

## PERSONALITY TYPES AND UNDERGRADUATES' LEARNING STYLES

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### Abstract

*Each individual has their traits and learning styles that benefit them when learning. Therefore, to ensure the fluidity of the language acquisition process, determining students' learning styles based on their personalities is essential. Hence, the study is done to determine the relationship between personality types and ESL students' learning styles. 148 Malaysian undergraduate students from Universiti Selangor were asked to answer the questionnaire. Demographic data were also collected to identify the respondents' age, gender, ethnicity/race, and native language. This study was conducted based on Myers-Briggs's MBTI personality test to determine the students' personality type. At the same time, the C.I.T.E Learning Styles Instrument was used to determine the student's learning styles. Twenty-five questions with four Likert-like scale options were created. Descriptive data were presented, and Chi-square analysis was used to investigate the relationship between personality types and learning styles. The findings suggested that the predominant personality types among the respondents are introverts. The primary learning style for introverts is solitary learning, while extroverts are social-group learning. The results have shown a significant correlation between personality types and learning styles.*

**Keywords:** Introvert, Extrovert, Personality, Learning Styles, ESL Acquisition

### INTRODUCTION

Learning styles are the distinctive ways in which each person gathers, organizes, and converts information into useful knowledge (Kolb, 1984). It can vary due to age, environment, or even the learner's personality type. Some people implement one or two learning styles in their learning strategies. Major learning styles that are more commonly known are visual, auditory,

and kinesthetic learning style preference. Visual learners prefer learning with visual material such as reading or seeing from books, charts, pictures, and infographics. They understand the materials by visualising them and using sight to remember and acquire knowledge more often. Meanwhile, auditory learners learn by listening and hearing the information. They are more likely to understand spoken instruction than written instruction. Most of the time, they will vocalise what they read to retain the information. Next, kinesthetic learners learn through doing and touching things. Kinesthetic learners tend to move around while studying. They prefer “hands-on” activities like crafting, drawing, and building.

Meanwhile, learning styles such as social-individual or solitary learning and social-group can explain the learners' work conditions whether they are able to work in a group or work better alone (Babich et al., 1976). Learners who are more predominant towards solitary learning are better left alone when they are learning, as forcing them to be in a group might irritate them more and distract them from the learning process. Giving them space enables the learner to focus on their language acquisition. Hence, educators need to understand this to avoid limiting students' abilities. Instead, the teacher can provide a suitable activity and guide them when necessary. On the other hand, social learners like to interact with their friends or study with other students to keep them motivated and stimulated. In conclusion, this kind of learner values other people's ideas and group discussions to acquire knowledge better. For this type of learner, educators need to allow them to do activities with other learners to encourage them during the learning process.

According to Kristo (2012), “Each personality type and learning style has its advantages necessary for success in language learning.” Hence, learners need to know their personality type and learning style that suits them the best to ensure the fluidity of their learning progress in acquiring a second language. It is essential to acknowledge that some researchers have discovered a correlation between personality types and learning styles (Siddiquei & Ruhi, 2018); Ashraf et al., 2013). However, all the researchers that have been mentioned were not all using the same model or instrument in their study. For example, Siddiquei and Ruhi (2018) have incorporated the Big Five personality model with Felder and Silverman's learning style model in their research. Meanwhile, Ashraf et al. (2013) use the MBTI test and Felder Solomon Index of Learning Styles survey in their study.

Although several other studies have explored the relationship between learning style and personality type, few have examined it for ESL learners. It is important to note that individual differences play a significant role in the design of effective learning environments (Rasmussen, 1996). Consequently, it is essential to acknowledge learners' differences, such as their personality types and learning styles, when designing an instructional activity for them. Despite that, there is a problem that has been identified by Gardner (1999) that teachers prefer to teach the way they have been taught. Additionally, Jonassen (1981) found that a close association exists between the learning style and the chosen style of teaching. Therefore, teachers need to realise the problem as it is worth noting that their students may not have the same learning style since everyone does not fit into one pattern only. By acknowledging and understanding this, both the learners and instructors are able to collaborate and create an effective language learning environment.

Few studies' findings have indicated that personality variables significantly correlate with language mastering achievement (Altunel, 2015). Hence, it is important to acknowledge students' personality differences to ensure that everyone gets an equal opportunity to learn. If educators did not understand the differences between students' learning styles and language acquisition, misconceptions and biases might happen. There is an assumption that extroverts' potential when interacting with different people will positively impact the development of L2 skills (Altunel, 2015). For that reason, language teachers and family members perceive those extroverts are better at language learning than introverts (Altunel, 2015), causing negligent to introverted students.

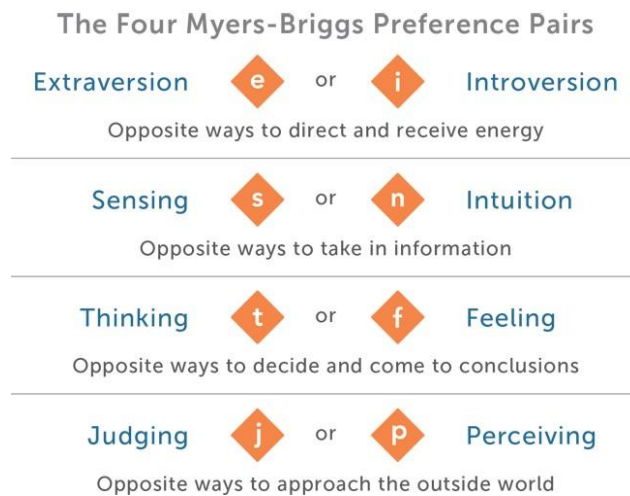
Hence, this study aims to offer greater definitive findings of the connection between extroversion and introversion and language acquisition within the context of English as a Second Language (ESL) through integrating neglected elements of research on personality and learning styles. Three research objectives were formed as follow:

- i. To identify the predominant personality types of undergraduate ESL students in UNISEL.
- ii. To identify the predominant learning styles of undergraduate ESL students in UNISEL.
- iii. To identify the correlation between personality types and ESL students' learning styles.

## METHODOLOGY

This research was carried out via Google Form. The participants were 148 young adult university students that learned English as a second language. The participants were Malaysian undergraduate students from UNISEL (University of Selangor), Bestari Jaya, Selangor, whose ages varied from 18 to 32. The participants consist of 20.95% male (n=31) and 79.05% female (n=117). This student's level of English performance was expected to be between intermediate and advanced. A quantitative method was used in the study. A demographic data form was created to identify respondents' age, gender, race/ethnicity, and native language. A survey questionnaire with 25 questions was designed based on C.I.T.E. Learning Styles Instrument (Babich et al., 1976). Besides, the participants were also required to answer Myer-Briggs Type Indicator (MBTI) on personality types.

The Myers-Briggs Type Indicator (MBTI) is a standard personality test based on Carl Gustav Jung's psychological theories. MBTI is a questionnaire that uses four pairings from Carl Jung's psychological styles theory to assess respondents' preferences based on these four dichotomies: Extraversion (E) vs. Introversion (I), Sensing (S) vs. Intuition (N), Thinking (T) vs. Feeling (F), and Judging (J) vs. Perceiving (P). The instrument then assigns an individual to one of 16 personality variants, each of which mix the four dichotomies, such as ENTP.



**Figure 1:** Myers-Briggs Type Indicator

## RESULT AND DISCUSSION

### Demographic

Table 1 shows that 79.05% of the respondents are female, and 20.95% are male. Meanwhile, the majority (56.08%) of the undergraduates who took the survey are between 18 and 22 years old. 41.22% of the respondents are around 23 to 27 years old, and four students are around 28 and 32 years old.

The majority of the respondents are Malay (93.92%). There are three Indian students, one Chinese student, two are Bumiputera from Borneo, one Pakistani student, one Bangladeshi student, and one student from the middle east.

**Table 1:** Respondents' Demographic Data

Demographic Variables	Frequency (n)	Percentage (%)
Gender		
Male	31	20.95
Female	117	79.05
Age		
18-22 years old	83	56.08
23-27 years old	61	41.22
28-32 years old	4	2.7
Ethnicity/Race		
Malay	139	93.92
Indian	3	2.03

Chinese	1	0.68
Bumiputera Sabah & Sarawak	2	1.35
Others	3	2.03
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Native Language		
Malay (Bahasa Melayu)	141	95.27
Others	7	4.73
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The majority of respondents for this study are Malay. Hence, the Malay language (95.27%) was selected as their first language. The other 4.73% are divided between Tamil (1.35%), Mandarin (0.68%), Telugu (0.68%), Bengali (0.68%), Arabic (0.68%) and Japanese (0.68%).

### **Personality Types**

Based on Table 2, out of 148 students, 103 (69.59%) are introverts and 45 are extroverts (30.41%). Based on the data, the majority (52.70%) of the female respondents are introverts, and the majority (16.89%) of the male respondents are introverts. This is perhaps due to the socio-culture and environment of the respondents, mostly Malay, where they are expected to be more passive.

**Table 2:** Distribution of students' personality types according to gender

<b>Variables</b>	<b>Frequency (n)</b>	<b>Percentage (%)</b>
Introvert	103	69.59
Male	25	16.89
Female	78	52.70
Extrovert	45	30.41
Male	6	4.05

Female	39	26.35
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### Learning Styles

The data collected was based on the number of individuals that possess a particular learning style. Thus, each individual can possess more than one primary learning style. The percentage is calculated based on the overall number of respondents with those learning styles as their major, 133 for introverts and 42 for extroverts.

The following Table 3 shows both learning styles for introverts and extroverts respondents. The majority of introverts prefer a solitary learning style which is 30.8%. On the other hand, 35.7% of extroverted respondents prefer a social learning style. As for the minority, 6.8% of introverts choose auditory as their learning style, and 11.9% of extroverts choose visual learning style.

**Table 3:** Correlation between Personality Types and Learning Styles

Variables	Frequency (n)	Percentage (%)
Introvert		
Kinesthetic	39	29.3
Visual	27	20.3
Auditory	9	6.8
Solitary	41	30.8
Social	17	12.8
Extrovert		
Kinesthetic	7	16.7
Visual	5	11.9

Auditory	8	19.0
Solitary	7	16.7
Social	15	35.7

**Table 4:** Correlation between Personality Types and Learning Styles based on Chi-Square

	Kinesthetic	Visual	Auditory	Solitary	Social	Total
Introvert	39	27	9	41	17	133
Extrovert	7	5	8	7	15	42
Total	46	32	17	48	32	175

$X^2(1, N = 175) = 19.645, p = .000587$ . The result is significant at  $p < .05$ .

In order to determine whether there is a correlation between the personality types and learning styles, Chi-square has been used to calculate the probability scores. Based on the data in Table 4, it can be concluded that there is a significant relationship between personality types and learning styles as the p-value is more significant than the value in the Chi-square table.

## CONCLUSION

The results of this study indicate that the incorporation of a variety of learning styles in education is necessary and efficient. Since there is no limitation to what learning style works and that each benefits from the learning styles, there should be no restriction on what to use in classes, and hence teachers and students should not limit themselves to one style only. Nevertheless, as a result, it suggests that since there is actually a significant correlation between personality types and learning styles, it is beneficial if the social style is for extroverts and the solitary style for introverts is implemented in classroom learning. Since it has been known by other studies that extroverts are active learners and introverts are reflective learners, the material that needs to be used in the learning process should cater to their needs.



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