

Empirical Study on How MBTI Personality Types Influence English Listening Learning Strategies of English Majors

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Abstract: This study explores the influence of MBTI personality types on three categories of English learning strategies—metacognitive, cognitive, and social/affective—used by English majors in English listening. The research findings indicate that significant differences exist in the selection of English listening learning strategies among subjects with different MBTI dimensions. Extraverted subjects actively employ cognitive and social/affective strategies, while intuitive subjects demonstrate greater aptitude in cognitive and metacognitive strategies. The results of this study can assist educators in providing more personalized instruction to students with different personality types, thereby enhancing the pertinence and effectiveness of teaching English listening.

Keywords: Personality Types, Learning Strategies, English Listening Strategies, English Majors.

1. Introduction

In the field of psychology, the Myers-Briggs Type Indicator (MBTI) is a widely used personality classification tool. It was developed by Isabel Briggs Myers and her mother, Katharine Cook Briggs, based on the psychological type theory of Carl Jung. The MBTI categorizes human personalities into 16 types based on four dimensions: Extraverted-Introverted (EI), Intuitive-Observant (NS), Thinking-Feeling (TF), and Judging-Prospecting (JP). These dimensions describe how individuals gain energy, perceive information, make decisions, and approach the external world, respectively. For example, extraverted individuals tend to gain energy from social interaction, while introverted individuals prefer solitude; observant individuals focus on details and concrete information, while intuitive individuals are more concerned with overall situations and abstract concepts.

Cultivating English listening skills is fundamental to English learning, requiring learners to possess not only strong phonetic discrimination but also considerable language comprehension. Effective listening strategies encompass previewing questions, capturing key information while listening, memorizing coherently afterwards, and accelerating listening response and language perception through extensive practice. Research indicates that training in listening strategies can significantly enhance students' listening comprehension and their ability to handle complex audio materials. However, the effectiveness of these strategies can be affected by individual learner differences, with personality type being a significant factor.

This study aims to investigate how MBTI personality types influence the English listening strategies employed by English majors. Specifically, the study will analyze the specific differences in how students with different personality types select and apply listening learning strategies. By understanding these correlations, educators can provide more personalized instruction tailored to different personality types, thereby improving the relevance and effectiveness of English listening instruction. This is significant because it helps reveal

the intrinsic connection between personality types and English listening learning strategies, offering a new theoretical perspective for English listening pedagogy. Secondly, through empirical research, this study can offer educators concrete teaching suggestions, helping them to better understand and cater to the learning needs of students with different personality types, thus enhancing the overall effectiveness of English listening instruction.

Finally, this study's findings may offer valuable insights for designing teaching strategies in other language learning domains, thereby fostering the advancement of personalized instruction.

2. Theoretical Review

As an important concept in the field of second language acquisition, learning strategies have consistently been a focal point in research within educational psychology and applied linguistics. They not only influence learners' learning efficiency but also profoundly reflect their cognitive styles, personality traits, and learning motivation. Despite the extensive research on learning strategies, a consensus on their definition has not been reached among scholars. Initially, the concept of learning strategies was proposed by Rubin [6], who defined them as "the techniques or devices which a learner may use to acquire knowledge." From the perspective of behavior and learning inclination, Stern [8] and Weinstein & Mayer [9] viewed learning strategies as a learning approach or a general learning tendency, with learners employing specific behaviors to facilitate information reception during the learning process.

From the perspective of purpose and consciousness, a learning strategy is a conscious behavior with the aim of improving the learning process and facilitating the memorization of linguistic and informational knowledge. Learners can develop their own learning strategies, which are intended to enhance the development of their language systems [1][6]. From the perspective of learning process and effectiveness, Oxford[3] posits that a learning strategy is an activity designed to make language learning more effective,

purposeful, and enjoyable. In 2004, a comprehensive definition of learning strategies was provided by the Chinese scholar Wen Qiufang: Learning strategies encompass the various strategies employed by individuals engaged in learning to enhance their foreign language acquisition. This includes not only the strategies adopted by learners to better accomplish a learning activity or task, but also the macro-strategies they use to plan, regulate, and predict their task objectives, the process of task completion, and the outcomes. Furthermore, it incorporates their understanding of language and language learning [4]. This definition encompasses both the micro-strategies employed by learners when completing specific learning tasks and the macro-strategies, such as the overall planning, regulation, and prediction of learning tasks, as well as the understanding of language and language learning.

These definitions describe learning strategies from different perspectives and with different focuses, collectively contributing to a comprehensive understanding of learning strategies.

Subsequently, research on learning strategies has expanded, leading to diverse classification systems that reflect varying research emphases. Based on information processing theory, O'Malley and Chamot [2] categorized learning strategies into metacognitive, cognitive, and social/affective strategies, a classification widely adopted in subsequent research. Furthermore, Oxford [3] distinguished between direct and indirect strategies. Direct strategies involve the immediate processing of language information through the manipulation and application of language materials, encompassing memory, cognitive, and compensation strategies. Indirect strategies, on the other hand, support language learning by managing, monitoring, and regulating the learning process, including metacognitive, affective, and social strategies.

Meanwhile, Wen [5] categorized learning strategies into management strategies and language learning strategies based on information processing approaches. Management strategies are related to the management of the language learning process, involving how learners plan, monitor, and adjust their learning behaviors. These strategies exhibit transferability across disciplines, professions, and time-space contexts, meaning they are applicable not only to language learning but also to the learning of other subjects and can even

be applied in daily life. Language learning strategies refer to those directly used for processing language learning materials and are directly related to these materials. These strategies possess disciplinary uniqueness, meaning they are mainly applicable to the field of language learning.

Listening learning strategies are a subset of language learning strategies, encompassing cognitive, metacognitive, and social/affective strategies [2]. Cognitive strategies involve problem-solving by considering how to store and retrieve information; examples include capturing keywords, capturing non-verbal cues, inferencing, and note-taking. Metacognitive strategies include planning, monitoring, and evaluating comprehension, with selective attention as one example. Selective attention involves predetermining which aspects of the listening material should be attended to. Social/affective strategies include requesting clarification and using self-talk to reduce stress or anxiety. Based on learning strategies and using O'Malley and Chamot's framework for classifying learning strategies, this study will investigate the listening learning strategies employed by different MBTI subjects.

3. Research Design

(1) Research Questions

This study primarily focuses on the following questions:

1) What differences exist in English listening learning strategies among English majors with different MBTI personality types?

2) How do different MBTI personality types influence the selection of English listening learning strategies?

3) How can English listening teaching strategies be adjusted to improve learning outcomes for students with specific personality types?

(2) Research Participants

This study investigates the influence of MBTI personality types on the English listening learning strategies employed by English majors. Participants in this survey were English majors, ranging from freshmen to junior. A total of 266 questionnaires were collected, and after screening, 250 valid questionnaires were obtained, yielding a validity rate of 0.94. A description of the participants is presented in the table below.

Table 1. The Description of Subjects

Subjects: 250							
Gender	Male				Female		
	20(8%)				230(92%)		
Grade	Freshmen	Sophomore	Junior	Senior	First-year Graduate	Second-year Graduate	Third-year Graduate
		52 (20.8%)	89 (35.6%)	37 (14.8%)	20 (8%)	20 (8%)	18 (7.2%)
Your understanding of your own MBTI	"I understand"				"I don't understand"		
	223 (89.2%)				27 (10.8%)		

(3) Research Methods

This study employs a mixed-methods approach, integrating both quantitative and qualitative research methods.

Firstly, data were collected from participants using the

Jungian Type Indicator and the English listening learning strategies questionnaire. To alleviate participant concerns and enhance data authenticity, anonymity and confidentiality were ensured throughout the data collection process.

Specifically, the Jungian Type Indicator was administered to participants who were uncertain of their personality types, with 27 questionnaires distributed and 27 valid responses received, resulting in a 100% response rate. The English listening learning strategies questionnaire was adapted from surveys by Huang [10] and Feng [7] and included three variables: metacognitive strategies, cognitive strategies, and social/affective strategies. The questionnaire is composed of two sections. The first section gathers basic information through four questions. The second section investigates English listening learning strategies, comprising 30 questions assessed using a five-point Likert scale, where "1-5" corresponds to a range from "Completely disagree" to "Completely agree," as detailed in Table 2. Analysis revealed a Cronbach's alpha coefficient of 0.937 for the questionnaire, demonstrating good reliability. Furthermore, the KMO value was 0.933, and Bartlett's test of sphericity was significant at $p < 0.001$, indicating high validity.

Table 2. Classification of English Learning Strategies

Variables	Items	Total
Metacognitive Strategies	3,14,16,18,22,23,24,25,27	9
Cognitive Strategies	1,4,7,8,11,12,13,15,17,19,20,21,26,28,29,30	16
Social/Affective Strategies	2,5,6,9,10	5

Secondly, SPSS 27 was used in this study to analyze the data collected from the questionnaire. Descriptive statistical analysis was employed to describe the basic information of the research subjects, including the distribution of MBTI personality types and their selection of English listening learning strategies. Statistical charts were used to visually display data characteristics, which provided a basis for subsequent in-depth analysis. Subsequently, independent samples t-tests and multiple regression analyses were

conducted to explore whether the selection of learning strategies differed across various dimensions of the subjects' MBTI, and to further investigate the influence of specific dimensions on strategy selection. The differences in listening learning strategy selection among students with different personality types were determined by observing the significance levels and standardized regression coefficient Beta values.

Finally, building upon the quantitative findings discussed above, this study will employ qualitative analysis to investigate the potential reasons behind the varying listening learning strategy choices made by students with different personality types. Furthermore, it will offer tailored listening learning strategy recommendations for students of different MBTI personality types.

4. Results and Discussion

(I) Distribution of the subjects' personality types

Based on the results of the questionnaire survey, descriptive statistics were first performed to analyze the distribution of subjects across MBTI types and dimensions. The results are presented in Table 3 and Table 4.

Table 3 reveals an uneven distribution of personality types among the subjects. The extraverted observant thinking judging (ESTJ), extraverted observant thinking prospecting (ESTP), extraverted observant feeling prospecting (ESFP), and introverted observant thinking judging (ISTJ) types were relatively underrepresented, accounting for 1.2%, 2%, 2%, and 2% of the subjects, respectively, totaling 7.2%. Conversely, the extraverted intuitive feeling prospecting (ENFP), introverted intuitive feeling judging (INFJ), and introverted intuitive feeling prospecting (INFP) types were more prevalent, representing 10.4%, 15.6%, and 18.4% of the subjects, respectively, totaling 44.4%. Table 4 shows that the subjects were generally introverted, intuitive, and feeling, with a nearly even distribution across the JP dimension.

Table 3. Subjects' Personality Classification by MBTI

Personality Types	E N F J	E N F P	E N T J	E N T P	E S F J	E S F P	E S T J	E S T P	I N F J	I N F P	I N T J	I N T P	I S F J	I S F P	I S T J	I S T P	Total
Frequency	23	26	7	6	12	5	3	5	39	46	10	9	24	19	5	11	250
Percentage	9.2	10.4	2.8	2.4	4.8	2	1.2	2	15.6	18.4	4	3.6	9.6	7.6	2	4.4	100

Table 4. Distribution of MBTI Dimensions

	Extraverted-Introverted (EI)		Intuitive- Observant(NS)		Thinking-Feeling(TF)		Judging-Prospecting (JP)		Total
	Extraverted	Introverted	Intuitive	Observant	Thinking	Feeling	Judging	Prospecting	
Frequency	87	163	166	84	56	194	123	127	250
Percentage	34.8	65.2	66.4	33.6	22.4	77.6	49.2	50.8	100

(II) Relationship between MBTI Dimensions and Listening Learning Strategies

The exploration of the relationship between MBTI personality types and English listening learning strategies of English majors aims to investigate the influence of MBTI personality types on these strategies. Therefore, the questionnaire survey data were classified based on the four dimensions of EI, NS, TF, and JP, and independent samples t-

tests were conducted for each. The results are shown in Table 5. Due to space limitations, Table 5 only presents the results with p-values less than or equal to the significance level ($\alpha = 0.05$). Notably, the p-values for the TF group were all greater than 0.05, indicating no significant difference in the selection of the three listening learning strategies among subjects within the TF dimension.

Table 5. P Value of MBTI Dimensions among Variables in ELS

Variables	Items	Extraverted-Introverted (EI)	Intuitive-Observant(NS)	Judging-Prospecting (JP)
Cognitive Strategies	During the listening process, notes were taken to record information deemed important.			.002
	After listening activities, I often categorize and organize new words, terms, sentence patterns, and cultural insights extracted from the listening materials.	.014		.026
	During listening, I understand how to segment audio into sense groups and process information accordingly. (Sense groups are defined as meaningful phrases extracted from longer sentences.)			.002
	During listening, when new words are encountered, I employ context, keywords, and other cues to infer their general meaning.	.036		.017
	During listening, I often leverage linguistic rules, such as signal words, conjunctions, and sequence markers, within the audio to make informed judgments and inferences, thereby facilitating comprehension.	.006		
	During listening, I frequently utilize visual imagery to enhance understanding and retention of new information.	< .001	.016	
	During listening, I relate new information to prior knowledge or apply common sense to facilitate my understanding.	.017		.048
	During listening, I often anticipate the content based on various relevant information.	.006		
	I often combine English listening and speaking practice, reinforcing the information I hear through speaking exercises.	.006	.010	.013
	In listening training, I utilize various resources, including English radio broadcasts, songs, movies, and online multimedia.			.020
	Before listening, I often predict the content of the material by examining the title and anticipating the questions.	.008		.015
Social/Affective Strategies	During the listening process, I like to mentally translate the information I hear into Chinese.		.028	
	In my listening comprehension practice, I often communicate with teachers and classmates, sharing learning experiences and discussing learning methods to improve learning effectiveness.	< .001		
	When I encounter problems I don't understand while listening to English, I ask teachers or classmates for help.	.017		
Metacognitive Strategies	I often summarize and analyze the characteristics and keywords of different types of listening materials, as well as their questioning techniques.	.002		
	I often seek opportunities to practice my listening skills, such as by listening to foreign language radio broadcasts, watching foreign language movies, and participating in English corners.		.033	
	I promptly summarize and evaluate my listening performance, classroom participation, and learning strategies.			< .001
	During listening exercises, I identify my weaknesses and analyze the reasons behind them to make improvements.	.018		
	During listening exercises, I monitor my focus and actively encourage myself to concentrate.			.008
	I have a detailed extracurricular listening plan, which I follow systematically, and I continuously refine its content and schedule.		.018	.047
	Before attending listening class, I preview the lesson's new vocabulary and listening comprehension options.			.009

Table 5 shows that significant differences exist in the selection of English listening learning strategies among subjects with different MBTI dimensions. Specifically, regarding the EI dimension, significant differences were observed in subjects' selection of cognitive and social/affective strategies. Extroverted subjects tend to actively employ language rules for reasoning and judgment while listening. They deepen their impression of the information by practicing speaking and readily exchange learning experiences with others to enhance their learning effectiveness. This inclination may stem from extroverted individuals' affinity for social interaction and their proficiency in expression and communication. Conversely, while introverted subjects may not exhibit these behaviors as

prominently as their extroverted counterparts, they may prioritize self-reflection and internal information processing during listening, potentially leading to different strategic choices.

On the SN dimension, subjects exhibited significant differences in their choice of cognitive and metacognitive strategies. Intuitive subjects were more adept at leveraging visual imagery to facilitate comprehension and memorization of new information while listening. They also tended to utilize multimedia resources such as English broadcasts, songs, and movies. This may stem from the inclination of intuitive individuals to prioritize the overall context and abstract concepts. Sensing subjects, in contrast, may demonstrate comparatively weaker performance in these areas, potentially

due to their preference for details and specific information. Consequently, they might concentrate more on meticulous processing and thorough comprehension of listening materials.

On the JP dimension, subjects demonstrated significant variations in their selection of cognitive, social/affective, and metacognitive strategies. Judgmental subjects tend to predict and plan listening content in advance, focusing on summarizing and evaluating their listening performance and learning strategies. They also exhibit a strong ability to monitor their attention. In contrast, perceptive subjects may demonstrate greater flexibility and adaptability in these areas, readily adjusting their learning strategies to suit different listening contexts.

Secondly, this study employed the first factor of the four MBTI dimensions (E, S, T, and J) as independent variables and the three learning strategy types as dependent variables. Multiple linear regression analyses were then conducted, with the results presented in Table 6.

Table 6. Standardized Coefficients Beta between four MBTI Dimensions and English Learning Strategies

	Extraverted (E)	Observant (S)	Thinking (T)	Judging (J)
Metacognitive Strategies	0.14*	-0.12*	0.04	0.17***
Cognitive Strategies	0.20***	-0.11	0.006	0.18***
Social/Affective Strategies	0.17**	-0.14*	0.007	0.068

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.005$

As shown in Table 6, extraverted (E) exhibits a positive correlation with all three types of learning strategies, indicating a significant influence on the selection of learning strategies. This suggests that extraverted students are more likely to adopt proactive approaches in their choice of English listening learning strategies. They may be more adept at leveraging social interaction to facilitate learning, such as exchanging learning experiences with others and reinforcing their comprehension of listening materials through speaking practice. Furthermore, these students may also place greater emphasis on self-monitoring and strategic adjustments during the listening process.

Judging (J) ranks second only to extraversion in its impact on strategies, demonstrating a positive correlation with all three types of learning strategies. This implies that judging students are inclined to be more planned and organized in their selection of English listening learning strategies. They may prioritize prediction and planning before listening activities, as well as self-monitoring and strategy adjustment throughout the listening process. However, the Standardized Coefficient Beta for J and social/emotional strategies was 0.068, failing to reach statistical significance. This suggests that individuals with a judging personality may not exhibit a strong preference for social interaction and learning strategy sharing.

Observant (S) was negatively correlated with all three types of learning strategies, with negative Beta values, suggesting that intuitive learners favor these strategies more. The relationship between thinking (T) and the three types of learning strategies, however, was not significant; the standardized regression coefficient Beta values were small

and did not reach statistical significance. This indicates that T students may not show a distinct preference in their choice of English listening learning strategies. They may prioritize logical analysis and rational thinking, but their selection of specific learning strategies might be more contingent on other variables.

(3) Implications

This study reveals a significant correlation between MBTI personality types and English listening learning strategies, offering a novel theoretical perspective for English listening instruction. Educators should recognize that students with different personality types exhibit variations in their selection and application of listening learning strategies, which may impact their learning outcomes. Consequently, educators should prioritize students' individual differences in listening instruction and strive to implement personalized teaching approaches to cater to the diverse learning needs of students with different personality types.

Secondly, teachers should tailor English listening teaching strategies to accommodate the distinct personality types of students. For instance, extraverted students can be encouraged to actively engage in classroom discussions, enhancing their listening comprehension through communication and the sharing of learning experiences. Conversely, introverted students can benefit from increased opportunities for self-reflection and independent thought, facilitating improved understanding and memorization of listening materials. Meanwhile, educators should adopt different teaching strategies for intuitive and observant students respectively to maximize their learning advantages.

In conclusion, the results of this study emphasize the importance of personalized instruction. Educators should understand individual differences in students' learning styles, personality types, and other aspects, and develop personalized teaching plans based on these differences. By providing diversified learning resources and strategic guidance, educators can help students better realize their potential and improve the overall effectiveness of their English listening learning. Furthermore, educators should continuously pay attention to the latest research findings and pedagogical approaches, and constantly update and refine their teaching strategies to adapt to evolving teaching needs and student characteristics.

5. Conclusion

Employing a mixed-methods approach, this study investigates how MBTI personality types influence English listening learning strategies among English major students. The results indicate that students with different MBTI personality types exhibit significant variations in their choice of English listening learning strategies. Specifically, extraverted students favor actively applying linguistic rules for reasoning and judgment when using cognitive and social/affective strategies. They effectively reinforce their comprehension of auditory information through speaking practice and willingly exchange learning experiences with others to improve their learning outcomes. Intuitive students are more inclined to use visual imagery to facilitate the understanding and memorization of new information and tend to utilize a variety of multimedia resources for listening practice. Judging students place more emphasis on predicting and planning listening content in advance. They are also adept at monitoring their attention and promptly summarizing and evaluating their listening performance and learning strategies.

Furthermore, multiple linear regression analysis confirms that the extraversion and judging significantly impact the selection of learning strategies. These conclusions not only reveal the intrinsic connection between personality types and English listening learning strategies but also offer new theoretical perspectives and practical guidance for English listening instruction. Educators should provide more personalized teaching guidance based on students' MBTI personality types, thereby improving the relevance and effectiveness of English listening instruction.

References

- [1] Chamot, A. (1987). The Learning Strategies of ESL Students. In A. Wenden, & J. Rubin (Eds.), *Learner Strategy in Language Learning* (pp. 71-83). Englewood Cliffs, NJ: Prentice Hall, Inc.
- [2] O'Malley, J. M., & Chamot, A. U. (1990). *Learning Strategies in Second Language Acquisition*. Cambridge: Cambridge University Press.
- [3] Oxford, R.L. (1990). *Language Learning Strategies: What Every Teacher Should Know*. NY: Newbury House.
- [4] Qiufang Wen, Lifei Wang. 20 Years of Empirical Research on L2 Learning Strategy in China. *Foreign Language and Literature Studies*, 21(1), 7, 2004.
- [5] Qiufang Wen, Lifei Wang. SLA Research Methods Over 35 Years: Looking Back and Ahead. *Journal of Foreign Languages*, (04),18-25, 2004.
- [6] Rubin, J. (1987) *Learner Strategies: Theoretical Assumptions, Research History and Typology*. In: Wenden, A.L. and Rubin, J., Eds., *Learner Strategies in Language Learning*, Prentice Hall, Englewood Cliffs, 15-30.
- [7] Silan Feng. A Survey on the Application of Learning Strategies to English Listening of Non-English-major Postgraduates: A Case Study of Guangxi Normal University. Guangxi, China: Guangxi Normal University, 2015.
- [8] Stern, H. H. (1999). *Fundamental concepts of language teaching*. Oxford: Oxford University Press.
- [9] Weinstein, C. and Mayer, R. (1986) *The Teaching of Learning Strategies*. In: Wittrock, M., Ed., *Handbook of Research on Teaching*, Macmillan, New York, 315-327.
- [10] Yu Huang. *A Study on the Influence of Students' Thinking Style upon Listening Strategies in Senior High School*. Guizhou, China: Qiannan Normal University for Nationalities, 2021.