

A Research Review on MBTI-Based Second Language Acquisition Teaching Respecting Individual Personality Traits

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Abstract: This review aims to investigate the application of MBTI (Myers-Briggs Type Indicator) in second language acquisition (SLA) teaching, especially how to optimize language learning strategies by understanding individual personality traits. The research demonstrates that: 1) MBTI could help educators identify learners' personality differences and thereby make individualized pedagogical approaches; 2) learners with variations MBTI categories display distinctive differences in leaning motivation, strategies, and effects, which provide theoretical support for personalized instruction; 3) emotional elements and cultural background also plays important roles in SLA. Though there is research providing foundation for the application of MBTI in language learning, limitations such as method, sample selection and theoretical framework still exist. Future research should further explore the integration of MBTI and other psychological theories to promote further development of personalized study.

Keywords: MBTI; Second Language Acquisition (SLA); Individual Personality Traits; Personalized Education; Learning Strategies.

1. Introduction

In the field of second language learning (SLA), the significance of MBTI theory has become increasingly prominent. MBTI categorizes individual personality traits from four dimensions, promoting educators' understanding of students and their learning styles and needs. Studies show that individual personality traits influence SLA process significantly, especially in study motivation, strategies, and effects [1]. Individual personality variations impact both learners' choice of language learning strategies and their emotional and cognitive response in the learning process[2].

In recent years, research on MBTI and SLA has been increasing, and researchers have begun to focus on how varied personality categories exert influence on learners' language learning strategies. For example, Gao [3] investigates the relationship between MBTI and language learning strategies, pointing out that distinctive differences exist among learners with different personality categories when it comes to study strategy choice. This discovery provides theoretical support for personalized instruction, emphasizing the importance of respecting individual personality traits.

Besides, the effect of individual difference has gained extensive attention. The systematic review of Zhang and Aubrey [4] demonstrates that individual variations (i.e., motivation, identity, and cultural adaptive abilities) could remarkably affect learners' pragmatic competence of second languages. Claudia Yong [5] indicates that individual personality traits could influence university students' academic performance and strategic styles, which further highlights the significance of taking individual personality traits into consideration in SLA. In short, understanding learners' personality could help teachers to make more effective teaching strategies, thereby improving the effect of second language learning.

It is worthwhile to notice that Cohen (2018)[6] underlines

the importance of cultural ability in their research, mentioning that in the background of multi-cultural background, understanding learners' personality traits and cultural background could promote their learning more effectively, which is in consistent with the MBTI theory and further supports the significance of individualized instruction.

In conclusion, research based on MBTI individual personality traits is under rapid development, and future studies could explore how to apply this theory in practical teaching to facilitate learners' language skill improvement and individualized development.

2. Research Status in China

2.1. MBTI and Individual Personality Traits

In recent years, MBTI has gained increasing attention domestically, especially in the teaching field. Studies show people with different personality categories display varied features in the learning process. For example, Gao [3] indicates that MBTI categories enable us to understand individual variations and provide evidence-based guidance for formulating appropriate language learning strategies. Specifically, extrovert (E)-type learners tend to participate in group discussion and interaction, while introvert (I)-type learners prefer learning and reflective practice independently. In addition, thinking (T)-type learners demonstrate outstanding performance in analysis and logical reasoning, whereas Feeling (F)-type learners prioritize interpersonal dynamics and affective experience during learning.

When analyzing the distribution of personality categories, researchers discover that ISTJ and ESTJ-type students are particularly prevalent among Chinese students, which could influence their learning styles and strategic options. Moreover, the research of Basikin [7] demonstrates that the different traits of MBTI categories could impact English learners' performance, especially in the four main domains of listening, speaking, reading, and writing. Meanwhile, Hyun-Jin Cho's

[8] study also underscores the importance of individual personality in education, indicating a statistically significant correlation between personality and learning outcomes, which reaffirms the significance of individual difference in learning.

2.2. Personality Traits and Language Learning Strategies

Regarding the relationship between personality traits and language learning strategies, domestic research has also yielded some findings. Research of Lixiang Gao and Honggang Liu [9] demonstrates that learners' personalities have a direct impact on their learning strategies. Extrovert-type learners tend to use social strategies, such as communicating and cooperating with others, but introvert-type learners prefer to use cognitive strategies, including self-directed learning and reflection. In addition, Nurul Intan Hipni Helen Kenol and Harwati Hashim's [10] research indicates that elements like gender and backgrounds could also influence learners' strategy choice, which further highlights the difference of individual variation in language learning.

2.3. Affective Factors and Academic Performance

The role of affective factors has gained widespread attention as well. Research demonstrates that affective elements including motivation, self-confidence have a distinguish connection with academic performance. Xian Zhao and Danping Wang [11] indicates that learners' affective features, such as grit, plays a key role in overcoming difficulties and strengthening study incentives. Furthermore, Lan Zhang and Scott Aubrey's [4] systematic review reveals that individual differences (IDs) also exert a significant role in one's pragmatic competence capability of a second language, with affective factors showing robust correlations with learners' linguistic proficiency.

Within the MBTI theoretical framework, research of affective factors provides a new perspective for understanding learners' academic performance. For example, extrovert-type learners tend to display higher learning motivation and self-confidence, whereas introvert-type learners may experience discomfort in social learning contexts, which may adversely affect their academic performance. Wei Xu' [12] research further explored the interaction effect between individual personality and affective intelligence and emphasized the significance of affective factors in the learning process. Therefore, when designing instructional activities, teachers should account for students' personality features and affective factors to promote their language learning outcomes.

3. Research Status of Other Countries

3.1. Digital Media and Personality Prediction

With the development of digital technology, researchers abroad have begun to employ digital tools such as online social media to analyze and predict individuals' personality traits. Research in this field indicates that social media activities could provide rich individualized data to help educators and psychologists to better understand users' personality traits. Ahmad [13] pointed out that through natural language processing technology, researchers could effectively extract individual properties from social media

contents, which provides innovative perspectives for selecting individualized learning strategies. For example, Liu (Liu et al., 2025) [14] investigated how to use large language models (LLMs) to construct student personality profiles for delivering more targeted support in language learning. In addition, individualized learning experience could significantly improve students' participation and learning efficiency. This social-media-date-based personality prediction approach provides a groundbreaking perspective for second language pedagogy and is able to better satisfy different learners' needs. What's more, Huiling Ma's [15] research on willingness to communicate shows that there is a close connection between individual personality traits and the willingness to communicate in the language learning process, which facilitates educators' language learning strategy designing.

3.2. Pedagogical Approaches and Individual Variation

In designing pedagogical approaches, researchers abroad have placed growing emphasis on individual differences, especially the influences of personality factors on learning strategies and academic outcomes. Liu [16] systematically reviewed the adaptive research of educational games, discovering that personalized learning experience could improve students' study motivation and participation. This adaptive pedagogical approach accounts for not only students' cognitive abilities but also their personal traits, therefore realizing more effective study and laying scientific foundations for the research and development of pedagogical tools.

Furthermore, Louwen [17] indicates that non-cognitive features like temperament, behavioral styles, and emotional intelligence vary remarkably among different occupational groups, which provides important guidance for educators in curriculum design. Through profiling students' personality types, teachers can calibrate pedagogical strategies to optimally accommodate students' individualized needs in second language learning, therefore improving their study effect and satisfaction.

4. Conclusion

In the research of second language acquisition based on MBTI, there are several domestic and overseas papers investigating the relationship between MBTI and language learning. As a prevalent psychological assessment tool, MBTI can help educators understand students' individual personality traits to provide them with a more individualized study support in a better manner. Cohen et al.'s[6] study highlights the importance of cultural ability in education, and even though it mainly focuses on medical education filed, the perspective of inter-disciplinary cooperation and culture understanding it proposes is applicable in language learning, since it can help teachers to effectively adjust their teaching arrangements to tailor to students' psychological needs. However, there are still limitations of existing research. For example, Ahmad [13] points out in his research that although MBTI is widely applied in career selection and individual development, its pragmatic applications in language learning strategies remain underdeveloped. Gao and Liu's [9] research further explores demotivation in foreign language learning and underscores the significance of individual variation in study motivation, but fails to investigate in depth how MBTI

specifically influences learning motivation and strategy selection.

In investigating the relationship between MBTI and Learning strategies, Yangyang Gao's [3] research analyzed the correlation between different MBTI personality types and language learning strategies in detail, and indicates that teachers can match students' learning strategies according to their personality features, and thereby enhance their study efficiency.

Moreover, Liu's [16] research highlights the individualized impact of the adaptation of educational games on study. Even though it primarily focuses on game-based learning, its exploration of individualized learning is applicable to the language learning context as well. Teachers may leverage these adaptive designs to meet students' learning needs with varied MBTI types and choose better educational games for second language instruction.

To sum up, although existing research has laid a theoretical foundation for MBTI-based second language teaching, further exploration is needed to bridge theory and practice. Future study may explore in depth how MBTI influences language learning strategy selection and how to apply this theory in practical teaching. Xue and Yu's [18] research also proposes the importance of ambiguity tolerance in language education in the post-pandemic era. Future research could combine MBTI with ambiguity tolerance to explore its influence on language learning. Besides, Vuogan and Li's [19] systematic assessment also provides an innovative perspective for the research approach of second language learning. It emphasizes the importance of transparency in research, which offers implications for future combining research of MBTI and language learning. Finally, Thomas's [20] study demonstrates that future research should continue to focus on the importance of individual differences to promote the theoretical and practical development of second language learning.

5. Limitations

In the pedagogical research of MBTI-based second language acquisition, existing research has some limitations, primarily manifested in facets such as methods, sample selection, and theoretical framework.

First of all, many studies have mainly adopted quantitative research methods, whose limitation is they usually cannot thoroughly capture individuals' complexity and diversity in the process of second language learning, and therefore might lead to a partial understanding of personality traits and learning effects. Moreover, the influence of individual personality traits on learning satisfaction and success in the online learning environment has also gained attention. Research indicates that understanding students' personality features can help teachers to design curriculum materials in a better manner to satisfy the learning needs of different individuals. In the meantime, with the rapid development of information technology, the application of computerized learning system is gradually increasing, which provides new perspectives and methods for individualized learning.

Next, the limitation in sample selection cannot be neglected. Many samples in research primarily focus on a specific educational background or cultural context. For example, some research only limits to Malaysian university students [5]. Such sample selection limits the generalizability of the research results and may not be applicable to learners from different cultures or education systems. Moreover, the

insufficient sample size can also affect the reliability and validity of research findings. In response to this issue, some research stresses that in open and distance learning environments, students' self-regulating ability plays an important role in successful learning, indicating that students from different cultural backgrounds may face divergent challenges.

Last but not least, the limitation of frameworks also influences the understanding of the application range of MBTI in second language learning. Though the MBTI theory provides a useful perspective for individual personality traits, it has been criticized for its oversimplified typologies that fail to adequately consider individual dynamic changes in the learning process [2]. What's more, existing research often neglects to integrate MBTI with other psychological theories, leading to inadequate exploration in the relationship among personality traits and learning motivation, strategies and other factors. For example, research demonstrates that there is a predominant correlation between individuals' communication willingness and their personality traits, suggesting the needs to account for more complex psychological factors in second language acquisition research.

Generally speaking, although MBTI-based second language acquisition research provides significant perspectives for understanding individual traits during language learning, its limitations in methods, sample selection, and theoretical frameworks require further resolutions to advance in-depth research in this field.

6. Research Prospects

In the research of second language acquisition based on MBTI, future study should pay more attention on individualized study and diversities. With the continuous development of educational technology, combining the MBTI theory with modern technology could provide new possibilities for second language acquisition. For example, intelligent tutorial systems (ITSs) can create individualized learning experience according to students' personality traits, which method is especially important in language learning [14]. By using large language models (LLMs), we are enabled to simulate students' personality traits, therefore improving their study effects [14].

Besides, future research could explore the influence of MBTI personality types on study motivations and communication willingness. Existing research indicates that individuals' personalities represent a tight connection with their performance in second language learning [12]. For example, extrovert and open individuals may exhibit heightened communicative willingness in language learning [15]. Therefore, development of personality-tailored learning strategies and pedagogical methods will be an essential research direction.

As technologies evolve, the method of text-based personality prediction (TBPP) should be included into the second language acquisition framework. This method uses natural language processing technologies and can predict students' personality traits more accurately, thus providing statistic support for individualized learning [21]. Future research could further explore how to integrate TBPP with MBTI to optimize personalized learning strategies for second language acquisition.

What is noteworthy is that the research of MBTI does not limit to the language learning realm and can extend to teaching practices of other subjects. For example, research on

nursing students suggests students with different personality traits display a salient distinction in learning motivation, self-efficacy, and academic accomplishment [22]. Such interdisciplinary research could provide educators with a more comprehensive perspective to satisfy diverse learners' needs. Also, with the deepening of individual variations in the second language learning field, language learning strategies (LLS) are also important research directions [20].

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