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The Relationship of EFL Students' Personality Traits and Their Preferred Language Learning Styles

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Abstract
This study explores the relationship between EFL students' personality traits and their preferred language learning styles at Nam Can Tho University. Rooted in the Five-Factor Model, namely *Openness, Conscientiousness, Extraversion, Agreeableness*, and *Neuroticism*, the research aims to identify how these psychological characteristics influence students' learning preferences. Employing a mixed-methods approach, the study gathered data through questionnaires and semi-structured interviews with 278 English-major students. Quantitative findings revealed statistically significant correlations between several traits and specific learning style: *Extraversion* and *Agreeableness* were linked to social and *Auditory* preferences; *Conscientiousness* correlated with structured and *Visual* learning style; while *Openness* showed the strongest associations across a wide range of learning styles. In contrast, *Neuroticism* did not exhibit consistent relationships with any learning styles. Qualitative data further supported these results by providing in-depth insights into students' learning behaviors and motivations. The study highlights the importance of personality-informed pedagogy in English language instruction, suggesting that more personalized and learner-centered teaching strategies can lead to improved engagement and academic success among EFL students in Vietnam.

Keywords: Personality Traits (PT), Learning Styles (LS), EFL Students

1. Introduction

For many years, English has been a key component of Vietnam's education system, serving as an important tool to equip students for the demands of a more interconnected world. However, many Vietnamese EFL learners face significant difficulties in achieving. Struggles with sentence construction and effective use of English often stem from a lack of practical, real-world experience. Furthermore, traditional teaching methods can lead to boredom and a decrease in motivation, which in turn affects students' engagement and enthusiasm. To overcome these deterrents, there has been a developing emphasis on student-centered learning, empowering learners to take a dynamic part in their language development.

Among the various factors that influence the learning process, personality traits have been recognized as key influences on how students engage with and approach their studies (Dörnyei & Skehan, 2003) [11]. Personality traits (PT), as portrayed by McCrae et al. (2003) [31], include an individual's steady designs of contemplations, feelings, and behaviors, all of which play a critical part in the learning experience. The Five-Factor Model, also known as OCEAN, classifies these traits into *Openness, Conscientiousness, Extraversion, Agreeableness*, and *Neuroticism*, providing valuable insights into how PT influences language LS (McCrae & Costa, 1987) [30]. Whereas previous investigations have highlighted the effect of these traits on dialect learning, there remains limited understanding of how these characteristics impact EFL students in Vietnam, especially at the tertiary level. This study aims to investigate the relationship between PT and LS among English majors at private university in Vietnam. Employing a mixed-methods design, it integrates survey and interview data to explore how personality shapes learning preferences. The findings are expected to inform more personalized and effective English language instruction in Vietnam.

2. Literature Review

2.1 Personality traits

Over the decades, the term 'personality traits' has been defined by different researchers in several ways. Cervone and Pervin (2013) [5] defined PT as the psychological traits that shape a person's consistent and unique patterns of emotions, thoughts, and behaviors. Personality refers to the unique ways an individual thinks, feels, and behaves, shaped by both conscious and unconscious psychological processes that influence these patterns (Funder, 2015) [16].

The Big Five model stands out as one of the first well-known and widely utilized (Goldberg, 1990) [18]. It comprises five key traits: *Openness* (O), *Conscientiousness* (C), *Extraversion* (E), *Agreeableness* (A), and *Neuroticism* (N) exploration (McCrae & Costa, 1987) [30], which is usually called with the acronym OCEAN (Cervone & Pervin, 2013) [5]. While many more specific traits can be identified, the five main traits in this model are strongly backed by years of research (Dewaele, 2012) [9]. Each of these traits can be explained as follows:

Openness describes an individual's readiness to be curious, imaginative, investigative, and to engage in exploration (McCrae & Costa, 1987) [30]. Creativity is a key aspect of *Openness*, enhancing the ability for abstract and lateral thinking (Kakamad et al, 2024) [22]. Individuals with high *Openness* seem to excel academically and feel at ease when reflective learning is incorporated into their courses (Komarraju et al., 2011) [27].

People who are conscientious are often responsible, organized, and self-disciplined (McCrae & Costa, 1987) [30]. People high in *Conscientiousness* often engage in proactive planning and analyze their behavior to understand its effects on others. This trait is commonly seen in project management teams and human resources departments, where it helps build a balanced team structure and supports overall team development (McCrae & Costa, 1987) [30].

Extraversion is characterized by a propensity for assertiveness and sociability, as well as a tendency to experience positive emotions and pursue excitement (McCrae & Costa, 1987) [30].

According to Cao and Meng (2020) [4], *Extraversion* may be advantageous for foreign language learning, especially in the area of oral communication. This might not be surprising, as extroverted individuals are typically more willing to take risks in communication and are less concerned about possible mistakes they might encounter (Cao & Meng, 2020) [4].

Highly agreeable individuals are typically kind, supportive, empathetic, friendly, and considerate toward others (McCrae & Costa, 1987) [30]. They are recognized for their compassion, forgiveness, dependability, and selflessness.

Individuals with high *Neuroticism* often struggle with anxiety, worry, nervousness, and emotional instability (McCrae & Costa, 1987) [30]. They also tend to rely on ineffective coping styles, engage in self-blame, and react with hostility (McCrae & Costa, 1987) [30].

2.2 Learning styles

The term 'learning style' first emerged when researchers sought ways to align course presentation and materials with individual learner needs (Kirby, 1979) [24]. Reid (1995) [40] emphasized that LS are not simply preferences but deeply ingrained patterns that influence how learners absorb and acquire knowledge, especially in foreign language learning. Pham et al. (2024) [38] highlighted that LS reflect an individual's distinct cognitive, emotional, and physiological traits, influencing their preferred approach to acquiring and retaining knowledge across different educational settings.

Drawing from multiple perspectives, the key attributes of LS can be summarized as follows:

- LS are specific to each individual.
- They encompass cognitive, emotional, and physiological aspects.
- They define an individual's preferred method of receiving, processing, and retaining information in a learning setting.
- LS tend to remain relatively consistent over time.

Reid (1995) [40] developed the Perceptual Learning Style Preference Questionnaire (PLSPQ) with the specific aim of assessing learning preferences among foreign language learners. This model assesses students' learning preferences based on their sensory perceptions, including *Visual*, *Auditory*, and *Kinesthetic* modalities. Additionally, it considers two social dimensions of learning: *Group* and *Individual* preferences.

- ***Visual*:** Renou (2008) [41] stated that *Visual* learners primarily depend on visual cues to comprehend and retain information.. They are often described as having a vivid imagination (Davis, 2007) [7] and demonstrate strong memory retention when utilizing visual aids like maps, diagrams, flashcards, charts, and graphs (Dunn, 1986) [12].
- *Auditory* learning refers to a style where individuals absorb information most efficiently by listening. Renou (2008) [41] described *Auditory* learners as those who benefit from spoken words, whether through lectures, discussions, or verbal explanations. Juris et al. (2009) [21] further noted that these learners engage best with audio-based materials such as audiobooks, podcasts, CD-ROMs, and videos, as such resources align with their natural preference for *Auditory* input.
- **Kinesthetic:** Renou (2008) [41] stated that these learners primarily process information through body movements, making physical activities such as moving, touching, or manipulating objects essential for grasping new concepts. Armstrong (2004) [1] further explained that students with *Kinesthetic* intelligence thrive when given opportunities to move, quickly learn physical skills, and use movement as a memory aid.
- **Tactile:** According to Renou (2008) [41], this LS emphasizes using hands to manipulate objects, allowing learners to gain control over their learning experience. Unlike *Kinesthetic* learners, who rely on whole-body movement, *Tactile* learners focus on touch and object manipulation to absorb information (Dörnyei, 2005) [10]. *Tactile* learners benefit from hands-on activities such as laboratory experiments, model building, and working with physical materials.
- **Group:** Individuals who prefer a *Group* learning style often believe that interacting with peers enhances their learning experience. Renou (2008) [41] found that students who engaged in group-based activities demonstrated higher levels of understanding and retention compared to those who studied alone.
- **Individual:** In contrast to group learners, individuals who prefer an independent learning style believe they achieve the best results when studying alone. Renou

(2008) [41] observed that independent learners tend to have higher levels of concentration, enabling them to process information more efficiently.

2.3 Related studies

Several studies have examined the relationship between PT and LS, providing valuable insights into how students' characteristics influence their learning preferences.

Yanardöner et al. (2014) [45] examined the predominant LS and PT of 224 undergraduate students, as well as the relationships between them. The study employed a quantitative research design with descriptive statistical analysis. Data were collected through three questionnaires: a demographic data form, Kolb's Learning Style Inventory, and the Big Five Inventory. Statistical analysis was conducted using SPSS (version 17.0). The results showed that 'assimilator' was the most common LS among students, with no significant correlation between LS and gender, academic department, or Grade Point Average (GPA). Similarly, *Agreeableness* was identified as the most prevalent personality trait, and no significant associations were found between PT and gender, department, or GPA. The study also revealed no notable connection between students' LS and their PT.

Seyal et al. (2019) [44] explored the relationship between students' PT and LS in a higher education institution in Brunei Darussalam. The study employed a quantitative survey with a random sampling approach, collecting data from ninety respondents. The analysis, conducted using the Chi-square test, was based on the Big Five (OCEAN) personality theory and the VARK Learning Style model to identify dominant PT and learning preferences. The results indicated that *Openness* and *Agreeableness* were the most prevalent PT among students. Notably, *Extraversion* showed no significant correlation with any LS. However, both *Openness* and *Agreeableness* were strongly associated with the *Kinesthetic* LS, suggesting that students with these traits learn best through hands-on, interactive experiences. Additionally, *Conscientious* students predominantly favored reading as their preferred LS, while *Neuroticism* showed a significant link to the *Visual* LS. These insights highlight the importance of understanding students' learning preferences, enabling educators to design more effective and engaging teaching methods beyond traditional classroom instruction.

Expanding on this topic, Khuntia and Behera (2024) [23] examined gender differences in the Big Five PT and LS, as well as the relationship between these traits and learning preferences among adolescents in Odisha. Data were collected from three state universities using the VARK questionnaire and the Big Five Inventory, with 225 participants aged 18 to 21 years (mean age = 19.38 ± 1.26) selected through purposive sampling. SPSS was used for data analysis, employing one-way MANOVA and Pearson's correlation coefficient. The findings indicate a significant gender difference in *Conscientiousness*, with boys exhibiting higher *Conscientiousness* traits than girls. Additionally, girls showed a preference for *Auditory* and read/write LS, while boys favored *Visual* and *Kinesthetic* LS. The results also revealed distinct associations between PT and LS. Overall, the study suggests that boys tend to be more rational, thoughtful, goal-oriented, and curious about acquiring knowledge while being less impulsive than girls.

3. Research Methodology

3.1 Research aim and questions

The research aims to explore the relationship between English-major students' PT and their LS preference. It centers on the Big Five traits, *Extraversion*, *Agreeableness*, *Neuroticism*, *Conscientiousness*, and *Openness*, and how these characteristics impact students' inclinations for learning English. This study uses a mixed-methods design, combining quantitative surveys and qualitative interviews. The survey, involving 278 English-major students from 4 years at Nam Can Tho University. By understanding the relationship between these characteristics and LS, the study seeks to provide valuable insights that can enhance more effective teaching styles, increase student engagement, and eventually improve English proficiency among EFL learners in the Vietnamese context.

The key problem of this study is best highlighted by exploring the following questions:

- What is the relationship between English-major students' personality traits and their language learning styles?
- To what extent do each personality traits correlate with English-major students' learning styles?
- Which learning styles are most strongly associated with particular personality traits among English-major students?

3.2 Research instrument

This study used two questionnaires to collect data, the Big Five Inventory BFI, developed by Goldberg (1993) [18] and the Perceptual Learning Style Preference Questionnaire, developed by Reid (1987) [39]. Additionally, all items across both standardized instruments were rated on a five-point Likert scale, ranging from Strongly Disagree (1) to Strongly Agree (5). The responses were subsequently encoded into numerical values for data analysis, with each item being assigned a corresponding number to facilitate quantitative analysis.

To complement the quantitative findings from the questionnaire, semi-structured interviews were conducted with five participants. These individuals were purposely selected for semi-structured interviews. The selection criterion was based on their highest mean scores in each of the five PT based on their responses to the Big Five Inventory.

4. Results

4.1 Openness and language learning styles

Table 1: Correlation between Openness and language learning styles among English-major students at DNC

Learning styles	Openness	Pearson Correlation	Sig. (2-tailed)	N
Visual		0.22**	0.01	278
Auditory		0.32**	0.01	278
Kinesthetic		0.36**	0.01	278
Tactile		0.43**	0.01	278
Group		0.19**	0.01	278
Individual		0.31**	0.01	278

**. Correlation is significant at the 0.01 level (2-tailed).

The *Tactile* LS displayed the strongest correlation with *Openness* (r = 0.43, p = 0.01), which fell within the moderate correlation category.

The *Kinesthetic* LS followed closely, with a moderate

correlation of r = 0.36 (p = 0.01). This value suggested a consistent pattern in which students high in *Openness* tended to gravitate towards physically engaged learning methods.
Similarly, *Auditory* LS recorded a weak to moderate positive correlation with *Openness*, with r = 0.32 (p = 0.01).
The *Individual* LS also demonstrated a weak to moderate correlation with *Openness* (r = 0.31, p = 0.01). While this correlation approached the lower boundary of the moderate range, it remained statistically significant and aligned with the trend of *Openness* being linked to a variety of learning modalities.
In contrast, the *Visual* LS showed a weaker yet still significant correlation with *Openness* (r = 0.22, p = 0.01). This figure fell within the weak correlation range, indicating a modest tendency for students with higher *Openness* to prefer *Visual* inputs.
Lastly, the *Group* LS exhibited the weakest correlation among the six, with r = 0.19 (p = 0.01). Despite being statistically significant, this correlation remained in the weak range, suggesting that while *Openness* was related to group-based learning, the association was relatively limited in strength.

4.2 Conscientiousness and language learning styles

Table 2: Correlation between Conscientiousness and language learning styles among English-major students at DNC

Learning styles	Conscientiousness	Pearson Correlation	Sig. (2-tailed)	N
Visual		0.23**	0.01	278
Auditory		0.22**	0.01	278
Kinesthetic		0.13*	0.04	278
Tactile		0.23**	0.01	278
Group		0.22**	0.01	278
Individual		0.08	0.17	278

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

The *Visual* and *Tactile* learning styles exhibited the strongest correlations with *Conscientiousness* (r = 0.23, p = 0.01), indicating that conscientious students tended to prefer structured visual aids (e.g., charts, diagrams) and hands-on activities. Similarly, positive correlations were observed with Group (r = 0.22, p = 0.01) and *Auditory* (r = 0.22, p = 0.01) learning styles, suggesting that these students could thrive in cooperative tasks and *Auditory*-based environments such as lectures and discussions. The Kinesthetic style also showed a weaker yet significant correlation (r = 0.13, p = 0.04), implying a moderate preference for physical, movement-based learning activities.
In contrast, the Individual learning style did not show a statistically significant relationship with *Conscientiousness* (r = 0.08, p = 0.17), suggesting that conscientious learners were not particularly inclined toward studying in isolation.

4.3 Extraversion and language learning styles

Table 3: Correlation between Extraversion and language learning styles among English-major students at DNC

Learning styles	Extraversion	Pearson Correlation	Sig. (2-tailed)	N
Visual		0.13*	0.03	278
Auditory		0.16**	0.01	278
Kinesthetic		0.18**	0.01	278
Tactile		0.15*	0.07	278
Group		0.18**	0.01	278
Individual		-0.07	0.22	278

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Among the six LS, five exhibited statistically significant positive correlations with *Extraversion*: *Kinesthetic* (r = 0.18, p = 0.01), *Group* (r = 0.18, p = 0.01), *Auditory* (r = 0.16, p = 0.01), *Tactile* (r = 0.15, p = 0.02), and *Visual* (r = 0.13, p = 0.03). These results suggested that English-major students who exhibited higher levels of *Extraversion* are more likely to prefer interactive, physically engaging, and sensory-rich approaches to language learning.
The strongest correlation is found between *Extraversion* and the *Kinesthetic* LS (r = 0.18), indicating that extraverted students tend to learn better through physical involvement and movement. Likewise, the correlation with the *Group* LS (r = 0.18) reflected extraverts' natural preference for social interaction and collaborative environments.
In addition, the significant correlations with *Auditory* and *Tactile* styles suggested that extraverted students may also be drawn to learning through listening and hands-on manipulation of materials
Although the correlation with the *Visual* style was weaker (r = 0.13), it remained statistically significant, suggesting that extraverts still benefit from *Visual* aids such as diagrams or charts, though perhaps not as strongly as from other modes.
Conversely, *Extraversion* demonstrates a non-significant and slightly negative correlation with the *Individual* LS (r = -0.074, p = 0.22). This result reinforced the idea that extraverts are less inclined to study independently or in isolation, as they typically draw energy from interaction and external engagement.

4.4 Agreeableness and language learning styles

Table 4: Correlation between Agreeableness and language learning styles among English-major students at DNC

Learning styles	Agreeableness	Pearson Correlation	Sig. (2-tailed)	N
Visual		0.10	0.11	278
Auditory		0.37**	0.01	278
Kinesthetic		0.23**	0.01	278
Tactile		0.18**	0.01	278
Group		0.23**	0.01	278
Individual		-0.01	0.95	278

**. Correlation is significant at the 0.01 level (2-tailed).

The strongest correlation was observed between Agreeableness and the *Auditory* learning style (r = 0.37, p = 0.01), suggesting that agreeable students tend to prefer learning through listening activities such as lectures, conversations, or audio materials.

Moderate positive correlations were also found with both the Kinesthetic style (r = 0.23, p = 0.01) and the Group style (r = 0.23, p = 0.01), indicating that students high in Agreeableness are likely to enjoy physical involvement and collaborative learning environments.

In addition, a weak but significant correlation was identified with the Tactile style (r = 0.18, p = 0.01), implying some preference among agreeable learners for hands-on learning experiences.

In contrast, no significant relationships were found between Agreeableness and the Visual (r = 0.10, p = 0.11*) or Individual (r = –0.01, p = 0.95) styles, indicating that agreeable students are generally less inclined toward solitary or highly visual learning modes.In contrast, the Individual learning style did not show a statistically significant relationship with *Conscientiousness* (r = 0.08, p = 0.17), suggesting that conscientious learners were not particularly inclined toward studying in isolation.

4.5 Neuroticism and language learning styles

Table 5: Correlation between Neuroticism and language learning styles among English-major students at DNC

Learning Styles	Neuroticism	Pearson Correlation	Sig. (2-tailed)	N
Visual		-0.04	0.47	278
Auditory		0.10	0.10	278
Kinesthetic		0.04	0.50	278
Tactile		-0.01	0.91	278
Group		-0.02	0.80	278
Individual		0.01	0.93	278

**. Correlation is significant at the 0.01 level (2-tailed).

The *Auditory* LS showed the highest correlation with *Neuroticism* (r = 0.10, p = 0.10), a very modest positive relationship that did not achieve statistical significance. This weak association suggested that neurotic students might exhibit a slight inclination towards *Auditory* learning, possibly preferring lectures, audio resources, or discussions that allow them to absorb information through listening

Similarly, the correlation between *Neuroticism* and the *Kinesthetic* LS was also weak (r = 0.04, p = 0.50). This value suggested that neurotic students did not demonstrate a pronounced preference for hands-on, active learning experiences, such as role-plays or physical activities.

Regarding the *Visual* LS, the correlation with *Neuroticism* was minimal (r = -0.04, p = 0.47), indicating a slightly negative but statistically inconsequential relationship.

The *Tactile* LS, which involves physical interaction with materials, showed an almost negligible correlation with *Neuroticism* (r = -0.01, p = 0.91). This suggests that neurotic students did not exhibit any clear preference or aversion towards learning through *Tactile* activities, such as using hands-on materials or participating in practical tasks.

When it came to *Group* LS, the correlation coefficient was again minimal (r = -0.02, p = 0.80), indicating that neurotic students were neither significantly more nor less inclined to engage in group-based learning activities

Lastly, the correlation between *Neuroticism* and the *Individual* LS was virtually nonexistent (r = 0.01, p = 0.93). This result further confirmed that emotional instability did not drive neurotic students to favor independent, solitary study.

4.6 Results from the interview

4.6.1 Demographics of interview participants

To complement the quantitative findings and gain deeper insights into the relationship between PT and LS, five participants were selected for semi-structured interviews. These individuals were selected using purposive sampling, based on their outstanding scores (ranging from 4.63 to 5.00) in one of the five Big Five Personality Traits. The aim was to include participants who strongly represented a particular trait to ensure richer, more focused insights during qualitative analysis.

The interviewees represented a balanced mix in terms of gender and academic standing, with two males and three females drawn from different school years at DNC University. This distribution helped ensure a broader range of perspectives, both from those early in their academic journey and those nearing graduation. Each participant was identified with a pseudonym (Student 1 to Student 5) and represented a distinct PT.

Student 1, a fourth-year male student, had a high score of 4.90 in *Openness*, suggesting he is highly imaginative, creative, and receptive to new experiences. Student 2, also a fourth-year male, showed a strong tendency toward *Conscientiousness* with a score of 4.78, indicating a responsible and detail-oriented personality. Student 3, a third-year female, had a score of 4.63 in *Extraversion*, reflecting an energetic and sociable disposition. Meanwhile, Student 4, a first-year female, demonstrated a pronounced level of *Agreeableness*, scoring 4.89, suggesting she is cooperative, empathetic, and considerate in interpersonal interactions. Lastly, Student 5, another first-year female, recorded the highest score among the five (5.00) in *Neuroticism*, indicating high emotional sensitivity and frequent experiences of anxiety or stress.

Overall, the participants represented distinct personality

profiles across various stages of academic development. This demographic and psychological diversity added depth to the thematic analysis, allowing the study to explore how specific traits shape individual experiences and behaviors in the context of English language learning.

Table 6: Demographic statistics of the interviewees

Participants	Gender	School year	Personality Traits	Mean
Student 1	Male	4	Openness	4.90
Student 2	Male	4	Conscientiousness	4.78
Student 3	Female	3	Extraversion	4.63
Student 4	Female	1	Agreableness	4.89
Student 5	Female	1	Neuroticism	5.00

4.6.2 Personality traits and language learning styles in interview responses

4.6.2.1 Responses of the interviewee 1

Right from the beginning, he emphasized autonomy and a desire for deep understanding, stating:

I usually choose to learn by doing things myself and exploring on my own… (Student 1)

This preference for self-directed exploration indicates a learner who not only values independence but also actively seeks out knowledge through experiential learning, rather than relying solely on passive instruction. Additionally, he clarified his goal in learning English was not merely for academic performance, but for meaningful, functional use:

…I want to really understand and be able to use English in real life. (Student 1)

Furthermore, he openly described the tendency to connect academic content with real-life experiences:

…I often ask questions or try to connect the lesson to real life….(Student 1)

The use of questioning as a learning tool also indicated critical thinking and active engagement, behaviors that go beyond surface-level memorization.

I like to use not only textbooks but also online platforms or apps to explore more creative ways to study…(Student 1)

When asked about preferred learning environments, He clearly articulated a strong *Individual* learning orientation, stating:

I usually study alone because I find it easier to concentrate and more comfortable…(Student 1)

Studying alone not only offered him the freedom to control the pace and focus of the learning but also supported metacognitive regulation, as he was able to pause, reflect, and revisit material without external pressure:

I can choose the pace that suits me. I can stop where I want or look deeper into what I'm curious about…(Student 1)

Equally prominent is his *Visual* LS, which was demonstrated through frequent use of imagery, diagrams, and multimedia:

I like to create my own flashcards with pictures or draw mind maps to organize knowledge….(Student 1)

…I used to learn vocabulary only from books, but now I prefer learning through images or videos…(Student 1)

The emphasis on visuals suggested that he learned more effectively when information was structured spatially or symbolically, as in charts or color-coded notes. The transition from traditional text-based learning to more image-rich methods also reflected adaptive flexibility, which was a cognitive strength linked to *Openness*.

He displayed a willingness to innovate and adapt when a method became ineffective:

If I find one method no longer effective, I'll try a new one… it's a way to explore myself…(Student 1)

This mindset reflected both openness to change and self-awareness. The idea of "*exploring oneself*" through LS shifted positions him not just as a language learner, but as someone on a broader journey of personal growth. He further exemplified this with a specific learning innovation:

…I switched from just learning grammar from books to making videos explaining grammar in my own words… I remembered the lessons much longer…(Student 1)

By transforming into an active producer of content, he was engaging in what was known as generative learning, which had been shown to deepen comprehension and retention. This style also built confidence and enhances communication skills, suggesting that learning is not confined to internal processing but extends to external sharing and reflection.

His responses also revealed a thoughtful approach to handling learning difficulties, balancing self-effort with social support: *I usually try to overcome it on my own first… If it still feels hard, I'll ask my friends or talk to my teacher….*(Student 1)

This indicated both self-efficacy and *Openness* to feedback, a healthy combination that supported sustainable learning. In addition, he described using self-motivation techniques:

…I usually try to overcome it on my own first, like switching to a topic I like, watching motivational videos, or rewarding myself after finishing a lesson…(Student 1)

This demonstrated emotional intelligence and a proactive stance in maintaining morale during difficult periods.

Perhaps most telling is his awareness of emotional states and their influence on learning:*…When I'm tired or stressed, I prefer gentle learning activities like listening to English music or reading stories…*(Student 1)

Rather than forcing productivity, Participant 1 chose to adjust the intensity and nature of their learning in response to mood. This flexibility not only sustained engagement but also reflected a mature and holistic understanding of how learning intersects with emotional well-being.

4.6.2.2 Responses of the interviewee 2

Participant 2 demonstrated several notable characteristics that align closely with the *Conscientiousness* trait in the Big Five Personality model.*…I'm quite organized and like everything to be clear, so when I study, I usually set specific goals and try to follow the plan closely…*(Student 2)

Such a statement highlighted his desire for clarity and control, which was typical of conscientious learners who value order and precision in their studies (McCrae & Costa, 1987) [30]. His learning approach was marked by deliberate planning and systematic execution:*…I usually break down my weekly goals and mark them off after completing each one…*(Student 2)

This self-regulation and strong sense of discipline confirmed his *Conscientious* personality and reinforce the idea that he thrived in environments where he can manage tasks

methodically. Moreover, his inclination to avoid carelessness and ensured deep understanding before moving forward also aligns with this trait: *I don't like learning in a careless way that I need to fully understand and remember before moving on to the next part*. (Student 2)

Regarding his LS, he exhibited a strong *Visual* learning preference. His LS consistently involved visual aids, graphic organization, and color-coding techniques, which assisted in memory retention and conceptual clarity: *I usually learn by looking and taking careful notes… I also like to rewrite the content using diagrams or different colors to help me remember longer….*(Student 2)*…I especially like making summary tables, like vocabulary tables with meanings and example sentences…*(Student 2)

Although he primarily studied alone for better concentration and personalized control, he remained flexible when needed, particularly for interactive tasks like speaking:*I prefer studying alone… However, when preparing for speaking skills, I'm also open to studying with friends.* (Student 2)

This adaptability revealed a practical learning attitude that he prioritized effectiveness over strict adherence to one method. However, he still showed a strong preference for consistency and stability in his learning approach: *I only change when I feel the old method is no longer effective… If I do change, it's just small adjustments.* (Student 2)

In handling difficulties, he showed a conscientious approach by first attempting to solve problems independently, emphasizing personal responsibility and deep understanding: *…I often try to solve the problem myself first because it helps me understand more deeply…*(Student 2)

4.6.2.3 Responses of the interviewee 3

Participant C presented a clear example of a learner with a strong *Extraversion* PT, as conceptualized in the Big Five model. From the very beginning of the interview, she emphasized her preference for interactive learning: *I like to study through interactive activities like group discussions or doing exercises with others….*(Student 3)

She explicitlied connects interaction with increased understanding and enjoyment, which aligns with findings that extraverts are more motivated in communicative and collaborative environments.

Moreover, she attributed her learning motivation and comfort to her sociable nature:

I'm quite outgoing and enjoy communicating, so learning with others makes me feel more comfortable. (Student 3)

Obviously, her personality played a central role in shaping her academic behavior. She openly admitted that having a partner made her less likely to give up and more responsible, indicating that social accountability enhanced her persistence:*…Having a study companion gives me more motivated….*(Student 3)

Although she used learning tools such as sticky notes and flashcards, her most notable style involved teaching others as a form of review. This approach reflected her interpersonal orientation: *Sometimes I record short videos explaining things to friends, which is also a way for me to review.* (Student 3)

Furthermore, her admission that she did not rely heavily on technological tools suggested that the human element in learning was more important to her than digital innovation.

…I don't rely too much on tech tools…(Student 3)

Unlike Participant B, who carefully planned and tracked his goals, she adopted a more flexible and socially anchored planning style:

I have a general plan, but not very detailed. I usually set study schedules with friends…(Student 3)

This group-based scheduling revealed her *Extraversion* once again, planning became meaningful when it involved others. The social commitment served as both motivation and a structure to maintain her discipline.

She thrived in environments that encourage verbal exchange, collaboration, and shared experiences. This was also reflected in her preferred problem-solving method: *I'll look for friends or mentors to ask for advice….*(Student 3)

Instead of relying on solitary reflection, she turned to discussion and community-based solutions. Her reliance on speaking clubs and peer interaction supported this interpretation.

Nonetheless, she also identified clear challenges when studying alone, which was often the case for extraverted learners. She expressed difficulty focusing and maintaining motivation in the absence of social input:*…When studying alone, I get distracted or lazy easily…*(Student 3)

Moreover, she found grammar especially discouraging without explanation or interaction. This shows that abstract or solitary tasks were less effective for her unless supplemented by collaborative or engaging styles.

Her response to emotional states also reinforced the *Extraversion* trait. When feeling happy or energized, her productivity increased. However, negative emotions easily reduced her motivation:*…When I'm in a good mood, I study enthusiastically… But when I'm sad or tired, I lose interest…*(Student 3)

In response, she chose social or emotionally light activities such as chatting or listening to music, methods that allowed her to recharge and reconnect with the learning process....*I'll choose light activities like listening to English music or chatting with friends to relax...*(Student 3)

4.6.2.4 Responses of the interviewee 4

Student 4 exemplified a learner whose language LS are closely aligned with a *Tactile* style. For her, learning became meaningful and memorable when it involved movement and creation. She stated:

…when I physically do something, the knowledge sticks better. (Student 4)

Such statements reflected a clear preference for active, experience-based learning over passive reception. Furthermore, she attributed her learning choices to her personality, describing herself as:

…I'm quite gentle, easygoing, and like helping others…(Student 4)

She preferred learning environments that were supportive and interactive, where collaboration and mutual assistance were encouraged:*…I learn best when I can do something concrete and clear, especially when I can share or study comfortably with others.* (Student 4)

When asked about tools, she again emphasized *Tactile* and self-made materials:*I usually use handmade learning materials like flashcards, colored paper to write vocabulary on, or small models when studying complex lessons.* (Student 4)

This hands-on engagement not only supported her *Tactile* style but also reflected a creative and proactive learning attitude. It is worth noting that these tools were not digitally based, indicating a preference for physical interaction rather

than screen-based input.

While she expressed enjoyment in collaborative learning, she also recognized the occasional need for solitary space, a nuanced view that portrayed her as adaptable rather than rigid in her style:

…sometimes I also need my own space to review by writing things down or doing crafts. It depends on the moment…(Student 4)

This showed that while she thrived in groups, she valued balance, and tailors her approach depending on her emotional or cognitive state.

Regarding planning, she did not strictly follow individual schedules. Instead, she chose to coordinate plans with her study partner, showing that shared responsibility enhances her consistency:

I try to, but I often combine my plan with my study partner's so it's easier to keep track. (Student 4)

This collaborative planning method highlighted her interpersonal orientation and the motivational role others played in her learning process. Her willingness to change methods when things became ineffective or boring further underscored her flexibility and self-awareness:

…instead of just reading new words, I'll write them on paper, color them, and stick them around the room…(Student 4)

Here, she transformed passive learning into an active, multi-sensory experience, reinforcing the *Tactile* and *Visual* aspects of her style.

A particularly strong example of her resourcefulness appeared in her response to grammar challenges:*…I made a categorized chart of structures, colored it, and added examples. Then I shared it with my classmates...* (Student 4)

Besides, she not only adapted the material to suit her needs but also contributed to her peers' learning, reaffirming her agreeable and collaborative personality.

When it comes to challenges, she identified difficulty concentrating during long periods of passive learning:*I find it hard to concentrate when I have to sit still for too long, especially during theory lessons.* (Student 4)

This echoes the typical struggle of *Tactile* learners, who often require movement and interaction to sustain attention. Her coping styles included transforming abstract content into something concrete: *…try to turn the lesson into a more understandable format for me, like making diagrams or writing specific examples.* (Student 4)

Finally, her emotional regulation styles were telling. She confirmed that mood significantly influenced her learning performance:*…When I feel relaxed, I learn faster and more effectively…*(Student 4)

Rather than forcing herself to continue when emotionally unwell, she smartly transitioned to lighter, comforting tasks, such as writing a diary or doing simple exercises, until she regained energy. This adaptive behavior reflected emotional intelligence, and an ability to self-regulate in service of academic goals....*Sometimes I find it hard to concentrate ...I need to be doing something, like writing, drawing, or doing exercises...* (Student 4)

4.6.2.5 Responses of the interviewee 5

Student 5 represented a learner whose LS were strongly influenced by an *Auditory* style and a sensitive, emotionally attuned personality. Right from the outset, she emphasized the importance of sound in her learning process: *I often listen a lot, like turning on podcasts, re-listening to lectures, or watching videos with subtitles….*(Student 5)

This statement underscored her reliance on *Auditory* input for comprehension and retention. Rather than engaging primarily with visual materials, she gravitated toward audio content, which she found more accessible and less overwhelming. Her preference for replaying information reflected a need for both familiarity and comfort in the learning process.

Her learning tools further reflected this *Auditory* orientation: *I usually use headphones and English listening apps like VOA or BBC. I also record my own voice to listen later….*(Student 5)

By hearing her own voice, she was not only reinforcing pronunciation and rhythm but also building confidence, a crucial step for learners who may feel anxious about speaking.

Furthermore, she generally favored studying alone, which allowed her to maintain emotional balance and adjust her learning speed:*…When I'm by myself, I can adjust the pace and avoid pressure from others…*(Student 5)

When it comes to planning, she demonstrated a structured yet flexible mindset:

..I often make a fairly detailed plan so I don't get confused. But sometimes I have to adjust it because my emotions aren't stable. (Student 5)

This adaptability showed emotional self-awareness. She did not rigidly adhere to her plan when feeling unwell but modified it to suit her current state, which pointed to strong self-regulation skills.

She was also willing to modify her LS when they proved ineffective:

I look for a more comfortable way to study, like listening to a short English clip instead of reading long texts…(Student 5)

This shift indicated a learner who prioritized emotional safety and cognitive ease. One example illustrates how she adapted creatively:

I switched to listening to English songs and noting down unfamiliar words.That helped me remember them longer. (Student 5)

By turning vocabulary learning into an enjoyable, music-based activity, she increased her motivation and retention. This blend of affective and cognitive adaptation showcases her resourcefulness.

However, she often struggled with performance anxiety:*I get pressured when I don't understand the content. Sometimes I feel a bit insecure, especially when others correct me in front of people*. (Student 5)

This discomfort highlighted the emotional barriers she faced, particularly in speaking and comprehension tasks. Her styles for overcoming these challenges were thoughtful and tailored: *I'll take a short break, then return to learning in a gentler way, like replaying the section more slowly…*(Student 5)

Rather than forcing herself through stress, she took time to calm down before returning to the task with adjusted methods, revealing a strong capacity for emotional coping and persistence.

Finally, her view on the link between mood and learning performance was clear and consistent:*When I feel anxious or sad, I can hardly concentrate.* (Student 5)

5.1 Discussion

5.1.1 The relationship between Openness and language learning styles

A particularly striking result was the robust and consistent relationship between *Openness* and a variety of LS, most

notably *Tactile*, *Kinesthetic*, *Auditory*, and *Individual* LS. This finding is in line with the observations of Chamorro-Premuzic and Furnham (2008) [6], who argued that individuals high in *Openness* tend to be cognitively flexible, imaginative, and receptive to unconventional learning experiences.

The strong correlation between *Kinesthetic* and *Tactile* LS and *Openness* further echoes the findings of Lee and Pulido (2015) [28], who emphasized that open learners often prefer active, experiential modes of learning that engage the senses and body. Given the exploratory and sensation-seeking nature of *Openness* (McCrae & Costa, 1987) [30], this association seems logical.

Additionally, participants exhibiting high *Openness* demonstrated a strong preference for Individual learning, valuing autonomy, self-paced study, and personal experimentation. This aligns with Komarraju and Karau's (2005) [26] findings, which linked *Openness* to intrinsic motivation and independent learning behaviors. Learners in this study also reported adjusting their LS in response to their emotional states, further reflecting the reflective and adaptable nature of open individuals, traits which are integral to effective self-regulated learning (McCrae & Costa, 1987) [30].

While *Visual* learning also correlated positively with *Openness*, the strength of this relationship was weaker than anticipated. This somewhat contrasts with research conducted by Pham and Hamid (2013) [37], which emphasized visual preferences among open learners in Vietnamese EFL settings.

In contrast, the relatively low correlation between *Group* learning and *Openness* offers a counterpoint to findings by Zhang (2008) [46], who observed that open learners often enjoy social interaction in learning environments. In this study, however, many participants indicated that working in groups sometimes hindered their ability to fully explore topics at their own pace.

These patterns reflect the multifaceted nature of the *Openness* trait and provide practical implications for both learners and educators (Dörnyei, 2005) [10].

5.1.2 The relationship between Conscientiousness and language learning styles

The findings of this study indicate that *Conscientiousness* is positively linked to several language LS, suggesting that this personality trait plays an influential role in shaping how learners prefer to acquire and process information. In particular, conscientious individuals, who are often described as organized, self-disciplined, and achievement-oriented (Costa & McCrae, 1987) [30], appear to benefit from learning approaches that align with their methodical and goal-directed tendencies.

Previous research has shown that conscientious learners are likely to prefer structured and systematic environments, which may explain their affinity for visual LS such as the use of diagrams, charts, and written notes (Ehrman & Oxford, 1995) [13].

Moreover, the inclination toward *Tactile* and *Group* learning methods reflects the practical and collaborative nature of some conscientious learners. While traditionally associated with independence, conscientious individuals can also thrive in cooperative settings, particularly when responsibilities are clearly defined and shared goals are emphasized. *Group* LS may offer opportunities for structured interaction, where conscientious students contribute by ensuring that objectives are met and deadlines respected, further supporting their sense of responsibility and diligence (Barrick & Mount, 1991) [2].

Although *Auditory* and *Kinesthetic* styles are not typically considered ideal for conscientious learners, the findings suggest a degree of *Openness* to these modes when they are embedded in a purposeful and goal-oriented context. As noted by De Raad and Schouwenburg (1996) [8], *Conscientiousness* is not limited to a single cognitive or sensory preference but is reflected in a learner's broader commitment to achieving academic success, regardless of modality.

Furthermore, while some might assume that conscientious individuals prefer to study alone due to their self-regulating nature, the absence of a strong connection with *Individual* LS suggests that these learners are not exclusively solitary. Rather, their learning approach is shaped by the perceived effectiveness and efficiency of the style in achieving their goals (Komarraju et al., 2011) [27].

The qualitative insights from the interview with a participant characterized by high *Conscientiousness* reinforced these patterns. Her preference for structured visual tools, reliance on study schedules, and self-monitoring behaviors were in line with existing literature describing the behaviors of highly conscientious students (McCrae & Costa, 2003) [31]. These characteristics also reflect the learner's proactive coping styles and intrinsic motivation, which are essential for long-term language development and academic resilience (Noftle & Robins, 2007) [35].

5.1.3 The relationship between Extraversion and language LS

The results of this study provide evidence supporting the existence of modest yet meaningful correlations between personality traits, particularly *Extraversion*, and students' preferred language LS. These results are consistent with Dörnyei's (2005) [10] assertion that extraverted learners are more likely to thrive in communicative language teaching contexts, where speaking, listening, and interaction are emphasized.

Similarly, Ehrman and Oxford (1995) [13] found that extraverts tend to gravitate toward interactive and experiential LS, favoring activities that include social engagement over solitary reflection. This observation is in line with the work of Zhang (2008) [46], who observed that learners with high *Extraversion* scores were less likely to engage in introspective or solitary tasks.

Compared with other studies in similar contexts, the current findings echo those of Nikoopour and Farsani (2010) [33], who reported that Iranian EFL learners with high *Extraversion* were significantly more inclined to prefer *Group* and *Auditory* LS. The parallels between that study and the current one suggest that the influence of *Extraversion* on LS preference may be consistent across different cultural backgrounds, including in Vietnamese EFL contexts.

5.1.4 The relationship between Agreeableness and language learning style

Another pattern observed in the study is the compatibility between *Agreeableness* and interactive LS, such as *Auditory*, *Kinesthetic*, and *Group* LS. This aligns with the view that agreeable individuals, characterized by cooperation, empathy, and a desire for harmony (McCrae & Costa, 1987)

[30], naturally gravitate toward learning environments that foster interpersonal communication and collaborative tasks. The preference for *Auditory* LS, for instance, can be attributed to the social and reflective nature of agreeable students, who benefit from listening to others, participating in discussions, and engaging in verbal exchanges (Chamorro-Premuzi & Furnham, 2008) [6]. Likewise, *Kinesthetic* and *Group* LS offer opportunities for active participation and cooperative engagement, which are well suited to their interpersonal orientation.

In contrast, the research found little correlation between the *Agreeableness* trait and preferences for solitary or visually focused LS.

Visual styles, while effective for some learners, often lack the social dimension that agreeable individuals value, explaining the weak correlation observed in this research. These findings echo the work of Zhang (2008) [46], who highlighted the importance of matching LS with PT to promote more effective language learning outcomes.

5.1.5 The relationship between Neuroticism and language learning styles

The findings from this study suggest that *Neuroticism* does not exhibit a strong or consistent relationship with any particular language LS among EFL learners. While some slight tendencies were observed, such as a mild inclination toward *Auditory* LS, none of the associations reached a level of statistical significance.

Individuals high in *Neuroticism* are typically characterized by emotional instability, anxiety, and heightened sensitivity to stress (McCrae & Costa, 1987) [30]. These emotional factors can significantly impact how learners engage with language input and academic tasks. According to Matthews et al. (2003) [29], neurotic individuals are more prone to distraction and may struggle to maintain consistent study habits, which can hinder the development of clear learning preferences.

Although no strong correlation emerged quantitatively, qualitative insights from the interview with a neurotic learner provided a more nuanced understanding of how emotional sensitivity can shape learning behavior. The participant displayed a notable preference for *Auditory* LS, which she associated with emotional comfort and reduced stress. This supports previous research suggesting that neurotic learners may gravitate toward methods that offer psychological safety or that help manage anxiety (Ehrman & Oxford, 1995) [13].

Despite the overall weak correlations, it is important to consider that *Neuroticism* may still influence learners in more indirect ways. Research by Honey and Mumford (1986) [20] highlights that emotional traits such as anxiety, frustration, and fear of failure can affect motivation, attention, and language retention. In the case of neurotic learners, these factors may act as barriers, limiting their ability to engage fully with cognitively demanding or socially interactive LS

Additionally, the apparent lack of correlation between *Neuroticism* and LS in the present study might reflect the dynamic interplay between emotional traits and environmental factors. As noted by Ellis (2004) [15], affective variables in foreign language learning are often mediated by classroom conditions, teacher behavior, and peer interactions. A neurotic learner's style may therefore shift depending on perceived emotional safety or the presence of external stressors, rendering the relationship between personality and learning style less predictable and more context-dependent.

It is also possible that high levels of *Neuroticism* limit metacognitive awareness, thereby preventing learners from identifying or utilizing styles that align with their natural preferences (Ehrman & Oxford, 1995) [13].

6. Conclusion

This study explored the relationship between personality traits (PT) and language learning styles (LS) among English-major students at Nam Can Tho University, revealing significant links between specific PT, such as *Openness*, *Conscietiousness*, *Extraversion*, *Agreeableness*, and *Neuroticism*, and their preferred LS. The findings demonstrate how personality influences learning preferences, offering a deeper understanding of individual differences in language learning. This work contributes to the scientific knowledge by highlighting the importance of considering PT in designing personalized learning strategies, thus improving learning outcomes. The study's implications suggest that both students and lecturers can benefit from acknowledging these traits, leading to more effective, tailored approaches in language education.

7. Reference

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