

RESEARCH ARTICLE

The Impact of the Big Five Personality Traits on College Students' Views of ChatGPT in English Language Learning

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빅 5 성격 특성이 대학생의 ChatGPT 활용 영어학습에 미치는 영향

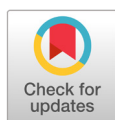
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ABSTRACT

This study explores the relationship between college students' personality traits and their perceptions of using ChatGPT. Twenty-three participants, who were enrolled in an English-medium instruction class participated in the study. They were asked to complete the Big Five Inventory, which examines one's personality traits and a questionnaire gauging their perceptions of ChatGPT use. To analyze the data, correlation and frequency analyses were performed. The results of the correlation analysis revealed a robust correlation between *conscientiousness* and item 1 and between *conscientiousness* and item 3. In addition, an association was found between *extraversion* and item 5 and *agreeableness* and item 5. Furthermore, there was a strong relationship between *conscientiousness* and item 7 and between *neuroticism* and item 11. Regarding students' perceptions of ChatGPT, the findings indicate a generally positive outlook on ChatGPT among students, particularly in enhancing grammar and vocabulary skills, and this is evidenced by self-reported improvements in writing abilities and grammar accuracy. However, participants expressed concern about the potentially diminishing effects on their critical thinking skills due to overreliance on ChatGPT. The implication of the study highlights that the identified correlations between personality traits and specific questionnaire items offer insights into potential usage patterns of ChatGPT among students. This finding implies that teachers should consider exploring ChatGPT as a pedagogical tool, tailoring its integration into teaching materials to align with students' diverse personalities and learning preferences.

Key words: ChatGPT, big five personality traits, ELT, language learning tool



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Introduction

Research on integrating technology into English language learning suggests its benefits, such as offering personalized instruction, opportunities for communicative language practice, and access to authentic language materials for learners to engage with. A prominent example is ChatGPT, a state-of-the-art artificial intelligence (AI)-powered language model developed by OpenAI that appeared to the public a year ago. Since its launch, ChatGPT has attracted widespread global attention, including English language teaching (ELT). The capabilities of ChatGPT have led to mixed sentiments among educators, school administrators, and researchers regarding its integration into education.

Some scholars (Hwang et al., 2023; Rudolph et al., 2023; Shin, 2023a, 2023b) argue that ChatGPT offers potential benefits and opportunities in ELT. For instance, it gives learners access to natural language input by drawing on a vast dataset of languages to generate authentic language samples. It can provide personalized lessons catering to individuals' needs and preferences. In addition, Hong (2023) notes that ChatGPT can function as a personal tutor, facilitating learner interaction and conversation in English as a foreign language (EFL) settings. However, concerns have been raised. Some caution (Baskara & Mukarto, 2023; Kostka & Toncelli, 2023) that ChatGPT may pose threats to students' critical thinking skills and writing abilities and that ChatGPT could produce biased and incorrect information as it is based on a working data set, which students may be able to discern due to a lack of knowledge.

Despite these concerns, Bin-Hady et al. (2023), Kim (2023) and Shin (2023a, 2023b) assert the positive aspects of ChatGPT in different EFL settings. Hong (2023) highlights how learners can practice multiple aspects of English language use outside of class through ChatGPT's capabilities, such as simulating human interactions, providing sentence samples, offering grammar checking, generating ideas, and delivering immediate feedback. He further posits that the technology is a game changer in ELT.

The growing body of research endorsing the efficacy of ChatGPT underscores its potential as a valuable tool for enhancing language learning experiences across diverse educational contexts (e.g., Shin, 2023a, 2023b). Consequently, it is suggested that certain educational institutions and educators across the globe have embraced the integration of ChatGPT into academic settings for diverse purposes. Indeed, academic conferences and colleges in Korea have started to offer special talks and workshops on using ChatGPT for education across various disciplines. However, the recent availability of ChatGPT leaves a significant gap in understanding how this advanced AI-powered chatbot could potentially augment language learning for learners in the context of foreign language (FL) learning due to a lack of empirical research. Against such a backdrop, this study examines a relationship between learners' personality traits and their perceptions of ChatGPT usage regarding its application in English language learning.

Literature Review

ChatGPT and English Language Learning

Since its debut, ChatGPT has rapidly gained global prominence, impacting learners and teachers in ELT. One notable feature of ChatGPT is its capability to generate interactive learning experiences and educational content on provided

prompts. In language learning, ChatGPT can create interactive dialogues with authentic language use examples and provide immediate feedback on written work, which can help improve learners' writing skills (Baskara & Mukarto, 2023). In addition, ChatGPT can create personalized reading passages with reading comprehension questions for learners to practice their reading skills. These capacities position ChatGPT as a valuable tool for personalized and interactive language learning experiences. Kim et al. (2023) argue that ChatGPT's extensive vocabulary and ability to generate contextually relevant responses contribute significantly to developing communicative proficiency in foreign language learning.

Using ChatGPT, language teachers can tailor lesson plans and materials that cater to the learners' needs and interests, thereby enhancing language instruction's effectiveness and motivation (Kostka & Toncelli, 2023). For instance, ChatGPT could create particular exercises and tasks, such as gap-filling exercises, sentence completion, and translation, reflecting the prompts provided by language teachers. Kim (2023) examined the feasibility of ChatGPT in developing teaching and learning materials for communication skills improvement and level-differentiated reading materials for secondary school English classes. He provided ChatGPT with detailed prompts to create pedagogical resources, and he found that ChatGPT exhibits a notable potential to provide valuable support to teachers in developing and refining teaching materials; however, he warns that teachers ought to critically validate ChatGPT-generated outputs since ChatGPT could produce inappropriate contents and errors in different aspects. Similarly, Kim et al. (2023) sought the feasibility and suitability of ChatGPT as a second language (L2) learning tool. They asked ChatGPT to design course content for L2 learners based on one particular teaching approach, TBLT (Task-Based Language Teaching), specifying particular steps. While recognizing the potential usefulness of ChatGPT in designing materials, they noted the susceptibility of ChatGPT to bias as it heavily relies on learning data.

Due to its novelty, empirical studies measuring the effect of ChatGPT on language learning are scarce. Most studies on ChatGPT mainly discuss its functions, benefits, challenges, and limitations in language learning (e.g., Ali et al., 2023; Baskara & Mukarto, 2023; Cotton et al., 2023; Hong, 2023; Kasneci et al., 2023; Kohnke et al., 2023; Rudolph et al., 2023). For example, a study by Ali et al. (2023) examined the impact of ChatGPT on students' learning motivation, examining perspectives from thirty-eight students and forty-two teachers of the English language using a questionnaire. The findings showed that both groups believe ChatGPT could help English language learners enhance their reading and writing skills. In addition, many participants reported that their vocabulary and grammar could be expanded and improved when using ChatGPT. The findings from the study by Liu and Ma (2023) are aligned with this. Using the technology acceptance model, Liu and Ma, who analyzed EFL learners' use of ChatGPT in informal digital English learning, advocate for using ChatGPT in English language learning. They argue that ChatGPT can provide learners with more opportunities for personalized language learning contexts both within and beyond the classroom.

An empirical study carried out by Shin (2023a, 2023b) also supports the application of ChatGPT in ELT. Shin (2023b) examined the effects of utilizing ChatGPT for guided writing instruction involving twenty-one pre-service teachers. Participants first had to ask ChatGPT to generate ideas and outlines. Then, they were required to choose a topic from ChatGPT's suggestions, ask ChatGPT for more detailed information on that topic, and then complete an essay based on this information. In addition, participants also had to write an essay with a selection of topics on their own and ask

ChatGPT to proofread their essays. Most participants responded that the ideas and outlines provided by ChatGPT were highly beneficial in the writing process. They further reported that ChatGPT's contributions and feedback given by ChatGPT were instrumental in completing their writing tasks.

The Big Five Personality Traits and English Language Learning

The research underscores the pivotal role of teachers in understanding the individual differences among language learners, which enables them to offer tailored assistance and elevate the quality of instruction. To achieve this, teachers in L2 and FL teaching must hone their ability to identify and comprehend the significant individual differences among their students (Ehrman, 1995b; Oxford, 1992). One of the multiple factors of individual differences that play a crucial role in language learning is learners' personalities. Research shows that they serve as a meaningful predictor for success in L2 and FL learning (Cooper, 2002), such as language learning strategies (Griffiths & Oxford, 2014; Oxford, 1992), L2 learning (Robinson et al., 1994; Skehan, 1989), and language learning anxiety (Babakhouya, 2019; Macintyre & Gardner, 1991).

The Big Five Factor Model (BFFM) is the primary framework for categorizing personality traits, encompassing *extraversion*, *agreeableness*, *conscientiousness*, *neuroticism*, and *openness* (Dörnyei, 2006; Pervin et al., 2006). It is argued that the BFFM encapsulates essential foundational individual differences in personality (McCrae & John, 1992) as defined in the following. *Extraversion* is characterized by sociability, talkativeness, and enjoyment of participating in interpersonal and social activities. *Agreeableness* refers to being kind, helpful, and caring for others, while *conscientiousness* involves being responsible, well-organized, and self-disciplinary. *Neuroticism* refers to one's characteristics of being anxious, worrying, and emotional. Lastly, *openness* to experience refers to one being imaginative, curious, and exploring. Research (Babakhouya, 2019; Gardner, 1985; Jackson, 2019; Krashen, 1985; McCrae & Costa, 1987; Zhang et al., 2019) has shown that *extraversion*, *agreeableness*, *conscientiousness*, and *openness* have a positive correlation with L2 and FL learning while *neuroticism* has a negative relationship with language learning, underscoring the significance of the Big Five personality traits in L2 and FL learning achievements.

Pourfeiz (2015) examined the relationship between Turkish university students' personal traits and attitudes toward FL learning. The findings showed a robust correlation between *agreeableness* and *openness* to experience with students' attitudes toward FL learning. Similarly, Rios (2019) investigated the impact of personality on students' perceptions of online learning experiences. He identified *conscientiousness* and *openness* as individual predictors significantly influencing students' perceptions. Furthermore, students who scored high on *conscientiousness* and *openness* showed higher motivation and intellectual curiosity in their classes. These findings underscore the relevance of personality traits, as defined by the Big Five model, in shaping outcomes within L2 and FL learning. Recognizing the significance of these traits stresses the importance of accounting for individual differences in understanding and optimizing L2 learning achievements (Chen et al., 2021).

The purpose of this study is to examine the relationship between college students' use of ChatGPT and their perceptions of ChatGPT on English language learning. One notable point about the participants is that 65% were international students from various countries enrolled in a Korean university where they studied, and the remaining 35% of participants were Korean students at the time of data collection. In many EFL settings, empirical studies often focus

on participants from a single nationality, such as exclusively Korean, Vietnamese, or Chinese students. However, in the current study, participants with varied nationalities, many with advanced levels of English, partook in the study. While it would be interesting to examine the relationship between each participant's English proficiency and their perceptions of using ChatGPT, the small number of participants makes such an analysis beyond the scope of this study. However, It would be intriguing to examine their perceptions of ChatGPT. The research questions are as follows:

1. To what extent do the Big Five personality traits relate to students' perceptions of ChatGPT?
2. How do students perceive ChatGPT in terms of its impact on their English language learning and the affective domain of their educational experience?

Method

Participants

Twenty-three students enrolled in the Screen English course, an English medium instruction class, participated in this study. Initially, thirty students expressed their willingness to partake in the experiment; however, seven students who did not fulfill the required tasks were subsequently excluded. Among the cohort of twenty-three participants, seven were males, while the remaining sixteen were females. The participants' majors at the university varied from Korean Language Literature, Economics, Business Administration, Fashion Design, and Tourism to name a few. Notably, the participants represented a diverse array of nationalities. Of the twenty-three individuals, eight were from Korea, four were from China, three were from Germany, two were from Indonesia, and one was from France, Iran, Kyrgyzstan, Malaysia, Mongolia, and the United States, respectively. Of the participants, six were exchange program students from overseas, two were in a one-semester program, and four were in a one-year exchange program at the time of the experiment. In self-reporting their English language proficiency, fourteen students rated themselves as advanced; two reported that they were near-native and native speakers, respectively. The remaining five rated themselves as intermediate.

Instrument

In the current study, there were two interventions used. One was the Big Five Personality Traits Inventory, a questionnaire designed to assess the personalities of individuals aged 18 and older. This instrument consists of 44 items grouped into five sub-scales, each representing one of the five major personality factors: *extraversion*, *agreeableness*, *conscientiousness*, *neuroticism*, and *openness*. The other instrument used was a questionnaire seeking students' perspectives on using ChatGPT for English language learning. The questionnaire, which the researcher developed, comprises three parts: demographic information (#1-6), the usage of ChatGPT and benefits and drawbacks (#7-9), and the effect of using ChatGTP on English language learning (#10-20) with one open-ended question (#21). Cronbach's alpha was performed to compute the reliability of the questionnaire. The questionnaire was found to be reliable with $\alpha = .822$.

Procedure

The class students were taking was an English-medium instruction course focusing on discussions and debates covering various social issues worldwide. Students were given various assignments to complete throughout the course, including summary writing, essay writing, one group oral presentation, and writing questions and answers on materials. For the current study, the essay writing task was used as a tool to require students to use ChatGPT for their learning. To this end, students were required to write three different types of essays throughout the semester. They were informed that they could utilize ChatGPT at any stage of their essay writing process, from the initial idea generation to the final revision. However, there was one condition: they had to submit their final essays and a complete history of their chat interactions related to the essay writing tasks. This requirement was implemented to ensure students write their essays independently and prevent plagiarism. At week 13, students were asked to complete the Big Five Personality Traits Inventory to determine their personality traits and the questionnaire examining their perceptions of using ChatGPT for language learning online. Students were asked to select multiple responses to certain questions in the questionnaire.

Results

Correlation Between Students' Personality and Their Perception

The study conducted a correlation analysis accompanied by descriptive statistics to explore the connection between the impact of students' personality traits and their perception of ChatGPT on English language learning. The results of descriptive statistics reveal that the mean score for *conscientiousness* was the highest, followed by *agreeableness* and *extraversion*. Notably, the mean score for *openness* was the lowest among the five traits.

Table 1. Descriptive statistics of students' personality traits

Traits	N	Mean	Std. Deviation	Minimum	Maximum
Extraversion	23	25.35	4.960	15	31
Agreeableness	23	28.17	5.365	18	38
Conscientiousness	23	28.57	5.892	15	38
Neuroticism	23	23.30	4.856	15	35
Openness	23	36.74	4.683	27	44

Furthermore, the findings of the correlation analysis revealed a positive and statistically significant relationship between students' personality traits and the effects of ChatGPT on English language learning. Specifically, the trait *conscientiousness* demonstrated a strong correlation between item 1 (ChatGPT has enhanced my speaking abilities.) ($r(23) = .594, p = .003$) and item 3 (ChatGPT has enhanced my vocabulary.) ($r(23) = .434, p = .038$). Moreover, the traits *extraversion* and *agreeableness* were associated with item 5 (ChatGPT has helped me improve my overall English proficiency.) ($r(23) = .527, p = .010, r(23) = .424, p = .044$ respectively).

Table 2. Correlation between students' perceptions and the effect of ChatGPT on English language learning

Item		ETV	AGB	CST	NRT	OPN
1	Pearson Correlation	.150	.272	.594**	.057	-.213
	Sig. (2-tailed)	.495	.209	.003	.798	.329
	N	23	23	23	23	23
2	Pearson Correlation	-.128	.256	.221	-.346	.096
	Sig. (2-tailed)	.561	.238	.312	.103	.424
	N	23	23	23	23	23
3	Pearson Correlation	.031	.182	.434*	.189	-.247
	Sig. (2-tailed)	.888	.406	.038	.387	.256
	N	23	23	23	23	23
4	Pearson Correlation	.043	.285	.238	-.059	.198
	Sig. (2-tailed)	.846	.187	.274	.789	.366
	N	23	23	23	23	23
5	Pearson Correlation	.527**	.424*	.358	-.042	.065
	Sig. (2-tailed)	.010	.044	.094	.849	.770
	N	23	23	23	23	23
6	Pearson Correlation	.174	.085	-.193	.103	-.068
	Sig. (2-tailed)	.427	.704	.378	.640	.758
	N	23	23	23	23	23

Note: ETV: extraversion, AGB: agreeableness, CST: conscientiousness, NRT: neuroticism, OPN: openness

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

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

Overall, the results suggest varying degrees of association particularly between the three personality traits *conscientiousness*, *extraversion*, and *agreeableness*, and the effect of ChatGPT on English language learning.

Table 3. Correlation between students' perceptions and the affective aspect of English language learning using ChatGPT

Item		ETV	AGB	CST	NRT	OPN
7	Pearson Correlation	-.082	.126	.195	.037	-.175
	Sig. (2-tailed)	.709	.566	.373	.866	.424
	N	23	23	23	23	23
8	Pearson Correlation	.165	.123	.472*	.171	-.180
	Sig. (2-tailed)	.451	.575	.023	.436	.412
	N	23	23	23	23	23
9	Pearson Correlation	.421*	.124	.238	.136	-.192
	Sig. (2-tailed)	.046	.572	.274	.535	.379
	N	23	23	23	23	23
10	Pearson Correlation	.377	.426*	.409	-.022	-.179
	Sig. (2-tailed)	.077	.043	.053	.920	.415
	N	23	23	23	23	23
11	Pearson Correlation	-.034	-.025	.321	.445*	-.384
	Sig. (2-tailed)	.879	.911	.135	.033	.070
	N	23	23	23	23	23

Note: ETV: extraversion, AGB: agreeableness, CST: conscientiousness, NRT: neuroticism, OPN: openness

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

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

Table 3 above shows the analysis of the correlation between students' personality traits and the affective domain of English language learning using ChatGPT. The findings show that the trait of *conscientiousness* is associated with the affective aspects of the English language, particularly with item 7 (ChatGPT has made language learning more

interactive and engaging for me.) ($r(23) = .462, p = .026$). Also, *extraversion* was related to item 9 (I enjoyed using ChatGPT as a language learning tool.) ($r(23) = .432, p = .040$). At the same time, *openness* showed a correlation with item 10 (I will continue to use ChatGPT for learning English.) ($r(23) = .426, p = .043$). Furthermore, *neuroticism* showed an association with item 11 (ChatGPT is a good tool for learning English.) ($r(23) = .437, p = .037$). The research argues that students with high levels of *conscientiousness* used more strategies in L2 learning (McCrae & John, 1992). The findings from this study show a stronger relationship between *conscientiousness* with many items in the effect of ChatGPT on English language learning than the other traits.

The implication from the results is that the influence of ChatGPT on English language learning might differ depending on the individuals' personality traits. This suggests that students who exhibit higher levels of conscientiousness, extraversion, and agreeableness might engage with and benefit from ChatGPT in ways distinct from those who score lower on these traits. Therefore, personalized teaching approaches that consider these personality differences could enhance the effectiveness of technology-aided language learning.

Students' Perceptions of ChatGPT

Students were asked to select multiple responses to the usage of ChatGPT in the questionnaire. Table 4 shows the various purposes for which students use ChatGPT. One prominent response is that 32% of students reported that they used ChatGPT to check the grammar and vocabulary of their work and double-check it to ensure that it was perfect before submission to their professor. The course students took was an English-medium instruction course requiring them to produce assignments in English. It is presumed that they wanted to ensure their work was thorough without mechanical errors. This intent is well shown in a comment by a German student:

Table 4. Purpose of the use of ChatGPT

#	Items	Percentage (Frequency)
1	To practice conversation skills and role-playing scenarios	21.7 (5)
2	To check grammar and vocabulary for accuracy	39.1 (9)
3	To receive feedback on English-related questions	13 (3)
4	To get ideas for English assignments	26.1 (6)
5	To double-check my English assignments for submission to professors	39.1 (9)
6	To access resources and references for English language learning	21.7 (5)
7	To explore cultural topics and language nuances through conversation with ChatGPT	13 (3)
8	Others	4.3 (1)

When I use ChatGPT I ask to check the grammar of a text (e.g., job application) or ask if there is anything that could have been written more professionally. From English learners around me I know that they use ChatGPT to ask for mistake correction, and explanation for written sentences, as well as grammar rules. I think for that ChatGPT can be helpful. I can imagine ChatGPT is somewhat limited when it comes to practicing speaking skills and adapting to an individual's learning needs.

Concerning the benefits of ChatGPT, students expressed various responses as shown in Table 5. More than half of students indicated that their writing skills and grammar accuracy improved. In addition, 43.5% of the participants reported that their vocabulary was expanded, and another 43.5% pointed out that they could get immediate feedback and clarification upon their questions.

Table 5. Benefits of the use of ChatGPT

#	Item	Percentage (Frequency)
1	I can improve my language proficiency.	21.7 (5)
2	I can enhance writing skills.	52.2 (12)
3	I can enhance grammar accuracy.	56.5 (13)
4	I can improve my vocabulary.	43.5 (10)
5	I have access to instant language support and clarification.	43.5 (10)
6	I can practice in real-life conversation and interactive language use.	17.4 (4)
7	I can increase my confidence in speaking.	4.3 (1)
8	I can get exposure to natural language patterns and idiomatic expressions.	21.7 (5)

Table 6 illustrates the drawbacks of ChatGPT that students see. Notably, a substantial majority of students (73.9%) expressed that dependence on ChatGPT may impede their cognitive processes, particularly in thinking and problem-solving. This concern is well illustrated in the comment from Student 4, who expressed her reliance on ChatGPT: *For me, using ChatGPT will be more convenient; I can research most problems when I am learning a language, and it helps me have more ideas and thoughts. But sometimes I may think I'm relying too much on this tool.* This observation aligns with existing research addressing the impact of ChatGPT on students' cognitive abilities (Hong, 2023; Kim et al., 2023).

Table 6. Drawbacks of the use of ChatGPT

#	Item	Percentage (Frequency)
1	It is difficult to understand the responses generated.	4.3 (1)
2	It produces awkward and unusual language.	39.1 (9)
3	Depending too much on ChatGPT can limit students' independent thinking and problem-solving skills.	73.9 (17)
4	Detecting and correcting language mistakes is challenging.	13 (3)
5	It produces inaccurate and unreliable information.	43.5 (10)
6	ChatGPT tends to give the same generic answers to everyone without considering their strengths and weaknesses.	56.5 (13)
7	ChatGPT lacks guidance on cultural nuances and appropriate language use.	21.7 (5)

ChatGPT is recognized for quickly generating ideas and responses based on user input, making it accessible and convenient for students. However, a significant issue arises as more than half of the surveyed students (50%) find that ChatGPT often gives generic answers that do not cater to their needs. It is suggested that improving students' skills in creating effective prompts could be important to get a broader range of responses from ChatGPT. Without this improvement, there is a potential risk of receiving standardized replies from ChatGPT.

Lastly, more than 40% of the participants noted that ChatGPT provided information that they deemed unreliable. This discovery is reassuring, suggesting that students can distinguish between accurate and inaccurate information.

Table 7 reveals several insights into the effect of ChatGPT on language learning. In general, participants did not hold a strong positive attitude toward the effect of ChatGPT on English language learning. Less than 40% of participants noted that ChatGPT helped them improve their English language proficiency and that their motivation to practice their English skills increased. Nevertheless, more than half of students noted that their grammar, vocabulary, and writing skills have improved.

Table 7. Effect of ChatGPT on English language learning

#	Item	Percentage (Frequency)
1	ChatGPT has helped me improve my English proficiency.	39.1 (9)
2	ChatGPT has enhanced my motivation to practice and develop my English skills.	39.1 (9)
3	ChatGPT has made language learning more interactive and engaging for me.	47.8 (11)
4	ChatGPT has increased my confidence in English.	34.7 (8)
5	I enjoyed using ChatGPT as a language-learning tool.	39.1 (9)
6	ChatGPT is a good tool to use for learning English.	69.6 (16)
7	ChatGPT lacks guidance on cultural nuances and appropriate language use.	21.7 (5)

Concerning the participants' view on the improvement of their confidence in English, a relatively low percentage of students noted that their confidence improved. This probably has to do with the fact that many of the participants self-reported that their English proficiency level was advanced or higher. Therefore, they may mainly have used ChatGPT to seek ideas and double-check their work before submission. Nonetheless, a substantial number of students noted that ChatGPT is a good tool for learning English.

Discussion

The current study underscores the relationship between personality traits, as conceptualized by the Big Five model, and students' perceptions of ChatGPT in English language learning. The results indicated that *conscientiousness* had the highest mean score, followed by *agreeableness*. This aligns with Chen et al.'s (2022) findings from their 40-year meta-analysis, which identified *conscientiousness* as a strong predictor of success in L2 learning. Building on this Cao and Meng (2020) assert that students with high levels of *conscientiousness* tend to engage in detailed planning, employ meta-cognitive strategies, self-regulate their learning, and demonstrate persistence in overcoming learning challenges, which are likely contributors to their success in L2 acquisition. Similarly, Rios (2019) found that *conscientiousness* and *openness* significantly influence students' perceptions of their online learning experiences, with those scoring higher in these traits showing increased motivation and intellectual curiosity. On the other hand, Pourfeiz (2015) found that students with high levels of *agreeableness* showed more willingness to identify and interact with members of the L2 community.

The findings of this study can be interpreted within its specific context. This context includes all international students in the class being from abroad and currently enrolled at a Korean university, along with Korean students who have had the experience of living overseas. This diverse range of backgrounds among the students could be a significant factor influencing certain psychological traits. Specifically, these experiences might contribute to higher levels of *conscientiousness* and *openness*. This hypothesis aligns with the research conducted by Zhang et al. (2019), which suggests that students exhibiting higher levels of *openness* tend to demonstrate a strong curiosity and an interest in non-traditional experiences and challenges. They are also more inclined to explore new things. Thus, the international experience of these students could be directly related to their heightened *openness* and *conscientiousness*, as evidenced in the study's findings.

The findings of the study also revealed that personality traits, particularly *conscientiousness*, *extraversion*, and *agreeableness*, significantly correlate with positive attitudes toward ChatGPT's effectiveness in enhancing language skills. Students with higher levels of *conscientiousness* particularly resonated with ChatGPT's capabilities such as providing immediate feedback, correcting grammar, and aiding in idea generation. This suggests their preference for structured, reliable, and efficient learning tools, a characteristic of ChatGPT that matches well with their need for organized and meticulous language practice. Hong (2023) supports this view, noting that ChatGPT when given precise prompts, can effectively identify and correct grammatical errors, offering improved versions of students' written work. This feature makes ChatGPT a beneficial tool for students seeking assistance with English grammar. In this sense, ChatGPT may be a good tool to assist students with weaknesses, such as English grammar. In line with this perspective, Baskara and Mukarto (2023) advocate that the adoption of ChatGPT in language learning within higher education is a valuable pursuit, offering fresh and innovative approaches to address the challenges of language acquisition. This aligns with the statement of Liu and Ma (2023). They suggest that incorporating ChatGPT in the English language can facilitate and encourage students' personalized learning outside the classroom.

However, this study also highlights concerns regarding over-reliance on ChatGPT, potentially impacting students' independent thinking and problem-solving skills, which Ali et al. (2023) discussed. They suggest the need for a balanced approach in technology integration, where ChatGPT serves as an adjunct tool rather than a complete substitute for traditional learning methods. Such a balance ensures that while students benefit from the efficiency and accessibility of AI-driven tools, they also engage in critical thinking and creative problem-solving, essential skills in language learning. Additionally, educators need to understand both the strengths and limitations of ChatGPT to use it effectively in classrooms, as noted by Zhang and Hyland (2021). Grasping the full scope of ChatGPT's capabilities enables teachers to maximize its advantages while avoiding potential pitfalls. This foundation is crucial in adapting to the integration of AI tools like ChatGPT in educational practices.

The overall effect of ChatGPT on English language learning as perceived by the students was mixed. While a significant number acknowledged improvements in grammar, vocabulary, and writing skills, less than 40% felt that ChatGPT substantially enhanced their overall English proficiency or motivation. This could be attributed to the advanced level of English proficiency among many participants, who may have used ChatGPT more for refinement than for basic language practice.

Conclusion and Implications

The present study examined the relationship between students' personality traits based on the Big Five personality traits and their perceptions of ChatGPT. To this end, correlation and frequency were performed. The individual predictors of the model associated with students' perceptions were *extraversion*, *agreeableness*, *conscientiousness*, *openness*, and *neuroticism*, showing a positive relationship with students' perceptions. Notably, *conscientiousness* was associated more strongly with students' perspectives on several items than the other four traits.

Concerning students' perceptions of ChatGPT, students had a positive attitude toward ChatGPT in language learning.

They responded that they used ChatGPT for different purposes, such as checking the grammar and vocabulary of their work. With enhancing English language learning, many reported that their writing skills and vocabulary were improved. Furthermore, most participants also noted that ChatGPT helped improve their English language proficiency and that it is a good tool for learning English.

In this study, the positive attitudes toward using ChatGPT in the English language seem to highlight that ChatGPT represents more opportunities for students. The same idea is supported by Liu and Ma (2023), who suggest that ChatGPT could offer more benefits to language learners. Thus, instead of dismissing the technology completely, it might be a good idea for teachers to utilize it by training students on how to use it effectively, thereby extending personalized learning beyond the classroom. However, teachers should complement new evaluation forms that focus on developing critical thinking skills and creativity, areas in which AI cannot substitute the role of teachers (Baskara & Mukarto, 2023; Zhai, 2022).

This study is subject to certain limitations. For a more comprehensive understanding of the benefits and challenges associated with integrating ChatGPT in ELT, an empirical study involving distinct groups of participants would be more desirable. Another limitation of this study is that the total number of participants is insignificant for generalizability. In future studies, an increased pool of participants and including personal interviews with learners would be more desirable to understand the effect of ChatGPT in ELT fully.

Conflicts of Interest

The author(s) declared no conflicts of interest.

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- e. I have access to instant language support and clarification.
- f. I can practice real-life conversation and interactive language use.
- g. I can increase my confidence in speaking.
- h. I can get exposure to natural language patterns and idiomatic expressions.

9. What are the drawbacks of using ChatGPT you have had? Select all that apply.

- a. It is difficult to understand the response generated.
- b. It may produce awkward or unnatural language.
- c. Depending too much on ChatGPT for English language learning can limit students' independent thinking and problem-solving skills.
- d. Detecting and correcting language mistakes generated can be challenging.
- e. It may produce inaccurate and unreliable information.
- f. ChatGPT tends to give generic answers to everyone without considering their strengths and weaknesses.
- g. ChatGPT lacks guidance on cultural nuances and appropriate language use.

Part III: The effect of using ChatGPT

To what extent do you agree or disagree with the following statements? Please rate on a scale of 1 to 5, where 5 means "strongly agree" and 1 means "strongly disagree."

10. ChatGPT has enhanced my speaking abilities.	1	2	3	4	5
11. ChatGPT has enhanced my ability to write in English more effectively.	1	2	3	4	5
12. ChatGPT has enhanced my vocabulary.	1	2	3	4	5
13. ChatGPT has helped me understand grammar rules and sentence structures better.	2	3	4	5	
14. ChatGPT has helped me improve my English proficiency.	1	2	3	4	5
15. ChatGPT enhanced my motivation to practice and develop my English skills.	1	2	3	4	5
16. ChatGPT has made language learning more interactive and engaging for me.	1	2	3	4	5
17. ChatGPT has increased my confidence in using English.	1	2	3	4	5
18. I enjoyed using ChatGPT as a language-learning tool.	1	2	3	4	5
19. I will continue to use ChatGPT to learn English.	1	2	3	4	5
20. ChatGPT is a good tool for learning English.	1	2	3	4	5