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A COMPARISON OF BIG FIVE, PERSONALITY PLUS
AND ENNEAGRAM PERSONALITY MODELS USING
THE ANALYTIC HIERARCHY PROCESS

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A Comparison of Big Five, Personality Plus and Enneagram Personality Models Using the Analytic Hierarchy Process

Abstract

This study presents a comprehensive comparative evaluation of the Big Five, Enneagram, and Personality Plus personality models using the Analytic Hierarchy Process (AHP). The purpose is to determine the relative strengths of each model across five evaluation criteria: scientific validity, depth of insight, ease of use, practical applications, and flexibility. Drawing on expert judgments and the multi-criteria decision-making logic of AHP, the study develops a structured framework for comparing personality assessment systems. Findings indicate that the Big Five model achieves the highest overall ranking due to its strong empirical foundation, cross-cultural applicability, and extensive use in research and organizational settings. The Enneagram demonstrates notable strengths in self-awareness, coaching, and personal development, while Personality Plus provides accessibility and practical value for communication and interpersonal understanding. The study contributes to personality assessment literature by integrating theoretical analysis with decision science and offers recommendations for researchers, educators, counselors, and human resource professionals.

Keywords: Big Five; Enneagram; Personality Plus; Analytic Hierarchy Process; Personality Assessment; Multi-Criteria Decision Making

1. Literature Review

Personality assessment has become an important area of inquiry in psychology, education, counseling, and organizational management. Different personality models have been developed to explain individual differences in behavior, cognition, emotion, and interpersonal interaction. Among the most widely discussed frameworks are the Big Five Personality Model, the Enneagram, and Personality Plus. Although each model has gained popularity in different contexts, relatively few studies have attempted to compare them systematically using a structured decision-making framework.

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The Big Five model emerged from lexical and factor-analytic traditions and is generally regarded as the dominant scientific framework in personality psychology. The Enneagram evolved through philosophical, spiritual, and psychological traditions and emphasizes motivation, personal growth, and emotional awareness. Personality Plus is based on the classical temperament theory and focuses on practical communication and self-understanding. These models differ substantially in their theoretical assumptions, empirical support, and application domains.

Each of these personality models emerged from different historical contexts, influenced by distinct psychological traditions and cultural backgrounds.

1.1. Big Five Personality Traits (OCEAN Model)

Origins and Development: Early Foundations (1930s-1940s): Gordon Allport and Henry S. Odbert were among the first researchers to study personality traits systematically. They analyzed approximately 18,000 personality-related words from dictionaries, laying the groundwork for trait-based theories (Allport & Odbert, 1936).

Lexical Hypothesis (1950s-1960s): Raymond Cattell refined this work into 16 personality factors using factor analysis (Cattell, 1947). Hans Eysenck further reduced personality structure to three major dimensions: Extraversion, Neuroticism, and Psychoticism (Eysenck, 1972).

Emergence of the Big Five (1980s-1990s): Lewis Goldberg, Paul Costa, and Robert McCrae contributed to the development and consolidation of the five-factor model (OCEAN: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism) (Costa & McCrae, 1978; McCrae & Costa, 1980).

Current status: The Big Five is widely regarded as the most empirically supported personality model and is commonly used in research, business, and clinical assessment (Goldberg, 1992; John et al., 2008). Five evaluation criteria were selected: (1) Scientific Validity, (2) Depth of Insight, (3) Ease of Use, (4) Practical Applications, and (5) Flexibility and Adaptability. Scientific validity refers to empirical support and psychometric reliability. Depth of insight reflects the ability to explain motivations and behavioral patterns. Ease of use concerns accessibility and interpretability. Practical applications address usefulness in education, counseling, and organizations. Flexibility refers to applicability across contexts and cultures.

1.2. Enneagram of Personality

Origins and Development: Ancient Roots and Modern Formulation. Influences from early Sufi teachings, Christian mysticism, and Neoplatonism suggest that elements associated with the

Enneagram existed in earlier spiritual traditions. G. I. Gurdjieff (1920s), an Anatolian-Armenian mystic, introduced the Enneagram symbol in the modern West (Riso & Hudson, 2000). Oscar Ichazo (1950s-1960s), a Bolivian philosopher, organized nine personality types influenced by spiritual and psychological principles (Ichazo, 1982). Claudio Naranjo (1970s-1980s), a Chilean psychiatrist, integrated modern psychology into the system and helped establish it as a tool for self-awareness and therapy (Naranjo, 1994).

Current status: The Enneagram is used in self-development, coaching, and spiritual growth, although it lacks strong empirical validation (Sutton, 2012). It is valued for introspection, psychological insight, and spiritual dimensions.

1.3. Personality Plus (Four Temperaments Model)

Origins and Development: Ancient Greece (400 BCE). Hippocrates introduced the Four Temperaments based on bodily fluids: Sanguine (optimistic, social), Choleric (bold, leader-like), Melancholic (thoughtful, analytical), and Phlegmatic (calm, reserved) (Goodacre & Naylor, 2020). During the Middle Ages and the Renaissance, the Four Temperaments became central to medicine and philosophy. Florence Littauer (1980s) wrote Personality Plus, which modernized the Four Temperaments and made the model accessible for self-improvement and communication (Littauer, 1996).

Current status: Personality Plus is used mainly for personal development and relationship coaching, but it lacks strong empirical validation.

Table 1. Comparing Origins of Personality Models

Personality Model	Origins	Key Contributors	Scientific Basis	Primary Use Today
Big Five*	1930s–1990s	Allport, Cattell, Goldberg, Costa & McCrae	Strong empirical research	Psychology, HR, research
Enneagram**	Ancient → 20th century	Gurdjieff, Ichazo, Naranjo	Some psychological elements, but not rigorous	Personal growth, coaching, therapy
Personality Plus***	Ancient Greece → 1980s	Hippocrates, Littauer	No scientific validation	Communication, relationships, self-help

*Big Five = Best for academic and professional use (science-backed, structured).

**Enneagram = Best for deep personal exploration (roots in psychology & spirituality).

***Personality Plus = Best for quick, relatable insights (simple but lacks depth).

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Each personality model is applied differently in modern psychology, including clinical psychology, organizational behavior, self-development, and counseling. Table 2 presents the modern use of these three models in psychology.

Table 2. Comparing Use of Personality Models in Modern Psychology

Personality Model	Scientific Basis	Common Uses in Psychology	Used in Workplace?	Used in Therapy?	Used in Coaching?
Big Five*	Strong empirical research	Clinical psychology, HR, cognitive science	Yes, for hiring and performance	Yes, for personality disorders	Yes, for career coaching
Enneagram**	Some psychological support, but not rigorous	Self-awareness, mindfulness, relationship therapy	Yes, in leadership & conflict resolution	Yes, in emotional therapy	Yes, in coaching & counseling
Personality Plus***	No scientific backing	Communication, relationships, self-help	Yes, in team-building & leadership	Not widely used	Yes, in coaching & social skills training

*Gold standard for scientific research, hiring, and clinical assessments.

**Powerful for self-discovery, emotional intelligence, and coaching.

***Fun, simple, and useful for social skills, but lacks depth.

The Big Five appears to be the most scientifically validated and widely used model, while the Enneagram is particularly useful for emotional intelligence and personal growth. Personality Plus is simple, easy to use, and helpful for communication skills. Therefore, the strengths and weaknesses of each model are summarized in Table 3.

Table 3. Key Strengths & Weaknesses of Each Model

Criteria	Big Five*	Enneagram**	Personality Plus***
Scientific Validity	Empirical research-backed (+)	Some psychological basis, but not rigorous (~)	Lacks scientific support (X)
Depth of Insights	Broad but not deeply personal (+)	Explores core fears & motivations (+)	Simple; focuses on social behavior (X)
Ease of Use	Moderate complexity (~)	Can be deep and complex (~)	Very easy to grasp & apply (+)
Practical Applications	Used in psychology, HR, and coaching (+)	Used in self-development and therapy (+)	Used for casual self-understanding (~)
Flexibility and Adaptability	Universal across cultures/ industries (+)	Used in personal growth & relationships (+)	Best for social interactions (~)

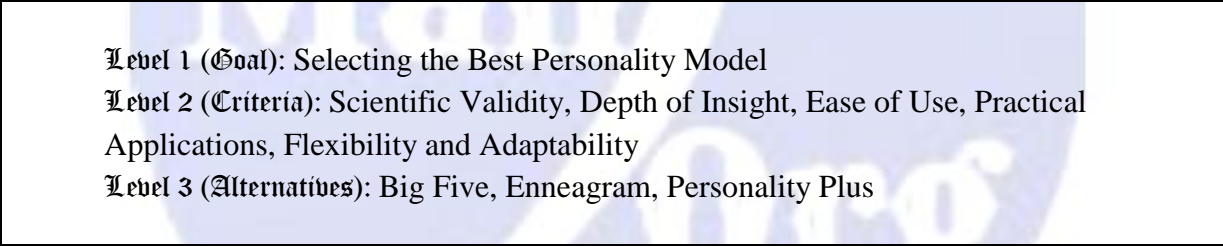
2. Methodology

This study employs the Analytic Hierarchy Process (AHP), a widely used multi-criteria decision-making method developed by Saaty (1980, 1990);. AHP enables qualitative judgments to be transformed into quantitative priorities through pairwise comparisons. A panel of experts with experience in psychology, education, management, and personality assessment evaluated the criteria and alternatives.

This study aims to compare the Big Five, Enneagram, and Personality Plus personality models using the Analytic Hierarchy Process (AHP) to determine their relative effectiveness according to selected evaluation criteria. AHP is a multi-criteria decision-making (MCDM) technique that is appropriate for comparative studies because it enables qualitative attributes to be weighted quantitatively. It provides a structured way to compare multiple models and convert expert judgments into numerical priority scores.

The primary objective of this study is to compare three influential personality models using a transparent and replicable multi-criteria decision-making methodology. Research Question: Which personality model demonstrates the strongest overall performance when evaluated according to scientific validity, depth of insight, ease of use, practical applications, and flexibility?

Figure 1. AHP Hierarchy Tree



2.1. Research Design & Selection of Criteria

The research design provides a systematic and balanced evaluation of the three personality models. Specialists with at least 10 years of experience in the field evaluated the criteria weights. The evaluation is based on five key factors:

- **Scientific Validity:** Measures empirical support and reliability in psychology.
- **Depth of Insight:** Assesses the level of self-awareness and psychological depth.
- **Ease of Use:** Determines how user-friendly and accessible the model is.
- **Practical Applications:** Evaluates usefulness in real-world settings such as HR, coaching, and therapy.
- **Flexibility and Adaptability:** Measures how well the model applies across cultures and industries.

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2.2. Data Collection and Analysis

Experts and practitioners rated the relative importance of criteria on a 1-9 scale (Saaty, 1990). The AHP calculation steps are: (1) build the pairwise comparison matrix; (2) calculate criteria weights using the normalized principal eigenvector; (3) compare the alternatives under each criterion; (4) calculate final weighted scores; and (5) check consistency to ensure that judgments are logically sound ($CR < 0.10$) (Saaty, 1980).

Consistency Formulation:

$$CI = (\lambda_{\max} - n) / (n - 1)$$

$$CR = CI / RI$$

(Where λ_{\max} is the principal eigenvalue, n is the matrix size, and RI is the Random Index).

Table 4. Grading Table (1–9 Scale)

Criteria	Big Five	Personality Plus	Enneagram
Scientific Validity	9	4	6
Depth of Insights	6	5	9
Ease of Use	5	9	6
Practical Applications	8	7	9
Flexibility & Adaptability	8	7	9

Table 5. Pairwise Comparison Matrix for the Criteria

Criteria	Scientific Validity	Depth of Insights	Ease of Use	Practical Applications	Flexibility & Adaptability
Scientific Validity	1.00	3.00	5.00	2.00	2.00
Depth of Insights	0.33	1.00	3.00	0.50	0.50
Ease of Use	0.20	0.33	1.00	0.25	0.25
Practical Applications	0.50	2.00	4.00	1.00	1.00
Flexibility & Adaptability	0.50	2.00	4.00	1.00	1.00

3. Results

The AHP analysis indicates that Scientific Validity received the highest priority weight. Consequently, the Big Five achieved the highest overall score due to its extensive empirical foundation. The Enneagram ranked second, reflecting strong performance in depth of insight and developmental applications. Personality Plus ranked third but demonstrated advantages in accessibility and communication-oriented applications.

The computed weights for each criterion are shown in Table 7. Scientific Validity is the most important criterion (37.83%), followed by Practical Applications and Flexibility and Adaptability (both 21.88%). The Consistency Index (CI) is 0.0121, and the Consistency Ratio (CR) is 0.0108. Since $CR < 0.10$, the matrix is consistent.

Table 7. Criteria Weights (Derived from Normalized Matrix)

Criteria	Weight
Scientific Validity	37.83%
Depth of Insights	12.75%
Ease of Use	5.66%
Practical Applications	21.88%
Flexibility & Adaptability	21.88%

Table 8. Final AHP Ranking (Based on Weighted Scores)

Model	Final Score	Key Strength
1. Big Five	37.7%	Best for scientific accuracy, research, and HR applications
2. Enneagram	35.8%	Best for deep self-awareness, emotional intelligence, and coaching
3. Personality Plus	26.5%	Best for simple, quick personality insights and communication skills

3.1. Sensitivity Analysis

A sensitivity analysis was conducted to test the robustness of the ranking. If the weight of "Scientific Validity" is significantly reduced (e.g., from 37.83% to below 20%) and the weight of "Ease of Use" or "Depth of Insight" is increased, the Enneagram model surpasses the Big Five in the

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overall ranking. This demonstrates that the Big Five's dominance is highly sensitive to the emphasis placed on empirical rigor by the decision-makers.

4. Discussion

The AHP ranking provides findings that are broadly consistent with the literature, but the results also reveal important differences. Based on the weights and grades used in this study, the Big Five receives the highest overall score because scientific validity has the strongest weight. The Enneagram follows closely due to its high scores in depth of insight, practical applications, and flexibility. Personality Plus ranks third because it is easy to use but has weaker scientific support and less psychological depth.

The findings support the argument that different personality models serve different purposes. The Big Five is most appropriate for scientific research and evidence-based assessment. The Enneagram is particularly useful for self-reflection, coaching, and leadership development. Personality Plus remains valuable for introductory personality education and interpersonal communication training. The results also illustrate the value of AHP as a methodology for comparing conceptual frameworks.

Although this study is valuable, it has limitations. A primary limitation is inherent to the AHP methodology itself, which relies heavily on expert judgments, making the process susceptible to subjective bias. Different expert panels may generate different pairwise comparison matrices and priority weights. The professional backgrounds of the evaluating experts—for instance, whether they are clinical psychologists who naturally prioritize scientific validity, or human resources professionals who might prioritize practical application—can directly influence the 1-9 pairwise comparison scores. Future research should incorporate larger expert groups, empirical datasets, and cross-cultural validation procedures. Further research should also apply these models in educational and workplace settings with larger samples and real test data. Future studies could also include additional personality assessments and examine emerging approaches to personality subtypes.

5. Implications for Education and Management

Educational institutions can use the findings to select appropriate personality frameworks according to their objectives. Researchers may prioritize the Big Five for rigorous empirical studies, whereas counselors and coaches may find the Enneagram more beneficial for developmental interventions. Personality Plus can be useful for introductory training programs and communication workshops.

Conclusion

The study concludes that the Big Five model demonstrates the strongest overall performance when evaluated through AHP. Nevertheless, the Enneagram and Personality Plus provide distinct advantages in developmental and practical contexts. Rather than viewing these frameworks as competing systems, practitioners should recognize their complementary strengths and select the most appropriate model according to specific objectives.

References

- Allport, G. W., & Odbert, H. S. (1936). Trait-names: A psycho-lexical study. *Psychological Monographs*, 47(1), i-171. <https://doi.org/10.1037/h0093360>
- Cattell, R. B. (1947). Confirmation and clarification of personality factors. *Psychometrika*, 13, 197-220.
- Costa, P. T., & McCrae, R. R. (1978). Objective personality assessment. In M. Storandt, I. C. Siegler, & M. F. Elias (Eds.), *The clinical psychology of aging* (pp. 119-143). Springer. https://doi.org/10.1007/978-1-4684-3342-5_5
- Eysenck, H. J. (1972). Human typology, higher nervous activity, and factor analysis. In V. D. Nebylitsyn & J. A. Gray (Eds.), *Biological bases of individual behavior* (pp. 165-181). Academic Press. <https://doi.org/10.1016/B978-0-12-515350-8.50016-8>
- Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment*, 4(1), 26-42.
- Goodacre, C. J., & Naylor, W. P. (2020). Evolution of the temperament theory and mental attitude in complete denture prosthodontics: From Hippocrates to M. M. House. *Journal of Prosthodontics*, 29(7), 594-598.
- Ichazo, O. (1982). *Interviews with Oscar Ichazo*. Arica Institute Press.
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114-158). Guilford Press.
- Littauer, F. (1996). *Personality Plus*. Revell.
- McCrae, R. R., & Costa, P. T. (1980). Openness to experience and ego level in Loewinger's Sentence Completion Test: Dispositional contributions to developmental models of personality. *Journal of Personality and Social Psychology*, 39(6), 1179-1190. <https://doi.org/10.1037/h0077727>
- Naranjo, C. (1994). *Character and neurosis: An integrative view*. Gateways/IDHBB.
- Riso, D. R., & Hudson, R. (2000). *Understanding the enneagram: The practical guide to personality types*. Houghton Mifflin Harcourt.
- Saaty, T. L. (1980). *The Analytic Hierarchy Process*. McGraw-Hill.

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Saaty, T. L. (1990). The analytic hierarchy process in conflict management. *International Journal of Conflict Management*, 1(1), 47-68.

Sutton, A. (2012). But is it real? A review of research on the Enneagram. *Enneagram Journal*, 5*, 5-20.

