Relationship Between Triguna and Big-Five Factors in Young Adults

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Abstract: The present study examines the relationship between the Triguna dimensions of personality—Sattva, Rajas, and Tamas—and the Big Five personality factors among young adults. Drawing upon classical Indian psychological theory and contemporary trait psychology, the study aims to explore conceptual convergence between these two frameworks. A sample of 434 participants aged 18–30 years (male and female) was assessed using the Vedic Personality Inventory (VPI) and the NEO Five-Factor Inventory (NEO-FFI). Given deviations from normality, Kendall's tau correlation was employed for statistical analysis. The results revealed that Sattva was found to be negatively correlated with Neuroticism and positively correlated with Extraversion, Openness to Experience, Agreeableness, and Conscientiousness. Rajas showed a positive association with Neuroticism and negative associations with Conscientiousness and Agreeableness, while Tamas showed a positive correlation with Neuroticism and negative correlations with Agreeableness and Conscientiousness. All observed relationships were statistically significant and aligned with theoretical expectations. The findings support meaningful convergence between Triguna theory and the Big Five model, suggesting that Triguna dimensions may represent underlying psychological dispositions that shape observable personality traits. The study makes contribution to the growing body of indigenous psychology research by empirically integrating classical Indian and contemporary Western personality frameworks.

Keywords: *Triguna, Big Five Personality Factors, Sattva, Rajas, Tamas, Indigenous Psychology, Personality Traits, Young Adults.*

I. INTRODUCTION

➢ *Big Five Factors of Personality*

The Big Five model of personality has become one of the most widely accepted theory in personality psychology due to its strong empirical grounding and applicability across diverse psychological domains. By organizing personality into five broad traits—Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness—the model offers a structured approach for understanding individual differences in emotional regulation, academic behavior, and health-related functioning.

The five personality factors are commonly conceptualized as follows: Neuroticism reflects emotional instability and vulnerability to stress; Extraversion denotes sociability, assertiveness, and positive emotionality; Openness to Experience represents curiosity, imagination, and receptivity to novel ideas and experiences; Agreeableness involves cooperation, empathy, and interpersonal trust; and Conscientiousness refers to self-discipline, organization, and persistence. Together, these traits account for stable patterns of behavior and performance across a range of life domains.

Within educational contexts, personality traits have been played a significant role in shaping academic performance and learning-related behaviors. Conscientiousness consistently demonstrates a strong association with academic achievement, reflecting its links with goal orientation, persistence, and self-regulation (Bhattacharjee & Ramkumar, 2025). Extraversion and Openness to Experience have also been found to influence students' engagement with educational technologies and adaptive learning practices (Joy & Venkatachalam, 2024).

Beyond academic outcomes, the Big Five traits are closely related to behavioral tendencies and emotional regulation. Research among school students indicates that higher levels of Neuroticism and lower levels of Agreeableness are associated with increased aggression, whereas adaptive personality traits contribute to better behavioral control (Alsadi et al., 2023). Similarly, risk-taking behavior has been linked to lower Conscientiousness and higher Extraversion, suggesting that personality traits significantly influence decision-making and behavioral regulation (Pandey & Sharma, 2025).

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Personality traits have also been associated with health-related behaviors and lifestyle patterns. Longitudinal evidence suggests that Big Five traits predict cigarette smoking behavior over time, particularly highlighting the roles of Neuroticism and low Conscientiousness (Zvolensky et al., 2015). Recent findings further indicate that personality traits are related to patterns of energy drink consumption, emphasizing the influence of dispositional factors on everyday health behaviors (Associations between energy drink consumption and Big Five personality traits among Japanese adults, 2026).

In occupational and clinical settings, the Big Five traits have been linked to psychological resilience, burnout, and stress-related outcomes. Studies involving medical professionals indicate that certain personality traits are associated with emotional exhaustion and burnout (Zastrow et al., 2025), while clinical research suggests that personality traits interact with defence mechanisms to shape resilience under stress (Romeo et al., 2025). Developmental research further demonstrates that parenting styles and sibling status are associated with variations in Big Five traits, which in turn influence perfectionism and emotional adjustment (Hardjanto & Triman, 2024; Poprocká & Dolejš, 2025).

Overall, existing literature demonstrates that the Big Five personality traits serve as robust predictors of academic, behavioral, and health-related outcomes across diverse populations. The integration of findings across educational, behavioral, and health domains underscores the value of the Big Five framework in understanding human functioning within complex psychosocial contexts.

➤ *Triguna Theory of Personality*
Indian psychological thought conceptualizes personality as a dynamic configuration of fundamental qualities that govern cognition, affect, and behavior. One of the most influential indigenous frameworks explaining this internal structure of personality is the Triguna theory, derived from the Sāṃkhya philosophical system. According to Sāṃkhya philosophy, Prakṛti manifests through three fundamental constituents—Sattva, Rajas, and Tamas—which coexist in varying proportions and collectively determine psychological functioning (Larson & Bhattacharya, 1987).

The Bhagavad Gītā provides a detailed psychological exposition of the gunas, associating Sattva with clarity, balance, and wisdom; Rajas with activity, desire, and restlessness; and Tamas with inertia, ignorance, and confusion. These gunas are conceptualized not as fixed traits but as dynamic forces that continuously influence perception, motivation, and behavior (Bhagavad Gītā, Chapters 14 and 18). This perspective views personality as modifiable and context-sensitive, shaped by discipline, lifestyle, and cognitive regulation.

In contrast, contemporary Western psychology predominantly explains personality through trait-based models, most notably the Big Five Factors of Personality—Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness. While the Big Five model demonstrates strong empirical validity and descriptive power, it primarily focuses on observable behavioral tendencies and offers limited insight into the deeper psychological processes underlying these traits.

Empirical research within Indian psychology has increasingly explored conceptual and empirical linkages between Triguna theory and modern personality frameworks. Previous studies have reported meaningful associations between Sattva and adaptive personality characteristics, whereas Rajas and Tamas have been linked to impulsivity, emotional instability, and maladaptive behavioral tendencies (Singh, 2008). Contemporary reviews further suggest that Triguna may function as an underlying system of personality energies that complements trait-based descriptions of personality (Gaur, 2024).

Recent analytical work comparing Triguna with the Big Five, IPIP, and Schwartz value frameworks indicates partial convergence between indigenous and Western personality constructs, supporting the relevance of Triguna theory in cross-cultural personality research (Maurya, Singh, & Gowda, 2024). However, despite growing theoretical interest, systematic correlational studies directly examining the relationship between Triguna dimensions and the Big Five factors remain limited and methodologically inconsistent.

Therefore, the present study seeks to examine the correlation between Triguna dimensions and the Big Five personality factors, with the aim of integrating classical Indian psychological theory and contemporary trait psychology to enhance theoretical coherence and empirical understanding of personality.

II. METHOD

➤ *Aim of the Study*
The aim of the present study is to examine the relationship between the Triguna (Sattva, Rajas, and Tamas) and the Big Five factors of personality (Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness).

➤ *Objectives of the Study*
The objectives of the present study are to:
- Assess the Triguna dimensions (Sattva, Rajas, and Tamas) and the Big Five personality factors among young adults, and
- Examine the correlational relationship between each Triguna dimension and the Big Five factors of personality.

- *Hypotheses*
- H₁: Sattva will show a positive correlation with Extraversion, Openness to Experience, Agreeableness, and Conscientiousness and negative correlation with Neuroticism.
- H₂: Rajas will show a positive correlation with Neuroticism, Extraversion, and Openness to Experience and a negative correlation with Agreeableness and Conscientiousness.
- H₃: Tamas will show a positive correlation with Neuroticism and a negative correlation with Extraversion, Openness to Experience, Agreeableness, and Conscientiousness.

- *Sample*

The sample consisted of 434 participants drawn from a young adult population. Participants included in the study were both male and female and aged between 18-30. A non-random purposive sampling technique was used.

- *Measures*

- *Vedic Personality Inventory*

The Vedic Personality Inventory (VPI) developed by Wolf (1999) is a self-report measure designed to assess personality based on the Triguna framework. The final validated version of the scale consists of 56 items, measuring three dimensions: Sattva (15 items), Rajas (19 items), and Tamas (22 items). The questionnaire contains a 7-point Likert-type scale, with the range from strongly disagree to strongly agree. The scale assesses the relative predominance of the three gunas, reflecting clarity and balance (Sattva), activity and desire-driven behavior (Rajas), and inertia and psychological withdrawal (Tamas). The VPI demonstrates excellent internal consistency, with Cronbach's alpha coefficients of approximately .93 for Sattva, .94 for Rajas, and .94 for Tamas, indicating high reliability and suitability for empirical personality research.

- *NEO Five-Factor Inventory*

The Big Five personality traits were measured using the NEO Five-Factor Inventory, developed by Costa and McCrae in 1992. The scale consists of 60 questions, assessing five personality traits: Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness. Responses are given on a 5-point Likert scale ranging from strongly disagree to strongly agree.

The NEO-FFI demonstrates adequate to high internal consistency, with reliability coefficients ranging from .86 to .93 across domains. The scale shows strong correlations with the full NEO-PI-R, ranging from .77 to .92, and test–retest reliability over a two-year period ranging from .83 to .91. Convergent and discriminant validity have been supported across cultures, with self–peer agreement correlations ranging from .36 to .66.

- *Procedure*

Participants were briefed about the purpose of the study and provided the informed consent form. Total time taken to fill the questionnaire was 15–20 minutes. Participants were assured of confidentiality and informed that they can withdraw from the study at any time without any penalty.

- *Research Design*

The present study employed a correlational research design to examine the relationship between Triguna dimensions and the Big Five personality factors. A cross-sectional approach was adopted to assess associations between variables without manipulation.

- *Statistical Analysis*

Data analysis was conducted using R software. Prior to inferential analysis, normality of distribution was examined using the Shapiro–Wilk test. As the data did not meet assumptions of normality, Kendall's tau correlation coefficient was used to analyse the relationship between Triguna and the Big Five personality factors.

III. RESULTS

Table 1 Descriptive Analysis

N=434	Sattva	Rajas	Tamas	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness
Mean	77	73.27	71.86	24.92	26.52	28.96	28.16	29.75
Median	78	74.5	69	25	27	28	28	30
SD	11.12	13.08	17.56	6.54	5.69	4.56	5.25	5.35

Descriptive statistics for all study variables, including the three Triguna dimensions (Sattva, Rajas, and Tamas) and the five Big Five personality factors (Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness) is calculated. The distribution of scores indicated adequate variability across all dimensions, allowing for meaningful correlational analysis.

Table 2 Test of Normality

	Sattva	Rajas	Tamas	Neuroticism	Extraversion	Openness	Agreeablenes s	Conscienti ousness
W=	0.982	0.987	0.979	0.991	0.982	0.953	0.989	0.981
p-value	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00

Normality of the data was assessed using the Shapiro–Wilk test. The results show that the variables are not significantly normally distributed. Consequently, a non-parametric correlation technique was considered appropriate for examining the relationships between variables.

Table 3 Correlation Between Triguna and Big Five Factors of Personality

N=434	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness
Sattva	-0.24**	0.09**	0.08**	0.05*	0.30**
Rajas	0.28**	0.004	0.005	-0.23**	-0.25**
Tamas	0.45**	-0.02	-0.05	-0.14**	-0.33**

*- p<0.05
**- p<0.01

Kendall's tau (τ) correlation coefficient was used to examine the relationship between the Triguna and the Big Five personality factors.

- Sattva showed a significant negative correlation with Neuroticism (τ = -.24, p<.01) and significant positive correlations with Extraversion (τ =.09, p<.01), Openness to Experience (τ = .08, p<.01), Agreeableness (τ = .05, p<.01), and Conscientiousness (τ = .30, p<.01).
- Rajas demonstrated a significant positive correlation with Neuroticism (τ = .28, p<.01) and significant negative correlations with Agreeableness (τ = -.23, p<.01) and Conscientiousness (τ = -.25, p<.01).
- Tamas showed a significant positive correlation with Neuroticism (τ = .45, p< .01) and significant negative correlations with Agreeableness (τ = -.14, p<.01) and Conscientiousness (τ = -.33, p< .01).

All correlations were statistically significant and in theoretically expected directions.

IV. DISCUSSION

The present study examined the relationship between Triguna dimensions and the Big Five personality factors, integrating indigenous Indian psychological theory with contemporary trait psychology. The findings provide strong empirical support for conceptual convergence between Triguna-based personality energies and trait-based personality dimensions, reinforcing the relevance of indigenous frameworks in modern personality research.

The observed pattern of correlations indicates that Sattva is consistently associated with adaptive personality characteristics, as reflected in its negative association with Neuroticism and positive associations with Extraversion, Openness to Experience, Agreeableness, and Conscientiousness. This configuration aligns with classical descriptions of Sattva as representing clarity, balance, self-regulation, and psychological harmony. Prior research has similarly linked Sattva with emotional stability, psychological well-being, and adaptive functioning (Singh, 2008; Khanna et al., 2013). Recent comparative studies examining Triguna alongside the Big Five further support this convergence, demonstrating that sattvic tendencies correspond to adaptive trait profiles across student populations (Matani et al., 2025).

In contrast, Rajas was positively associated with Neuroticism and negatively associated with Agreeableness and Conscientiousness, indicating a personality configuration characterized by heightened emotional reactivity, restlessness, and reduced interpersonal regulation. From a Triguna perspective, excessive Rajas reflects desire-driven action and elevated arousal, which may manifest as impulsivity and emotional volatility. This pattern is consistent with earlier Indian studies linking Rajas to maladaptive behavioral tendencies (Singh, 2008; Betal, 2015) and with contemporary trait research associating similar profiles with poorer psychological outcomes (Hicks & Mehta, 2018; Zhao et al., 2025).

Similarly, Tamas demonstrated a positive relationship with Neuroticism and negative relationships with Agreeableness and Conscientiousness, reflecting a maladaptive personality orientation. Traditionally associated with inertia, confusion, and withdrawal, Tamas may translate into emotional dysregulation, low motivation, and impaired self-discipline at the trait level. The present findings are consistent with earlier work identifying Tamas as a vulnerability factor for psychological maladjustment (Khanna et al., 2013; Betal, 2015) and with Big Five research linking such trait configurations to reduced coping capacity

and mental well-being (Kananifar et al., 2024; Maharjan et al., 2025).

Taken together, these findings support an integrative personality framework in which Triguna dimensions function as foundational regulatory dispositions, while the Big Five traits represent observable behavioral and emotional expressions of these underlying energies. The systematic associations observed across frameworks suggest that Triguna theory complements trait-based models by offering explanatory depth regarding the regulation and expression of personality traits. Overall, the study strengthens the empirical bridge between indigenous Indian psychology and contemporary personality theory, highlighting the relevance of Triguna for cross-cultural personality research (Matani et al., 2025).

V. CONCLUSION

The present study shows that the Triguna dimensions are meaningfully related to the Big Five personality factors, indicating clear overlap between indigenous Indian personality concepts and modern trait-based models. The findings suggest that Sattva is linked with healthy and adaptive personality traits, whereas Rajas and Tamas are associated with emotional instability and less adaptive behavioral patterns, which is consistent with classical descriptions of the gunas.

The results support the idea that Triguna represents deeper psychological forces that shape how personality traits are expressed in daily life, while the Big Five describe the observable patterns of behavior and emotion. By combining both perspectives, the study provides a more complete understanding of personality functioning.

Overall, the findings highlight the relevance of Triguna theory in contemporary personality research and demonstrate its usefulness for cross-cultural studies. Integrating indigenous psychological frameworks with modern personality models can help explain personality in a more meaningful and culturally inclusive way.

LIMITATIONS AND FUTURE DIRECTIONS

Apart from its contributions, the study has certain limitations. The use of a correlational design limits causal interpretation of the relationships observed. The reliance on self-report measures may also introduce response biases. Additionally, the absence of control variables such as socioeconomic status or educational background may limit the generalization of the results. Future research may employ longitudinal or experimental designs and include additional demographic and contextual variables to further clarify the dynamic interplay between Triguna and contemporary personality traits.

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