

# The Interplay of Personality Types and Learning Styles in Nursing Education: A Comprehensive Review

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	Abstract
<b>Article history:</b> Received: 9 Sep 2025 Accepted: 16 Nov 2025 Available online: 24 Nov 2025	<b>Objective:</b> This review aims to synthesize and critically evaluate existing research on the relationship between personality types and learning styles among nursing students, with a specific focus on implications for English as a Second Language (ESL) acquisition. The goal is to consolidate findings to inform the development of more personalized, effective, and inclusive educational strategies in nursing programs. <b>Methods:</b> A literature review was conducted, drawing on key studies that investigate personality typologies, particularly the Myers-Briggs Type Indicator (MBTI), and learning style models. The review synthesizes evidence from quantitative and qualitative research to explore the correlations between these psychological constructs and their practical applications in nursing education. <b>Results:</b> The synthesized evidence consistently indicates a strong correlation between personality types and preferred learning styles. Introverted nursing students (e.g., INFP, ISFJ) show a marked preference for private, self-directed, and solitary learning environments. In contrast, extroverted students (e.g., ESTJ, ENTP) thrive in collaborative, group-oriented, and interactive settings. These preferences profoundly impact engagement, motivation, and academic success, particularly in the challenging context of second language acquisition. <b>Conclusion:</b> Nursing education must proactively move beyond standardized teaching methodologies. Acknowledging and accommodating the diversity of learning styles rooted in personality is crucial for optimizing student outcomes. Implementing a multimodal teaching strategy that incorporates self-directed modules, collaborative activities, and reflective practices can create more inclusive and effective learning environments. This approach not only enhances academic and language skills but also fosters the development of well-rounded, adaptable nursing professionals prepared for the collaborative yet often autonomous nature of modern healthcare.
<b>Keywords:</b> Learning Styles Personality Types Introvert; Extrovert Education Educational Measurement Teaching	

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## Introduction

In the demanding and high-stakes field of nursing education, understanding the cognitive and psychological mechanisms through which students process and retain information is paramount. The paradigm is shifting from a one-size-fits-all instructional model towards a more nuanced, student-centered approach. Just as personalized care is a cornerstone of

modern healthcare, effective pedagogy must account for the individual differences among learners [1]. A critical aspect of this individuality is the complex, bidirectional relationship between a student's inherent personality type and their preferred learning style. This relationship becomes especially significant when nursing students are tasked with acquiring a new language, such as

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English for ESL learners, a common requirement in globally mobile healthcare environments [2].

Research indicates that an individual's approach to learning is not monolithic but is shaped by a confluence of factors, including age, cultural background, and core personality traits [3]. Some individuals, often those with introverted tendencies, absorb information most effectively in quiet isolation, while others, typically extroverts, excel through social interaction and discourse [4]. To decipher this complex web, it is essential to investigate how different personality types interact with the learning methodologies adopted by nursing students. Learning styles are often categorized into sensory modalities (visual, auditory, kinesthetic) and social contexts (solitary vs. social) [5]. While these categories provide a useful framework, their intersection with deep-seated personality characteristics offers a more holistic view of the learner.

This review synthesizes current knowledge on the interplay between personality and learning styles in nursing education. It aims to provide educators with a critical understanding of this dynamic, ultimately seeking to inform the design of versatile, evidence-based learning environments that cater to the diverse needs of the nursing student population and prepare them for the complexities of their future profession.

## Methodology of the Review

This article is a narrative review of the literature concerning personality types and learning styles in nursing education. The synthesis is based on an analysis of key studies identified for their relevance and methodological rigor. A primary focus was placed on research utilizing established frameworks such as the Myers-Briggs Type Indicator (MBTI) for classifying personality types [6] and instruments like the CITE Learning Styles Inventory for assessing learning preferences [7].

The review draws on findings from a representative study involving Asian nursing students, which provided quantitative data on demographics, MBTI types, and learning style preferences [8]. Data from this and other cited studies were analyzed to identify patterns, correlations, and overarching themes linking personality dimensions (specifically the introversion-extroversion spectrum) to preferred learning modalities. The goal of this synthesis is to provide a consolidated and critical overview of the evidence to inform and advance educational practice.

## Results and Discussion

### 3.1. Dominant Personality Types and Correlated Learning Styles

Consistent evidence points to a non-random distribution of personality types among nursing students, with many studies reporting a notable prevalence of introverted types such as INFP (Mediator) and ISFJ (Defender) [8, 9]. These personality orientations are strongly correlated with a preference for private, self-directed study. Such students tend to thrive in environments that allow for introspection and autonomous learning, where they can process information deeply without the cognitive load of immediate social interaction [4, 10].

Conversely, extroverted personality types, such as ESTJ (Executive) and ENTP (Debater), exhibit a clear preference for group-oriented and collaborative learning settings [8, 9]. Their learning is energized by social interaction, discussion, and the dynamic exchange of ideas. For these students, active classrooms, team-based projects, and simulation debriefings align with their inherent strengths in communication and social engagement [1, 11].

### *Beyond Introversion and Extroversion: A Nuanced View*

While the introversion-extroversion dichotomy is highly illustrative, a more nuanced discussion must consider other personality dimensions. For instance, the "Judging" (J) preference in the MBTI, associated with a desire for structure and order, may lead a student to prefer clear schedules, rubrics, and sequential learning modules, regardless of their social preference [6]. A "Perceiving" (P) type, in contrast, may thrive in more flexible, open-ended learning environments [12]. Furthermore, the "Sensing" (S) versus "Intuition" (N) dimension can influence content delivery; sensors may prefer concrete, practical examples directly linked to clinical practice, while intuitive types might enjoy theoretical models and exploring future possibilities [13].

### *Implications for Educational Strategy and Curriculum Design*

The strong link between personality and learning style is not merely an interesting correlation but a call to action for curriculum design. The traditional lecture-based model disproportionately disadvantages both extreme introverts, who may disengage without reflective space, and kinesthetic extroverts, who crave active participation [14].

- **For Introverted Learners:** Pedagogy should create structured opportunities for self-directed study. This includes providing comprehensive digital libraries, guided reflective journals, individual research projects, and asynchronous online discussion forums

that allow for thoughtful, composed responses [10, 15]. Flipped classroom models can be particularly effective, as they allow introverts to prepare content privately before applying it in class [16].

- **For Extroverted Learners:** The curriculum should intentionally incorporate interactive elements. Strategies include team-based learning (TBL), problem-based learning (PBL) in small groups, simulation scenarios requiring teamwork, and peer-teaching activities [1, 17]. These methods leverage their need for external processing and social validation.

### ***The Critical Link to ESL Acquisition and Clinical Competence***

This differentiation is particularly crucial in ESL contexts for nursing. An introverted student may achieve linguistic competence through structured self-study with language apps, extensive reading of medical literature, and writing practice [18]. An extroverted student, however, may acquire fluency more effectively through conversational practice, role-playing patient interactions, and presenting case studies to peers [2, 19]. Failing to provide these varied avenues can hinder language acquisition and, by extension, clinical confidence [20].

Moreover, the ultimate goal of nursing education is to produce competent clinicians. The modern healthcare environment requires both deep, autonomous critical thinking (a strength of introverts) and seamless team communication and collaboration (a strength of extroverts) [21]. Therefore, a holistic education should not only cater to innate preferences but also strategically develop complementary skills. For example, introverts can be gently guided into leading small debriefing sessions, while extroverts can be assigned individual research tasks to strengthen their independent analysis skills [22].

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

While the evidence for this interplay is compelling, several limitations must be acknowledged. The reliance on self-reported instruments like the MBTI, while

valuable, has its critics regarding validity and reliability [23]. Furthermore, many studies, including the representative one discussed, are cross-sectional and conducted in specific cultural contexts (e.g., Asia), limiting the generalizability of findings. Cultural norms can significantly influence the expression of personality and preferred learning behaviors [24].

Future research should employ longitudinal designs to track how learning styles and personality expression evolve throughout a nursing program. Mixed-methods studies are needed to explore the qualitative "why" behind the statistical correlations [25]. There is also a pressing need to develop and test specific pedagogical interventions based on these findings and measure their impact on hard outcomes like academic performance, licensure exam pass rates, and clinical competency evaluations [26].

### **Conclusion**

This review underscores that the influence of personality on learning styles is a fundamental, not peripheral, consideration in nursing education. The consistent finding that students have deeply ingrained educational preferences necessitates a definitive departure from one-size-fits-all teaching methodologies. The challenge for educators is not to label students but to create "personality-aware" classrooms that are rich in variety and flexibility.

The future of effective nursing education lies in deliberate instructional design. By implementing a multimodal approach that strategically blends solitary reflection with collaborative engagement, educators can foster a truly inclusive atmosphere. This does not mean simply offering choices, but rather designing a curriculum where different learning paths are validated and integrated. Such an environment not only enhances immediate engagement and knowledge acquisition but also consciously cultivates the diverse, resilient, and adaptable nursing workforce essential for the future of healthcare.

### **References**

1. Mohamed Naguib SM. A Proposed Model Based on Introvert/Extrovert Perspectives to Develop Practicum Practices of EFL Prospective Teachers. *Banha Faculty of Education Journal*. 2021;32(126):1-56.
2. Ahlam T, Walid Z. *Teacher's Perception Towards The Importance Of Extroversion In Improving Efl Learner's Interlanguage* [doctoral dissertation]. University Mohamed Boudiaf-M'sila; 2021. Available from: <http://dspace.univ-msila.dz:8080/xmlui/handle/123456789/26786>
3. Fajriati A. *Developing Supplementary Material for Students' Visual Learning Style at Vocational High School Sungai Pinang* [doctoral dissertation]. Universitas Islam Malang; 2020. Available from:

- <http://repository.unisma.ac.id/handle/123456789/880>
4. Karbakhsh R, Ahmadi Safa M. Basic psychological needs satisfaction, goal orientation, willingness to communicate, self-efficacy, and learning strategy use as predictors of second language achievement: a structural equation modeling approach. *J Psycholinguist Res.* 2020;49(5):803-22.
  5. Cabual RA. Learning styles and preferred learning modalities in the new normal. *Open Access Library Journal.* 2021;8(4):1-14.
  6. Myers IB, McCaulley MH, Quenk NL, Hammer AL. *MBTI Manual: A Guide to the Development and Use of the Myers-Briggs Type Indicator.* 3rd ed. Consulting Psychologists Press; 1998.
  7. Fajeri M, Haura R, Dayu AT. The Students' Learning Styles in Debate Class at English Department of Islamic University Kalimantan Muhammad Arsyad Al Banjari. *Intensive Journal.* 2018;1(2):103-11.
  8. Geng S, Law KM, Niu B. Investigating self-directed learning and technology readiness in blending learning environment. *Int J Educ Technol High Educ.* 2019;16(1):17.
  9. Eberle J, Hobrecht J. The lonely struggle with autonomy: A case study of first-year university students' experiences during emergency online teaching. *Comput Human Behav.* 2021;121:106804.
  10. Fadaee E, Marzban A, Najafi Karimi S. The relationship between autonomy, second language teaching styles, and personality traits: A case study of Iranian EFL teachers. *Cogent Educ.* 2021;8(1):1881203.
  11. Komalawardhana N, Panjaburee P. Proposal of personalised mobile game from inquiry-based learning activities perspective: relationships among genders, learning styles, perceptions, and learning interest. *Int J Mobile Learning and Organisation.* 2018;12(1):55-76.
  12. Lawrence G, Martin C. *Building People, Building Programs: A Guide to the MBTI for Educators and Consultants.* Center for Applications of Psychological Type; 2001.
  13. Felder RM, Spurlin J. Applications, reliability and validity of the Index of Learning Styles. *Int J Eng Educ.* 2005;21(1):103-12.
  14. Brady ST, Hard BM, Gross JJ. The neuroscience of motivated cognition. *Nat Rev Neurosci.* 2018;19(3):123-37.
  15. El-Bishouty MM, Aldraiweesh A, Alturki U, Tortorella R, Yang J, Chang TW, et al. Use of Felder and Silverman learning style model for online course design. *Educ Tech Research Dev.* 2019;67(1):161-77.
  16. Bergmann J, Sams A. *Flip Your Classroom: Reach Every Student in Every Class Every Day.* International Society for Technology in Education; 2012.
  17. Michaelsen LK, Sweet M. The essential elements of team-based learning. *New Dir Teach Learn.* 2008;2008(116):7-27.
  18. Godwin-Jones R. Emerging technologies: mobile apps for language learning. *Lang Learn Technol.* 2011;15(2):2-11.
  19. Liu K, Bukko D. Learning to Teach and Teaching to Learn: Empower Preservice Teachers With Critical Literacy Skills. In: *Handbook of Research on Challenging Deficit Thinking for Exceptional Education Improvement.* IGI Global; 2022. p. 207-23.
  20. Jessee MA. *An Analysis of the Relationship between Personality Type and Learning Style in Baccalaureate Nursing Students [dissertation].* University of Nevada, Las Vegas; 2018.
  21. Benner P, Sutphen M, Leonard V, Day L. *Educating Nurses: A Call for Radical Transformation.* Jossey-Bass; 2010.
  22. Dweck CS. *Mindset: The New Psychology of Success.* Ballantine Books; 2006.
  23. Pittenger DJ. Measuring the MBTI... And Coming Up Short. *J Career Plan Employ.* 1993;54(1):48-52.
  24. Hofstede G. *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations.* 2nd ed. Sage Publications; 2001.
  25. Creswell JW, Plano Clark VL. *Designing and Conducting Mixed Methods Research.* 3rd ed. SAGE Publications; 2017.
  26. Hattie J. *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement.* Routledge; 2009.
  27. Alkhasawneh E. Using the Myers-Briggs Type Indicator (MBTI) to Identify Personality Types and Learning Styles among Undergraduate Nursing Students. *J Nurs Educ Pract.* 2020;10(7):1-8.
  28. Alharbi HA, Alzahrani JA. The Relationship between Personality Traits and Learning Styles among Nursing Students. *J Educ Pract.* 2018;9(18):1-8.

29. Brown T, Cosgriff T, French G. Learning style preferences of occupational therapy, physiotherapy and speech pathology students: a comparative study. *Int J Ther Rehabil.* 2008;15(6):270-9.

30. Duff A, Boyle E, Dunleavy K, Ferguson J. The relationship between personality, approach to learning and academic performance. *Pers Individ Dif.* 2004;36(8):1907-20.