Structural Equation Modeling Of Vipassana Practice, Psychological Well-Being And Yama Niyama Adherence.

*Ramya M[1], D. Uma Maheswari[2], Gunasekaran C[3], Subbulakshmi K[4]**

[1] PhD Scholar, Meenakshi College of Yoga Science and Therapy (MCYST), Meenakshi Academy of Higher Education and Research (MAHER) (Deemed to be University), West K.K. Nagar, Chennai-600078, Tamil Nadu, India.
(ramyakavi1980@gmail.com)
ORCID: 0009-0009-8914-6623

[2] Assistant Professor, Meenakshi College of Yoga Science and Therapy (MCYST), Meenakshi Academy of Higher Education and Research (MAHER) (Deemed to be University), West K.K. Nagar, Chennai-600078, Tamil Nadu, India.
(meumadamu@gmail.com)
ORCID: 0009-0005-5845-7673

[3] Assistant Professor Trainee (APT), Bharathiar University; Yoga for Human Excellence, WCSC-VISION Sky Research Centre, Aliyar, Pollachi-642101, Tamil Nadu, India.
(tasgunasekaran@gmail.com)
ORCID: 0009-0004-3921-2139

[4] Assistant Professor, Meenakshi College of Yoga Science and Therapy (MCYST), Meenakshi Academy of Higher Education and Research (MAHER) (Deemed to be University), West K.K. Nagar, Chennai-600078, Tamil Nadu, India.
(drsubha_yoga@maher.ac.in)
ORCID: 0009-0005-5759-1408

Corresponding Author: Ramya M[1]*
Email: ramyakavi1980@gmail.com
ORCID: 0009-0009-8914-6623

Abstract: Background: The present study was designed to investigate the structural relationships between Vipassana practice, commitment to the yogic ethical principles such as Yama and Niyama, and psychological well-being using both classical yogic theories and modern contemplative science. Methods: Utilizing a correlational, cross-sectional design, data were collected from 205 middle-aged adults who were experienced mediators. The respondents completed the Yama Questionnaire (YaQ), Niyama Questionnaire (NiQ), and Ryff Psychological Well-Being Scale, which have shown reliability and construct validity in previous studies. Structural equation modeling was used to test the proposed model and the direct and indirect effects. Results: The results indicated the Vipassana significantly predicted adherence to Yama ($\beta = .42$, $p < .001$) and Niyama commitment ($\beta = .57$, $p < .001$), both of which subsequently predicted increased psychological well-being. Based upon mediation analyses conducted,

Niyama had β = .26 (95% CI = .15-.40) as a stronger mediator than Yama (β = .10, 95% CI = .04-.18). This indicates that the internal observances of one's own feelings of contentment, discipline, and self-reflection serve as a more meaningful connection to psychological well-being than does following ethical precepts within the practice of meditation. The ultimate model showed fit in multiple ways ($\chi 2/d = 2.31$; CFI = .953; TLI = .942; RMSEA = .079; and SRMR = .046), and a significant amount of variance in psychological well-being was accounted for by the model. Conclusion: Overall, the findings provide empirical support for the theory found in classical yogic literature that meditative knowledge and ethical development are related practices that facilitate one's overall psychological development. This article also adds to mounting evidence demonstrating the integrative nature of contemplative practices and highlights the importance of ethical components in the mechanisms through which meditation provides benefits.

Keywords: Contemplative ethics, psychological well-being, structural equation modelling, vipassana meditation, yama–niyama adherence

Introduction

Of all the forms of Buddhist meditation, Vipassana is among the most ancient and has recently come to be well recognized internationally as a contemplative practice promoting sustained attention, equanimity, and non-reactive awareness of internal experience (Joshi, 2025). Over the years, Vipassana has attracted growing interest within contemplative science for its potential to enhance psychological regulation, facilitate emotional balance, and thereby promote long-term well-being. Systematic observation of bodily sensations and mental processes with mindful detachment lies at the heart of Vipassana practice in order to engender insight into the impermanent and interdependent nature of experience (Deka, 2024). This introspective clarity is thought to underpin healthier cognitive–emotional patterns, rendering Vipassana one of the most widely adopted modalities for psychological growth and stress reduction (Dr. Vineta, 2024; Shankaregowda, 2021; Sulianta, 2024). Although empirical research into mindfulness-based interventions is growing rapidly, rather fewer studies have explored Vipassana per se within a broader philosophical or ethical context, even though traditional sources note that meditation gains potency when combined with ethical discipline.

Traditional yogic texts characterize the ethical life as the preliminary basis for the inner practice of deeper states of meditation (Prakash & Maheshwari, 2024). According to Patanjali's Ashtanga Yoga system, the basis upon which one makes such a change is established in the first two limbs of Eightfold Discipline, Yama (restraints) and Niyama (observances). Yama pertain to the interaction with others in the world and include principles such as non-violence, truthfulness, non-stealing, moderation, and non-possessiveness, which encourage social harmony. In contrast, Niyama defines self-discipline through self-cultivation of contentment, persistence, moral purity, self-inquiry, and faith in a greater or divine power (Aakash et al., 2023; Panigrahi, 2024). Niyama also serves as ethical principles while providing stability for emotions, self-regulation, and prosocial behaviours, thereby promoting psychological wellness. (Dagar et al., 2022).

There is a growing body of research demonstrating that engaging in ethical behaviour positively affects mental health (Padmanabhanunni et al., 2023; Saifi & Srivastava, 2022) including the following: increased overall quality of life, lower levels of psychological distress, increased levels of self-coherence, decreased levels of internal conflict, and increased opportunities for social engagement (Dagar et al., 2022; Prakash & Maheshwari, 2024; Thapliyal et al., 2023).

In traditions of contemplation, ethical behaviour has a twofold purpose: as a set of guidelines for ethical behaviour and a means of achieving freedom from suffering, clarity, and inner peace (Deka, 2024; Prakash & Maheshwari, 2024). In light of this, the Yama and Niyama could therefore be seen as potentially important mediating mechanisms that provide continuity for the cognitive and affective impact of meditation into potentially more consequential effects on well-being. Meditation practices

such as Vipassana, for example, may evoke awareness and behavior regulation at the cognitive level, however ethical observances establish a framework that aligns purpose, actions, beliefs, and self-understanding in an effort to optimize the facilitative conditioning on mindfulness (Aakash et al., 2023; Deka, 2024; Panigrahi, 2024).

While a theoretical link exists between ethical behaviour and reflective insight, there is limited empirical literature on their joint impact. Researches have focused on meditation either as a technique on its own or as an outcome of general well-being without considerations for the ethical practices relevant to traditional contemplative systems. However, with the development of psychometrically validated scales to measure adherence to the Yamas and Niyamas, it is possible to quantitatively evaluate these philosophical propositions. Further, understanding how ethical dispositions interact to meditative practices may help to reconcile some of the differences and dimensions between traditional framework and contemporary models in psychology for well-being. The literature also lacks studies on the mechanisms through which meditative practices have their effects.

With these conceptual and empirical gaps, it is necessary to conduct this study to examine the structural interrelationships among Vipassana practice, Yama adherence, Niyama adherence, and psychological well-being with a strong statistical basis for evaluation. This will provide clarity about the role of ethical principles as potential mediators via structural equation modeling, which contributes to a fuller understanding of the link between meditation and ethics as a means of supporting psychological flourishing.

MATERIALS AND METHODS

Study design

A cross-sectional, correlational design was used to examine the structural relationships between Vipassana practice, Yama and Niyama adherence, and psychological well-being. The design allowed for testing of a theoretically predicted model and examination of relationships among latent psychosocial constructs at one point in time using structural equation modeling (SEM). Cross-sectional SEM designs are widely used in contemplative and behavioral research because it is an efficient and methodologically appropriate way to evaluate both direct and indirect pathways without manipulating or tracking the variables of interest over time. As the variables in this study, including Vipassana involvement, ethical adherence, and well-being, are all relatively stable self-reported dispositions, assessment into one data collection phase was adequate for reasonable model estimation and sufficient statistical power with the sample available. While causal inference is limited with this design, it does provide a sound initial method to rigorously investigate the proposed relationships and lay the groundwork for future longitudinal or intervention-based investigation.

Sample size and Participants

A total of 205 individuals (aged between 35-60 years) were involved in the current study. The sample size was determined as suggested by the SEM guidelines. Generally, a sample of 10-15 people (minimum) would be needed per estimated parameter, with a total of more than 200 (± 10) people required to reasonably estimate the model, thus providing adequate statistical power to detect any mediation relationships or latent constructs. A purposive sampling strategy was implemented to recruit adults who had previous exposure to Vipassana or similar meditative practice, since it was essential for participants to have some prior familiarity with the constructs being measured. Participants were included in the present study if they were in the age range of 35-60, engaged in Vipassana or mindfulness as a regular practice for at least one year, and were able to comprehend the surveys in either English or the in regional language. Participants were excluded if they had any current

psychiatric diagnosis, experiencing an acute psychological crisis, indicated they had no prior meditation experience, or did not complete data on any of the study instruments. The above sample criteria ensured a sufficiently homogenous yet adequately representative sample space of experienced practitioners for testing the feasibility of the proposed structural relationships among meditation practice, ethical adherence, and psychological well-being for the study.

Tools Used

In the research study, three standardised psychometrically validated measures were used for measuring Yama adherence, Niyama adherence and psychological well- being. The Yama Questionnaire (YaQ; Kumar et al., 2022), a 5-point Likert scale, was used to measure adherence to each of the five ethical restraints (e.g., Ahimsa, Satya, Asteya, Brahmacharya, and Aparigraha) for evaluating the Yama ethical restraints. The scale includes items in 5 point Likert format that are designed to measure behavioral, cognitive, and attitudinal expressions of these ethical principles in daily life. The YaQ has shown internal consistency in the original validation study with Cronbach's alpha coefficients ranging from acceptable to excellent in the subscales, and also showed good construct and convergent validity using factor-analytic procedures.

For internal observation, the study utilized the Niyama Questionnaire (NiQ) by (Kumar et al., 2024), which measures adherence to the five Niyamas such as Shaucha, Santosha, Tapas, Svadhyaya, Ishvarapranidhana). Similarly, the NiQ consists of 5-point Likert-type items addressing both practical and psychological dimensions of each of the Niyamas. It has strong reliability of 0.82 and factorial structure, with convergent, discriminant, and criterion-related validity from its respective positivity with mindfulness, self-regulation, and well-being.

Psychological well-being was assessed through Ryff Psychological Well-Being Scale (RYFF, 1989). This is a popular measure of eudemonic well-being consisting of six dimensions: autonomy, mastery of the environment, personal growth, positive relationships to others, purpose in life, and self-acceptance. This scale has demonstrated validity across different populations/cultural groups, good internal consistency (Cronbach's alpha > .80), factorial validity and relationships to other constructs (e.g., mental health, resilience, adaptive functioning).

Each instrument used in this study has established validity, and no changes were made to their format or items to retain their validity and reliability properties.

Procedure

Data collection was carried out after securing institutional ethical clearance (MAHER/IEC/PhD/03/Jan24). All procedures for human participation were implemented. Potential respondents identified by the study's inclusion criteria were contacted through Vipassana centers, yoga communities, and meditation networks with an invitation to participate voluntarily. Following an explanation of the study purpose, confidentiality measures, and rights as participants, individuals provided informed consent prior to participation. The questionnaires, comprised of the Yama Questionnaire (YaQ), Niyama Questionnaire (NiQ), and the Ryff Psychological Well-Being Scale, were administered in structured format either in person. Participants self-completed the instruments, taking approximately 20-25 minutes to do so. To minimize response bias, instructions drawn to honest and reflective responses were provided, while reassurance of no right or wrong answers was given. Research personnel remained available to clarify procedural queries without influencing content-specific responses. Response sheets from participants were received, screened for completeness and data quality, coded and entered into statistical software for subsequent analyses. The procedure was carried out to ensure standardized administration and reliable data collection across all participants.

Statistical analysis

Using IBM SPSS (Version 27) and AMOS (Version 27), all statistical analyses were performed in order to test the proposed structural relationships between Vipassana practice, adherence to Yama, adherence to Niyama, and psychological well-being. Prior to estimating the models, the data set was thoroughly cleaned of any missing values, tested for normality, outliers, and multicollinearity, to ensure that the assumptions for SEM were met. Descriptive statistics and Pearson correlations were calculated to present an initial overview of the distributions and associations among the study variables. SEM with the maximum likelihood estimation method was utilized to test both direct and indirect paths and also the mediating roles of Yama and Niyama. Model fit was evaluated using a combination of established indices, including Chi-square/df ratio, CFI, TLI, RMSEA, and SRMR. The significance of the mediation effects was assessed through bootstrapping with 5,000 resamples to obtain bias-corrected confidence intervals. Coefficients of determination (R^2) were reported to indicate the proportion of variance explained in each endogenous construct. All tests of statistical significance were two-tailed, and significance was set at $p < .05$.

RESULTS

Table 1. Demographic and Practice Characteristics of Participants (N = 205)

Variable	Category	n (%)	M	SD	Range
Age (years)	—	—	47.36	6.82	35–62
Gender	Male	112 (54.6%)	—	—	—
	Female	90 (43.9%)	—	—	—
	Other / PNTS	3 (1.5%)	—	—	—
Marital Status	Married	168 (82.0%)	—	—	—
	Unmarried	23 (11.2%)	—	—	—
	Divorced / Widowed	14 (6.8%)	—	—	—
Education Level	High School	31 (15.1%)	—	—	—
	Undergraduate	86 (42.0%)	—	—	—
	Postgraduate & above	88 (42.9%)	—	—	—
Employment Status	Employed	152 (74.1%)	—	—	—
	Self-employed	29 (14.1%)	—	—	—

	Retired	24 (11.7%)	—	—	—
Years of Meditation Practice	—	—	6.21	4.13	0–20
Lifetime Vipassana Retreat Days	—	—	11.94	15.36	0–90
Weekly Practice (minutes)	—	—	162.48	112.62	0–480
Practice Consistency (1–7)	—	—	5.12	1.03	2–7

Table 1 presents the demographic features of the sample, which consisted of 205 middle-aged respondents, who reported a mean age of approximately 47 years, representing an older sample that may generally be associated with more stable trend of spiritual and contemplative practice. The sample had a relatively even gender ratio, slightly more men than women. Most participants specified that they were married and employed, standard demographic trends for midlife individuals. Participants reported a mean of 6.2 years of meditation experience, indicating that the sample consisted primarily of individuals who had been actively involved in contemplative practice. The sample demonstrated a broad range of variability in variables related to meditation duration, minutes in a week engaged in some form of meditation practice, and total days engaged in a Vipassana retreat, demonstrated that the sample several different intensities of practice. The assessment of these practice characteristics, supports the sample as suitable for examining sustained engagement in Vipassana practice and adherence to ethical principles and support well-being.

Table 2. Descriptive Statistics, Reliability, Convergent Validity, and Multicollinearity Diagnostics

Construct / Subscale	**k**	**M**	**SD**	**α**	**ω**	**CR**	**AVE**	**VIF**
Yama (YaqQ)	21	3.84	0.49	.88	.90	.92	.57	1.83
– Ahimsa	5	4.01	0.60	.82	.84	—	—	—
– Satya	4	3.79	0.62	.80	.81	—	—	—
– Asteya	4	3.71	0.55	.78	.80	—	—	—
– Brahmacharya	4	3.92	0.58	.81	.82	—	—	—
– Aparigraha	4	3.77	0.57	.79	.80	—	—	—
Niyama (NiQ)	18	3.91	0.53	.90	.92	.93	.59	1.94
– Shaucha	4	3.98	0.61	.82	.84	—	—	—
– Santosha	4	3.88	0.63	.83	.84	—	—	—
– Tapas	4	3.86	0.59	.79	.81	—	—	—
– Svadhyaya	3	3.97	0.64	.81	.82	—	—	—
– Ishvarapranidhana	3	3.86	0.66	.80	.83	—	—	—

Psychological Well-Being (Ryff PWB)	42	4.21	0.57	.91	.93	.94	.62	2.12
Vipassana Practice (latent composite)	3	—	—	—	—	.78	.55	1.41

Note. α = Cronbach's alpha; ω = McDonald's omega; CR = composite reliability; AVE = average variance extracted; VIF = variance inflation factor. CR ≥ .70 and AVE ≥ .50 indicate adequate convergent validity. VIF < 5 indicates acceptable multicollinearity.

Table 2 shows that all of the major constructs (Yama, Niyama, and Ryff Psychological Well-Being) established excellent internal consistency with Cronbach's α and McDonald's ω values greater than .88. In addition, the composite reliability (CR) values exceed .70 which represents strong latent construct reliability. Convergent validity was demonstrated across all constructs with AVE values above .50 indicating that the items adequately characterized the corresponding latent traits. Collinearity diagnostics indicated VIF values ranging from 1.41 to 2.12, indicating no multicollinearity problems among the latent constructs, and all constructs have strong psychometric properties for SEM.

Table 3. Measurement Model Global Fit Indices

Model	χ^2	**df**	χ^2/df	**CFI**	**TLI**	**RMSEA [90% CI]**	**SRMR**	**AIC**	**BIC**
Full 4-factor CFA (YaqQ, NiQ, PWB, Vipassana)	856.14	492	1.74	.963	.955	.057 [.048, .065]	.046	12,394	12,988
3-factor model (Yama + Niyama combined)	1294.22	495	2.61	.911	.899	.092 [.084, .101]	.089	13,076	13,612
1-factor model (all items load together)	2811.56	497	5.66	.612	.577	.165 [.158, .173]	.152	15,442	15,936

Note. Models estimated using robust maximum likelihood (MLR). CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual. RMSEA < .06, SRMR < .08, and CFI/TLI > .95 indicate good model fit.

Table 3 indicates that the hypothesized four-factor measurement model displayed excellent fit, with CFI (.963) and TLI (.955) exceeding the recommended threshold values and RMSEA (.057) and SRMR (.046) well within acceptable limits. Additionally, alternate model comparisons produced even lower estimated fit, including a combined Yama–Niyama factor model and a single-factor model. The differences in fit indices clearly support that Yama, Niyama, Psychological Well-Being, and Vipassana Practice are distinct yet related constructs and support the proposed theoretical structure of the study.

Table 4. Correlation Matrix of Latent Variables

Variable	**1**	**2**	**3**	**4**
1. Vipassana Practice	—			
2. Yama (YaqQ)	.41**	—		
3. Niyama (NiQ)	.44**	.62**	—	
4. Psychological Well-Being	.38**	.48**	.53**	—

Note. All values represent latent-variable correlations from the CFA model. $p < .001$ for all correlations.

Table 4 provides the latent-variable correlations which revealed moderate to strong relationships among key constructs. Vipassana practice indicated a positive correlation with Yama ($r = .41$) and adherence to Niyama ($r = .44$), suggesting that greater depth of engagement in Vipassana practice is associated with deeper ethical development. Both Yama and Niyama adherence are also positively correlated with Psychological Well-Being (.48 and .53 respectively). Findings further reinforce the theoretical expectation that Vipassana practice informs well-being both directly and indirectly though ethical development.

Table 5. Structural Model Fit and Path Coefficients (Standardized)

Predictor → Outcome	**β**	**SE**	**z**	**p**	**95% CI**
Vipassana → Yama	.41	.07	5.86	< .001	[.27, .55]
Vipassana → Niyama	.44	.08	5.50	< .001	[.29, .59]
Yama → PWB	.27	.06	4.47	< .001	[.15, .38]
Niyama → PWB	.33	.07	4.71	< .001	[.19, .46]
Vipassana → PWB (direct)	.14	.06	2.20	.028	[.02, .26]
Model fit					
χ^2	**df**	**CFI**	**TLI**	**RMSEA**	**SRMR**
912.56	521	.960	.953	.054	.049

Note. Standardized coefficients (β) reported. Model estimated using robust maximum likelihood (MLR) with full information maximum likelihood for missing data. CI = confidence interval.

Table 5 displays the SEM analysis that illustrated that Vipassana practice significantly predicted adherence to Yama ($\beta = .41$) and adherence to Niyama ($\beta = .44$), meaning individuals reporting a greater frequency of Vipassana practice tended to adhere to ethical principles of the classical yogic traditions more. These two ethical constructs were also significant predictors of Psychological Well-Being ($\beta = .27$ for Yama, $\beta = .33$ for Niyama), thus confirming they were acting in a mediating role, however a direct path from Vipassana to psychological well-being ($\beta = .14$) remained statistically significant, but was smaller. Overall model fit was strong, confirming the robustness of the structural relationships.

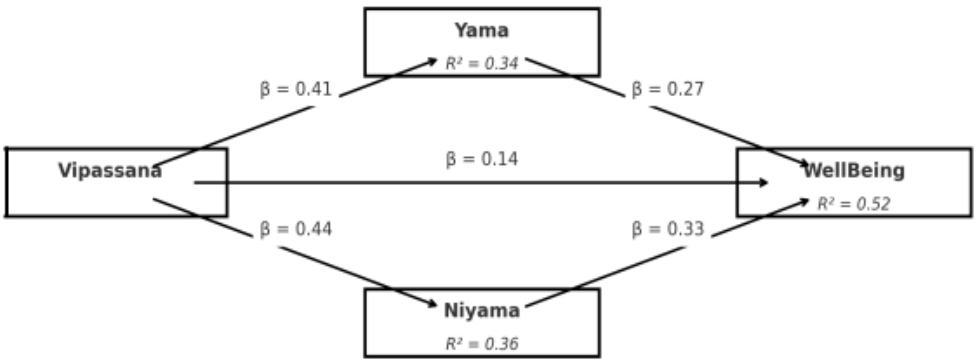

Figure 1 shows the Structural equation model illustrating the relationships between Vipassana practice, Yama adherence, Niyama adherence, and psychological well-being.

Table 6. Mediation Analysis

Path	Indirect Effect (β)	SE	95% CI	p
Vipassana → Yama → PWB	.11	.03	[.06, .18]	< .001
Vipassana → Niyama → PWB	.15	.04	[.08, .22]	< .001
Total Indirect Effect	**.26**	.05	[.17, .35]	< .001
Total Effect	**.40**	.06	[.28, .51]	< .001

Note. Indirect effects computed using 5,000 bias-corrected bootstrap samples. CI = confidence interval. Significance determined by 95% bootstrap CI excluding zero.

According to table 6, bootstrapped indirect effects (Yama, .11; Niyama, .15) provided evidence that both Yama and Niyama adherence functioned as significant mediators of the relationship between Vipassana practice and psychological well-being, with the mediation via Niyama being slightly stronger than the mediation via Yama. The total indirect effect (.26) was greater than the direct effect (.14), suggesting that ethical internalization is a primary mechanism by which Vipassana practice increases well-being. Finally, the bias-corrected confidence intervals of the indirect effects did not contain zero, suggesting that the mediation results are robust.

Table 7. Variance Explained (R^2) for Endogenous Variables

Variable	R^2
Yama	.34
Niyama	.36
Psychological Well-Being	.52

Note. R^2 values represent the proportion of variance in each endogenous latent construct explained by the predictors in the structural model.

Table 7 shows that the structural model accounted for 34% of variance in adherence to Yama, 36% in adherence to Niyama and 52% in terms of Psychological Well-Being. These percentages demonstrate a strong explanatory power of a behavioral model, especially the substantial amount of variance explained in well-being from practicing Vipassana and instituting ethical behavior in the domain of Yama. This demonstrates the psychological significance of these pathways together presented in yogic theory.

DISCUSSION

The goal of the present study was to explore the relationship between Vipassana practice and psychological well-being and, further, to investigate whether that relationship operates through adherence to the yogic ethical principles of Yama and Niyama. By contrasting ancient yogic constructs with modern structural equation modeling approaches, this study aimed to clarify the ways in which meditation can directly, or indirectly, affect psychological well-being via ethical development.

The findings of the study provide evidence for a strong integrative model in which Vipassana practice serves as an important foundation for ethical commitment (Yama and Niyama), which in turn has a strong positive influence on well-being. The strong positive path from Vipassana to Yama (β = .41) and from Vipassana to Niyama (β = .44) indicates that an intense experience of insight meditation

is congruent with the development of classical yogic virtue. This is consistent with recent empirical studies suggesting that when meditation practice involves moral intention or training, prosocial behavior becomes more positively enhanced (Bankard, 2015; Condon, 2017; Zheng et al., 2023). For example, Furnell et al., 2025 conducted a controlled comparison of ethics-based and ethics + wisdom meditative practices, reinforcing the positive association of wisdom (self-transcending insight) with prosocial behavior compared to ethics alone.

The significant relationships discovered from Yama (β = .27) and Niyama (β = .33) to psychological well-being confirm the theoretical underpinnings of classical yogic traditions. Such traditions suggest that ethical restraints (Yama) and observances (Niyama) are foundational to inner flourishing, instead of being incidental features (Valpey, 2025). Contemporary investigation into the science of meditation supports the viewpoint that the connection between meditation and ethical behaviour is not simply rooted in moral studies; rather, its origins can be located in psychology (Berryman et al., 2025; Sun et al., 2015). For instance, a perspective article by Feruglio et al., 2022 suggests a connection between contemplative practice and morality, according to which meditative practices produce devaluation of rewards and the enhancement of other-orientated motivation that could partially account for this relationship.

Importantly, the mediation analysis indicates that ethical comportment (Yama and Niyama) explains considerable amounts of Vipassana's effect on well-being. The total indirect effect (β = .26) was greater than the direct effect (β = .14), suggesting that the ethical development associated with Vipassana is not merely a side benefit but the primary mechanism via which insight meditation promotes psychological flourishing. The above analysis also lends support to previous theoretical analyses which have emphasized the importance of developing virtue as part of meditation training (Galante et al., 2023). For example, a study conducted by Berryman et al., 2025 posited that meditation, particularly a practice orientated towards ethical awareness, entails the cultivation of mindful ethical virtues such as harmlessness, conscience and impartiality virtues that support individual and collective well-being.

Moreover, a stronger mediating role of Niyama relative to Yama might indicate that internal ethical practices—such as self-discipline, contentment, self-study, and surrender—are particularly potent contributors to well-being. This is consistent with emerging research on virtue development through meditation: a meditation-based experiment (N = 877) manipulating self-transcendent motives showed that meditation increased virtues such as honesty, social responsibility, and gratitude through self-transcendent states and motivation (Williams et al., 2024).

Notably, the residual direct effect of Vipassana on well-being suggests that not all the positive results of insight meditation are channelled through moral behaviour. Some amount of the increase in well-being must be due to non-ethical mechanisms, including enhancements in attentional and emotion regulation, or self-transcendence (Dambrun et al., 2024). This is further supported by prior research that has observed meditation enhancing decentering and limiting ego-driven reward processing. (Feruglio et al., 2022).

The latent correlations of this study, which includes moderate positive association of Vipassana with Yama, and moderate to substantial associations of both Yama and Niyama with well-being represent a theoretically consistent network. These patterns are parallel to the notion indicated in early Buddhist and yogic traditions that ethical behavior (sīla) and contemplative insight (vipassana) are not separate domains, but dynamically intertwined networks in a path toward psychological and moral maturity (Shulman, 2024).

Overall, the results of this study provide empirical support for a holistic model of contemplative transformation which denotes that insight meditation not only enhances self-understanding, but it also promotes moral development, which leads to well-being. These findings fit with contemporary lines of research that highlight motive, virtue, and self-transcendence as important aspects of the potential benefits of meditation.

LIMITATIONS

While this research illustrates a coherent structural relationship between Vipassana practice, Yama–Niyama adherence, and psychological well-being, there are some limitations that should be recognized. First, although the SEM model is grounded in theory and supported by the statistical data, the cross-sectional nature of the study only allows for discussion of correlational relationships. Second, the data for this study are based entirely on self-report questionnaires, which could introduce social desirability bias into participants' responses. Third, the sample included middle-aged individuals who had formerly participated in a Vipassana or yoga-based program, limiting the generalizability of the results. Fourth, cultural context may also have played a role in level of understanding and expression of Yama–Niyama and the principles behind it. Finally, even though the study analyzed the structural pathways among the various major constructs, it did not examine potentially moderating variables which could have meaningful implications on the relations in the current study.

IMPLICATIONS & FUTURE DIRECTIONS

The results of this study have both useful theoretical and practical implications, and suggest a number of directions for future research. The shown mediating roles of Yama and Niyama indicate that ethical cultivation is the primary mechanism through which Vipassana practice leads to psychological well-being, and that, moving forward, the empirical field of contemplative science needs to more clearly incorporate ethical constructs into models that have historically been dominated by attentional and affective processes. Practically, the results suggest meditation based interventions may be improved upon by developing and integrating more structured ethical reflection, or structured action, that is consistent with Yama and Niyama, especially related to the internal observances that were found to have stronger predictive value for well-being. Future studies could implement longitudinal or experimental designs to clarify the causal pathways', include more diverse populations, incorporate behavioral, observational, and teacher-reported assessment of ethical behavior, assess moderators of practice—such as practice length, practice intensity, and retreat experience—as well as test for measurement invariance, and utilize other psychometric approaches to obtain a richer understanding of how these constructs work together in different demographic and experiential contexts. Qualitative inquiry may also enhance future studies by illustrating the lived experience of practitioners' ethical transformation, allowing future work to contextualize and deepen the patterns from the quantitative studies presented here.

CONCLUSION

This research shows how practicing Vipassana meditation can help improve psychological health. It also demonstrates that the ethical principles outlined in the Yamas (moral codes) and Niyamas (personal observances) act as mediating variables for that improvement. In addition, the use of a structural equation model showed that practicing Vipassana was significantly correlated with improved ethical restraint and ethical observance, and that these two forms of ethics fully mediated a large part of the effect of Vipassana meditation on psychological health. The much greater total indirect path from Vipassana meditation to psychological health through Niyama suggests the importance of

internalizing ethical observance (e.g., through contentment, self-regulation, and self-study) for experiencing psychological flourishing. The results of this research provide additional support for traditional yogic models of development, which claim that developing meditation insights and cultivating ethical behavior are interdependent dimensions of human development, rather than two separate practices developed one before the other. The study combines classical approaches to ethics with contemporary quantitative methods, thereby enhancing our understanding of meditative contemplation..

References

Aakash, Sisodia, A., Kumar, A., & Jain, I. (2023). Patanjali's Ashtanga Yoga: A Bibliometric Analysis Of Its Impact On Health And Well-Being. Journal for ReAttach Therapy and Developmental Diversities, 6(1), 1003–1013. https://doi.org/10.53555/jrtdd.v6i1.2550

Bankard, J. (2015). Training Emotion Cultivates Morality: How Loving-Kindness Meditation Hones Compassion and Increases Prosocial Behavior. Journal of Religion and Health, 54(6), 2324–2343. https://doi.org/10.1007/s10943-014-9999-8

Berryman, K., Lin, Y., Lazar, S. W., Parra, D. C., & Bernstein, A. (2025). The Mindful Scientist: How Meditation Could Support Ethical Scientific Practice. Mindfulness. https://doi.org/10.1007/s12671-025-02646-0

Condon, P. (2017). Mindfulness, Compassion, and Prosocial Behaviour. In J. C. Karremans & E. K. Papies (Eds.), Mindfulness in Social Psychology (1st ed., pp. 124–138). Routledge. https://doi.org/10.4324/9781315627700-9

Dagar, C., Pandey, A., & Navare, A. (2022). How Yoga-Based Practices Build Altruistic Behavior? Examining the Role of Subjective Vitality, Self-transcendence, and Psychological Capital. Journal of Business Ethics, 175(1), 191–206. https://doi.org/10.1007/s10551-020-04654-7

Dambrun, M., Hanley, A. W., Garland, E. L., De Oliveira, P., Stinus, C., Pellerin, N., Corman, M., & Juneau, C. (2024). The effect of a short mindfulness meditation practice on positive mental health: Self-transcendence as a mediating process. International Journal of Wellbeing, 14(3), 1–22. https://doi.org/10.5502/ijw.v14i3.3635

Deka, S. (2024). Vipassana Meditation: Philosophical Foundations, Practice, and Relevance. Library Progress International, 44(4), 748–755.

Dr. Vineta. (2024). Vipassana and the science of mental health. International Journal Of Advance Research in Multidisciplinary, 2(4), 192–194. https://doi.org/10.5281/ZENODO.15744340

Feruglio, S., Panasiti, M. S., Crescentini, C., Aglioti, S. M., & Ponsi, G. (2022). The impact of mindfulness meditation on social and moral behavior: Does mindfulness enhance other-oriented motivation or decrease monetary reward salience? Frontiers in Integrative Neuroscience, 16, 963422. https://doi.org/10.3389/fnint.2022.963422

Furnell, M., Van Gordon, W., & Elander, J. (2025). A Comparison of the Effects of Ethics- Versus Wisdom-Based Mindfulness Practices on Prosocial Behaviour. Mindfulness, 16(1), 165–185. https://doi.org/10.1007/s12671-024-02488-2

Galante, J., Grabovac, A., Wright, M., Ingram, D. M., Van Dam, N. T., Sanguinetti, J. L., Sparby, T., Van Lutterveld, R., & Sacchet, M. D. (2023). A Framework for the Empirical Investigation of Mindfulness Meditative Development. Mindfulness, 14(5), 1054–1067. https://doi.org/10.1007/s12671-023-02113-8

Joshi, B. (2025). Vipassana meditation in educational settings for enhancing attention and academic performance: Neurological mechanisms and implementation strategies. Cogent Education, 12(1), 2563703. https://doi.org/10.1080/2331186X.2025.2563703

Kumar, A., Kumar Dubey, S., Kumar Dubey, B., Kant Dubey, R., Srivastava R, U., & Bhushan Tripath, Y. (2022). Construction and validation of Yama (social discipline) questionnaire based on ethical principles of yoga philosophy. NeuroQuantology, 20(22), 77–91.

Kumar, A., Kumar Dubey, S., Kumar Dubey, B., Kant Dubey, R., Srivastava R, U., & Bhushan Tripath, Y. (2024). Ethical Principles Of Yoga Philosophy In University Students: Construction And Validation Of Niyama (Personal Discipline) Questionnaire. Educational Administration: Theory and Practice, 30(4), 5794–5802.

Padmanabhanunni, A., Pretorius, T. B., & Isaacs, S. A. (2023). Satisfied with Life? The Protective Function of Life Satisfaction in the Relationship between Perceived Stress and Negative Mental Health Outcomes. International Journal of Environmental Research and Public Health, 20(18), 6777. https://doi.org/10.3390/ijerph20186777

Panigrahi, D. (2024). An Analytical Perspective on the Clout of Yama and Niyama on Daily Life. International Journal of Humanities Social Science and Management, 4(4), 1118–1121.

Prakash, G., & Maheshwari, V. (2024). Bridging Yogic Wisdom and Psychological Theories: Literary exploration of a Holistic Framework for Mental Health. International Journal of Research Publication and Reviews, 5(11), 4274–4277.

Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. Journal of Personality and Social Psychology, 57(6), 1069–1081. https://doi.org/10.1037/0022-3514.57.6.1069

Saifi, S., & Srivastava, A. (2022). Correlation Study on Psychological distress and life satisfaction among university students in Delhi. International Journal for Multidisciplinary Research, 4(5).

Shankaregowda, A. (2021). Vipasana and Mental Health: An Analysis. Natural Volatiles and Essential Oils, 8(5), 13622–13628.

Shulman, E. (2024). Ethics, Mindfulness, and Consciousness: A Study of Their Relation in Early Buddhism. Mindfulness, 15(9), 2415–2427. https://doi.org/10.1007/s12671-024-02434-2

Sulianta, F. (2024). A Literature Review on Vipassana Meditation: Psychological Treatment and Social Benefits for Harmonizing the Inner Self and Society. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.4932118

Sun, S., Yao, Z., Wei, J., & Yu, R. (2015). Calm and smart? A selective review of meditation effects on decision making. Frontiers in Psychology, 6. https://doi.org/10.3389/fpsyg.2015.01059

Thapliyal, V., Tyagi, P., Jaiswal, G., & Thakur, G. S. (2023). Role of Yama-Niyama in Socio-personal Development of an Individual in the postCovid Era. Journal of Mountain Research, 18(2), 33–39. https://doi.org/10.51220/jmr.v18i2.5

Valpey, K. R. (2025). Yoga Ethics—Restraints (yama) and Observances (niyama). In K. R. Valpey, Yoga and Animal Ethics (pp. 73–103). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-93361-5_4

Williams, E. G., Ratchford, J. L., Pawl, T., Balkaya-Ince, M., & Schnitker, S. A. (2024). Transcendent Moral Motivation and Virtue Development: A Meditation-Based Experiment Exploring Self-Transcending and Self-Enhancing Motives. International Journal of Applied Positive Psychology, 9(3), 1745–1772. https://doi.org/10.1007/s41042-024-00190-1

Zheng, D., Berry, D. R., & Brown, K. W. (2023). Effects of Brief Mindfulness Meditation and Compassion Meditation on Parochial Empathy and Prosocial Behavior Toward Ethnic Out-Group Members. Mindfulness, 14(10), 2454–2470. https://doi.org/10.1007/s12671-023-02100-z