced psychological resilience. Children who engaged in customized spiritual practices exhibited significant emotional improvements, emphasizing that structured spiritual engagement from an early age can cultivate emotional maturity and mitigate future psychological distress (Pandya, 2017) <sup>[21]</sup>. The psychological mechanism at play often involves increased self-awareness, emotional regulation, and meaning-making capacities, all of which are foundational to mental health.

Socially, the ripple effects of such interventions are equally profound. For instance, spirituality has been linked to increased perceived social support and community integration. A study among elderly women found that spiritual intelligence positively impacted happiness through increased psychological hardiness and perceived social support (Shahsavari *et al.*, 2018) <sup>[22]</sup>. This illustrates that beyond individual growth, spiritual development nurtures prosocial behavior, empathy, and interpersonal connectedness—cornerstones of socially cohesive societies. Further supporting this, interventions with bereaved children in residential care across 13 countries found that spiritual programming significantly improved happiness, self-concept, resilience, and academic performance while reducing depression. These effects were especially notable among those who engaged in self-practice beyond the formal sessions, showing that the internalization of spiritual tools facilitates long-term social and emotional development (Pandya, 2017) <sup>[21]</sup>. Thus, spiritual practices can play a critical role in rehabilitative and preventive psychological care for vulnerable populations.

In sum, the integration of spiritual and happiness-oriented interventions in therapeutic settings not only elevates individual mental health but fosters collective well-being through increased empathy, reduced emotional distress, and enhanced social functioning. These “therapeutic ripples” have transformative potential for public health, education, and community development initiatives globally.

### **Limitations and Future Research Directions**

#### **Limitations**

While the study provides valuable insights into the effects of paired stress tests on happiness levels, several limitations should be acknowledged:

- 1. Sample Demographics:** Many intervention studies, including those using psychological and spiritual frameworks, often have limited diversity in their samples—frequently involving predominantly female, highly educated, or non-clinical participants. This limits the generalizability of findings to broader populations (Keil, 2017).
- 2. Short-Term Assessments:** Several studies assessed outcomes immediately post-intervention without long-term follow-up, making it difficult to determine the sustained impact on happiness or stress recovery over time (Rodowicz *et al.*, 2020).

3. **Spirituality Measures and Standardization:** There is inconsistency in how spiritual constructs are measured, with many interventions lacking validated or standardized tools to assess spiritual health, limiting cross-study comparisons and evidence synthesis (Tuck, 2012).
4. **Confounding Variables:** Community based interventions are vulnerable to uncontrollable external factors, such as social dynamics or environmental changes, that may influence psychological outcomes (Gourley *et al.*, 2020).

#### Future Research Directions

1. **Longitudinal Studies:** Future studies should implement long-term follow-ups to assess the durability of psychological and spiritual intervention outcomes over months or years.
2. **Diversified Populations:** Research should prioritize culturally diverse, socioeconomically varied, and clinical populations to increase external validity. This is particularly important given that interventions like Examen Tu Salud showed promising results in targeted ethnic populations (Trejo-Landeros *et al.*, 2025).
3. **Mechanistic Studies:** Investigating the biological and neuroendocrine pathways—such as cortisol or HRV—through which spiritual and psychological interventions exert their effects would strengthen causal claims (Michaelsen *et al.*, 2024).
4. **Technology-Enhanced Interventions:** Expanding and rigorously evaluating digital delivery models (e.g., app-based or email-guided interventions) could enhance accessibility and scalability, particularly in resource-limited settings (Keil, 2017).
5. **Dose-Response Analysis:** Determining the optimal duration and frequency ("dose") of interventions needed to produce clinically meaningful changes in well-being is an important area of exploration (Hulett & Armer, 2016).

While psychological and spiritual interventions show promise in enhancing happiness and reducing stress, methodological challenges and generalizability limitations must be addressed through more rigorous and inclusive future research.

#### Conclusion – Inner Peace, Outer Joy

The interplay between spirituality and mental well-being has increasingly drawn the attention of researchers aiming to understand the pathways to sustainable happiness and stress reduction. Spiritual interventions, particularly those integrating mindfulness, ritual engagement, and reflective practices, have demonstrated a powerful capacity to enhance happiness while mitigating stress. In a study involving elderly women in nursing homes, structured spiritual interventions such as supporting religious rituals and instilling hope led to a significant increase in happiness scores measured by the Oxford Happiness Questionnaire (Ayyari *et al.*, 2020) <sup>[20]</sup>. Similarly, workplace-based resilience programs showed consistent

improvements in spiritual well-being, mindfulness, and subjective happiness among healthcare workers (Berkland *et al.*, 2017) <sup>[16]</sup>. Spirituality not only serves as a coping mechanism but also facilitates a deeper sense of purpose and connection, which supports positive emotions and inner contentment even amidst life stressors (Ekşi *et al.*, 2020) <sup>[23]</sup>. These findings align with broader meta-analyses confirming that spiritual interventions across various contexts—clinical, educational, and occupational—consistently enhance well-being and reduce stress-related symptoms (de Diego-Cordero *et al.*, 2021) <sup>[24]</sup>. Ultimately, this body of evidence reinforces the understanding that inner peace cultivated through spiritual engagement radiates outward as measurable joy and resilience, shaping not only personal tranquility but also enriching interpersonal and societal harmony.

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