

INTERNATIONAL JOURNAL OF LAW
MANAGEMENT & HUMANITIES
[ISSN 2581-5369]

Volume 9 | Issue 4

2026

© 2026 International Journal of Law Management & Humanities

Follow this and additional works at: <https://www.ijlmh.com/>

Under the aegis of VidhiAagaz – Inking Your Brain (<https://www.vidhiaagaz.com/>)

This article is brought to you for free and open access by the International Journal of Law Management & Humanities at VidhiAagaz. It has been accepted for inclusion in the International Journal of Law Management & Humanities after due review.

In case of any suggestions or complaints, kindly contact support@vidhiaagaz.com.

To submit your Manuscript for Publication in the International Journal of Law Management & Humanities, kindly email your Manuscript to submission@ijlmh.com.

A Study on Learner Autonomy in English among Non-English Majors at a Public University in Hanoi, Vietnam

VU THI THUY NGAN*, VU MY LINH**, AND DO MAI QUYEN***

ABSTRACT

The main objective of this research is to investigate the key factors that affect autonomous English learning under the influence of digital technologies and AI tools at a public university in Hanoi, Vietnam. A questionnaire with 35 items was developed. Data were collected from 304 second-year non-English majors, who were randomly chosen from the 22 existing training programmes at Hanoi University of Natural Resources and Environment (HUNRE). The results indicate that English learning autonomy is influenced by several aspects involving digital technologies and AI tools, including learners' perceptions and behaviour regarding learning autonomy, the role of teachers, and the learning environment. The findings also support a recommendation that further research be developed with a larger scope in the context of the transformation of higher education in Vietnam under groundbreaking educational policies.

Keywords: *learning autonomy, learner autonomy, non-English majors, digital technologies, AI tools, English language teaching, Vietnam*

I. INTRODUCTION

In an era of globalisation and rapid digital transformation, English has become an indispensable tool for accessing diverse sources of information and knowledge, for participating in global integration across all aspects of social life, and for widening access to qualified employment. In Vietnam, English language education is increasingly prioritised as part of a broader educational reform aimed at developing a globally competent workforce.

Learner autonomy has been defined as "the ability to take charge of one's own learning", including responsibility for setting objectives, selecting learning content and methods, monitoring learning progress, and evaluating outcomes (Holec, 1981). It has also been described as learners' ability and willingness to make independent choices (Littlewood, 1999).

* Author is a Lecturer at Hanoi University of Natural Resources and Environment (HUNRE), Hanoi, Vietnam.

** Author is a Lecturer at Hanoi University of Natural Resources and Environment (HUNRE), Hanoi, Vietnam.

*** Author is a Lecturer at Hanoi University of Natural Resources and Environment (HUNRE), Hanoi, Vietnam.

In Vietnam, the importance of mastering English is increasingly affirmed through a number of national education policies, especially the project 'Making English the second language in schools during 2025–2035, with a vision to 2045', issued by the Prime Minister on 27 October 2025. This project marks a significant milestone in Vietnam's language education policy, shifting from treating English as a foreign language to shaping it as a second language used widely within the education system.

Numerous studies published by Vietnamese scholars have indicated that the English learning autonomy of non-English majors in Vietnamese universities is still limited and not truly effective. These studies have highlighted several difficulties and barriers to enhancing learner autonomy, including systemic factors such as training programmes, teaching and learning resources, and the English practice environment (Dang, 2010; Nguyen, 2011); factors relating to teachers (Nguyen & Nguyen, 2020); and factors relating to the learners themselves (Tran & Vuong, 2022; Le et al., 2024; Nguyen et al., 2024; Nguyen & Duong, 2025). Some recent studies have also shown the role of digital technology and artificial intelligence in promoting the learning autonomy of university students (Tran et al., 2025; Mai et al., 2025).

Against this background, ranging from national education policy to the situation of learner autonomy reported in published studies, the present research explores autonomy in learning English among second-year non-English majors at a public university in Vietnam. Specifically, the study surveys students' perceptions and behaviour regarding autonomy in learning English under the influence of digital technologies and AI tools, covering (i) their perceptions and behaviour concerning autonomy in learning English; (ii) their English teachers' role in driving the improvement of their English; and (iii) the learning environment as a means of promoting their English.

II. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

A. Theoretical framework

Learner autonomy has been conceptualised from various perspectives, but most definitions emphasise learners' capacity to take responsibility for their own learning. The concept was first systematically defined by Holec (1981), who described learner autonomy as "the ability to take charge of one's own learning", including responsibility for setting objectives, selecting learning content and methods, monitoring learning progress, and evaluating outcomes. Expanding this view, Dickinson (1994) argued that autonomy is fundamentally an attitude towards learning, whereby learners willingly assume responsibility for their learning process. Dickinson further emphasised that autonomy should be regarded as an educational goal rather than a specific

teaching method. Similarly, Littlewood (1999) defined autonomy as learners' ability and willingness to make independent choices. He proposed that autonomy is built upon four interrelated components, namely knowledge, skills, motivation, and confidence, which collectively enable learners to take responsibility for their learning decisions. From a broader perspective, Benson (2001, 2012) viewed learner autonomy as the capacity to take control of one's learning, emphasising that autonomy extends beyond self-study to encompass learners' attitudes and abilities to manage learning in diverse contexts. Complementing these perspectives, Tough (1979) conceptualised self-directed learning as a process in which individuals independently determine learning goals, identify resources, implement learning strategies, and evaluate outcomes. Collectively, these perspectives suggest that learner autonomy is a multidimensional construct involving responsibility, self-direction, decision-making, and self-regulation. It encompasses not only learners' abilities but also their motivation, confidence, and willingness to manage their own learning processes actively.

Learner autonomy has frequently been examined not only as an individual capacity but also as a construct shaped by contextual, psychological, and pedagogical influences. From a pedagogical perspective, Higgs (1988) emphasised the crucial role of teachers in shaping opportunities for autonomous learning through the degree of instructional control exercised in the classroom. He further argued that learner readiness, classroom climate, peer interaction, institutional expectations, and curriculum flexibility significantly affect learners' ability to engage independently in the learning process. Similarly, Borg and Al-Busaidi (2011) identified three major categories of barriers to learner autonomy: learner-related factors, teacher-related factors, and institutional factors. Their findings highlighted issues that may restrict opportunities for autonomous learning, such as learners' motivation and independent learning skills, as well as curriculum limitations and institutional practices. Regarding psychological factors, Cotterall (1995) proposed that readiness for autonomy is shaped by learners' beliefs about language learning, including perceptions of the teacher's role, the value of feedback, learner independence, confidence in learning ability, prior language learning experiences, and approaches to studying, while Mercer (2011) stressed the role of self-concept, beliefs, attitudes, and self-confidence in fostering autonomous behaviour. Mercer further suggested that differences in language proficiency may contribute to the development of distinct beliefs about language learning and autonomy. In a further study, Al-Khasawneh et al. (2024), on factors affecting learner autonomy in the context of English language learning, presented eight internal and external factors influencing learner autonomy: psychological elements, learning strategies,

cognitive abilities, metacognitive abilities, critical thinking, the role of the teacher, the task, and the environment.

Several recent studies have addressed autonomy in language learning under the influence of digital technology. In an overview study of AI-generated language learning content, Mohebbi (2024) demonstrated that AI-supported learning can enhance learner autonomy through personalised and self-directed learning opportunities. That study also identified several conditions necessary for the successful integration of AI in language education, including clear educational objectives, collaboration between educators and AI specialists in curriculum design, and supportive educational policies that ensure adequate infrastructure, teacher training, and equitable access to AI technologies. Another study, by Cripps (2020), highlighted the contribution of digital technology to learner autonomy through the concept of ubiquitous learning, that is, a learning environment in which learners can use various technologies to study anytime and anywhere, according to their individual needs. That research also showed that technology-supported learning environments help students take greater responsibility for their learning and become more independent and self-directed. Most students viewed technology positively and believed that digital tools could improve both teaching and learning.

B. Vietnamese studies on learner autonomy

Learner autonomy is one of the key features of English language instruction, especially in higher education, where learners are expected to become more autonomous and self-regulated. Over the past ten years, research on learner autonomy has drawn increasing attention in Vietnam as a result of wider educational reforms that prioritise learner-centred approaches and lifelong learning competencies. Several studies have explored various dimensions of learner autonomy, including students' perceptions and readiness, factors influencing autonomous learning, difficulties encountered by learners, and the impact of digital technology and emerging learning environments on the promotion of learner autonomy.

Earlier studies mainly discussed learner autonomy from theoretical and sociocultural perspectives. For instance, Dang (2010) and Nguyen (2011) highlighted that although Vietnamese students and teachers recognised the importance of learner autonomy, traditional teacher-centred practices and learners' dependence on teachers still limited the development of autonomous learning. Some empirical research has examined students' perceptions, practices, and readiness for autonomy in tertiary education. Studies by Le (2013) and Le (2018) revealed that students generally held positive attitudes towards autonomous learning; however, they faced challenges related to self-discipline, strategy use, and self-regulation. Research on non-

English majors further confirmed that although learners were aware of the importance of autonomy, their actual autonomous practices remained limited because of low motivation, inadequate learning strategies, and insufficient institutional support (Nguyen & Nguyen, 2020; Le & Nguyen, 2022).

Recent studies have increasingly focused on factors influencing learner autonomy and on the role of digital learning environments. Tran and Vuong (2022), as well as Nguyen and Duong (2025), emphasised that learner autonomy is shaped by interconnected factors such as learner motivation, teachers' approaches, learning environments, and institutional infrastructure. Furthermore, studies of learning based on a learning management system (LMS), blended learning, and out-of-class digital learning contexts indicated that technology-enhanced environments can improve learner autonomy by increasing flexibility, engagement, and opportunities for self-directed learning (Le et al., 2024; Tran et al., 2025; Mai et al., 2025). Similarly, Nguyen et al. (2024) found that learner autonomy in English as a medium of instruction (EMI) contexts was strongly influenced by language proficiency, motivation, learning strategies, and institutional support.

Overall, the reviewed studies indicate that learner autonomy in English learning has become an increasingly important research field in Vietnam. The existing literature consistently shows that Vietnamese university students generally recognise the importance of learner autonomy and express positive attitudes towards it. However, their actual autonomous practices are often constrained by weak self-regulation skills, traditional study methods, insufficient motivation, and inadequate learning environments. Recent studies further suggest that digital tools, LMS platforms, blended learning, and technology-enhanced environments can support learner autonomy when accompanied by appropriate instructional strategies and institutional support. Nevertheless, there remains a need for further research focusing on non-English majors in public universities, particularly on how learner autonomy develops under the influence of digital technology and emerging AI-supported learning environments in the context of the ongoing transformation of higher education in Vietnam.

C. Foreign studies on learner autonomy

Many researchers around the world have published findings on learning autonomy and have confirmed learner autonomy as a crucial element in effective English language acquisition. Borg and Al-Busaidi (2011) emphasised learner autonomy as a valued educational objective and examined how teachers' beliefs and classroom practices influence its development. Similarly, Najeeb (2013) conceptualised learner autonomy as learners' capacity to take charge of their

learning through setting goals, selecting learning strategies, monitoring progress, and evaluating outcomes. Moving beyond conceptual discussion, Chan (2015) investigated the use of learning contracts among language majors in Hong Kong and found that structured self-directed learning opportunities encouraged students to assume greater responsibility for planning and managing their learning. Likewise, Khulaifiyah et al. (2021) reported that English language students generally perceived autonomous learning activities positively and actively engaged in independent learning practices both inside and outside the classroom. These studies reveal a common research trend that views learner autonomy as a learner-centred process characterised by responsibility, self-management, and active engagement, while also highlighting the importance of pedagogical support and learning opportunities in fostering learner autonomy.

Another significant strand of research has focused on the role of autonomy and on the factors influencing it. Kemala (2016) identified motivation, learning strategies, teacher support, and the learning environment as key factors influencing autonomous learning. Similarly, Avazmatova (2022) emphasised that learner autonomy enables learners to take responsibility for their learning and to develop self-discipline and active engagement. In the context of distance education, Bei et al. (2019) found that self-management, self-monitoring, and motivation are central dimensions of learner autonomy. Likewise, Liu (2023) reported that autonomous learners demonstrate stronger goal-setting, closer monitoring of their learning, and more active participation in English learning. Collectively, these studies suggest that learner autonomy is shaped by both personal and contextual factors, with motivation, self-management, and supportive learning environments playing crucial roles in fostering autonomous language learning.

Much of the recent research on learner autonomy has been undertaken in educational settings where digital and AI-supported learning environments may strongly influence learner autonomy. Alm (2024) noted that AI technologies can enhance personalised and self-regulated learning, although learners may face challenges related to overdependence on technology and to the critical evaluation of AI-generated information. Likewise, He et al. (2025) found that AI-supported self-regulated learning positively predicts learner autonomy. Other studies, including Noorwali and Sabir (2025) and Jegadeesan et al. (2025), demonstrated that digital technologies and blended learning environments promote independent learning, flexibility, and learner responsibility in English language learning contexts.

III. RESEARCH METHODOLOGY

A. Research design

An objectives-based quantitative research approach was adopted in this study. A questionnaire containing 35 items was used as the primary research instrument for data collection. The objective of the study was to explore the factors affecting learner autonomy in learning English among second-year non-English majors under the influence of digital technologies and AI tools.

B. Participants

A sample of 304 second-year non-English majors was selected from a cohort of nearly 1,000 students at Hanoi University of Natural Resources and Environment (HUNRE), who were randomly chosen to take part in the questionnaire survey. Second-year students were selected as the research subjects for several reasons. First, they have completed their first year of university. Second, they have completed six credits of English, comprising English 1 and English 2. Third, English courses are no longer compulsory for second-year students. Autonomous learning is therefore all the more important in a context in which English is a useful tool not only in academia but also in today's deeply integrated international society.

Participants were drawn from six of the 22 training programmes at HUNRE in order to make the sample more representative. All the participants were aged between 18 and 20. They had recently moved to a new stage of education, that is, higher education with a credit-based system.

C. Research instruments

A closed-ended questionnaire was the research instrument used in this study. Excluding the general information about the participants, the questionnaire contained 35 items coded with the letter "Q" and divided into three main sections, which asked second-year non-English majors about learner autonomy in learning English under the influence of digital technologies and AI tools: (i) their perceptions and behaviour concerning autonomy in learning English, with 15 items, arranged from Q1 to Q15; (ii) their English teachers' role in driving the improvement of their English, with 10 items, arranged from Q16 to Q25; and (iii) the learning environment as a means of promoting their English, with 10 items, arranged from Q26 to Q35.

The items were arranged from 1 to 5, corresponding to negative through to positive levels (Likert, 1932). They were evaluated on a five-point Likert scale: 1 = strongly disagree; 2 = disagree; 3 = undecided; 4 = agree; 5 = strongly agree. The interpretation of the mean scores is presented in Table 1 below.

Table 1. Understanding of mean scores

Level	Range	Within this study	Range
Very high	4.5 to 5.0	Strongly agree	4.21 to 5.00

Level	Range	Within this study	Range
High	3.5 to 4.4	Agree	3.41 to 4.20
Medium	2.5 to 3.4	Undecided	2.61 to 3.40
Low	1.0 to 2.4	Disagree	1.81 to 2.60
		Strongly disagree	1.00 to 1.80

D. Data analysis

The quantitative data collected from the survey were recoded and analysed using SPSS (Statistical Package for the Social Sciences) software, version 20.0, reporting the number of items (N), minimum (Min), maximum (Max), mean (M), and standard deviation (SD). The mean was used as the indicator of the average value of participants' assessments. In order to provide a basis for assessing the participants' level of agreement with each item, five bands were established with the aim of achieving relative accuracy in interpreting the answers in the questionnaire. The average value on the five-point Likert scale was converted into the following ranges:

- 1.00–1.80 represented the lowest assessment (strongly disagree);
- 1.81–2.60 represented a low assessment (disagree);
- 2.61–3.40 represented a medium assessment (undecided);
- 3.41–4.20 represented a high assessment (agree);
- 4.21–5.00 represented the highest assessment (strongly agree).

IV. RESULTS

The findings of this study are presented according to the research questions. The overall N, Min, Max, M, and standard deviation for all items, separated into the three key parts as reported by the students, are shown in Table 2 below.

Table 2. The overall N, Min, Max, M and Std. deviation for three key parts

Descriptive Statistics					
	N	Min.	Max.	M	SD
Perception and behaviour	304	1.00	4.53	3.1353	.74277
Role of teacher	304	1.10	4.20	2.8764	.62436
Learning environment	304	1.30	4.20	2.6770	.46266
Valid N	304				

Descriptive Statistics					
(listwise)					

The data in Table 2 show that the learners reported the highest score for their perception and behaviour ($M = 3.13$, $SD = .74$), in comparison with "Role of teacher" ($M = 2.87$, $SD = .62$) and "Learning environment" ($M = 2.67$, $SD = .46$).

A. The students' perceptions and behaviour concerning autonomy in learning English under the influence of digital technologies and AI tools

Table 3 displays the mean scores for the eight items (Q1, Q2, Q5, Q11, Q12, Q13, Q14 and Q15) measuring students' perception of autonomy in learning English under the influence of digital technologies and AI tools.

Table 3. Descriptive statistics for the learners' perception on English learning autonomy

Code	Contents	N	Min.	Max.	M	SD
Q1	I am interested in learning English and enjoy it as my hobby.	304	1.00	5.00	3.4178	1.13734
Q2	I have understood the importance of learning autonomy in general, and English particularly.	304	1.00	5.00	3.7500	1.17313
Q5	Technology allows me to learn English anytime and anywhere.	304	1.00	5.00	3.7138	1.14047
Q11	AI tools (such as ChatGPT, Gemini or translation tools) help me understand English better.	304	1.00	5.00	3.6974	1.14920
Q12	I have many chances to learn English better inside	304	1.00	5.00	3.6941	1.11774

Code	Contents	N	Min.	Max.	M	SD
	and outside the classroom with available digital technologies and AI tools.					
Q13	Technology and digital tools encourage me to study English more actively and independently	304	1.00	5.00	3.6645	1.14289
Q14	Using technology and AI tools encourage me to take more responsibility for my English learning.	304	1.00	5.00	3.6513	1.13893
Q15	Exploring and searching for additional English learning materials beyond the textbook are more easier for me with support of technology and AI tools.	304	1.00	5.00	3.6974	1.11716
Valid N (listwise)	304					

The table above shows that the mean scores for the eight items relating to learners' perception are relatively high, with the lowest at $M = 3.41$, $SD = 1.13$ and the highest at $M = 3.75$, $SD = 1.17$.

Table 4 illustrates the participants' behaviour in autonomous English learning, covering seven items (Q3, Q4, Q6, Q7, Q8, Q9 and Q10).

Table 4. Descriptive statistics for the learners' behaviour on English learning autonomy

Code	Contents	N	Min.	Max.	M	SD
Q3	I set my clear	304	1.00	5.00	2.5000	.96814

Code	Contents	N	Min.	Max.	M	SD
	personal learning goals with aspects of English I need to focus on.					
Q4	I make detailed plans with specific period of time for each part to improve my English skills.	304	1.00	5.00	2.4178	1.07160
Q6	I myself find the ways to study (inside/outside of classes) and select technologies to apply before teachers give the recommendation	304	1.00	5.00	2.9342	.92398
Q7	I actively look for opportunities to practice English outside the classroom regularly.	304	1.00	5.00	2.3783	.96043
Q8	I use technology or support of AI to solve problems when I do not understand English lessons before getting teachers' support.	304	1.00	5.00	2.8454	.96769
Q9	I often check my study results myself without support teachers and AI.	304	1.00	5.00	2.4211	1.09621
Q10	I regularly evaluate my	304	1.00	5.00	2.2467	.93431

Code	Contents	N	Min.	Max.	M	SD
	progress in learning English without being forced by teachers.					
Valid N (listwise)	304					

The results for the students' behaviour in autonomous English learning show that the statement "I regularly evaluate my progress in learning English without being forced by teachers" recorded the lowest mean score ($M = 2.24$, $SD = .93$), while the highest mean score ($M = 2.93$, $SD = .92$) was recorded for the statement "I myself find the ways to study (inside/outside of classes) and select technologies to apply before teachers give the recommendation". The other statements, namely "I actively look for opportunities to practise English outside the classroom regularly"; "I make detailed plans with specific period of time for each part to improve my English skills"; "I often check my study results myself without support of teachers and AI"; "I set my clear personal learning goals with aspects of English I need to focus on"; and "I use technology or support of AI to solve problems when I do not understand English lessons before getting teachers' support", have average scores of $M = 2.37$, $SD = .96$; $M = 2.41$, $SD = 1.07$; $M = 2.42$, $SD = 1.09$; $M = 2.50$, $SD = .97$; and $M = 2.84$, $SD = .97$, respectively.

B. The learners' voice on English teachers' role in driving the improvement of their English under the influence of digital technologies and AI tools

Table 5. Descriptive statistics for the teachers' role

Code	Contents	N	Min.	Max.	M	SD
Q16	My teachers encourage us to learn English independently basing on learning plans.	304	1.00	5.00	3.1316	1.04477
Q17	My teachers guide and adjust learning methods to suit their students.	304	1.00	5.00	2.7072	.95948
Q18	My teachers introduce	304	1.00	5.00	3.1776	1.09967

Code	Contents	N	Min.	Max.	M	SD
	useful technologies, digital tools in English learning.					
Q19	My teachers provide guidance on how to learn English effectively with support of AT and technologies.	304	1.00	5.00	2.6634	1.32932
Q20	My teachers are on hand to help students during their students try new learning technologies.	304	1.00	5.00	2.6711	1.10967
Q21	My teachers create opportunities for students to practice English more inside the classroom.	304	1.00	5.00	2.8553	1.10150
Q22	My teachers create interacting and learning environment for students to practice English outside the classroom.	304	1.00	5.00	2.8717	.94746
Q23	My teachers always set aside time for students' questions if they need the help.	304	1.00	5.00	3.2829	1.21822
Q24	My teachers offer helpful feedback that helps their students become a more autonomous learner.	304	1.00	5.00	2.5493	1.19025

Code	Contents	N	Min.	Max.	M	SD
Q25	The evaluation of learning results by teachers is always fair and authentic for each learner.	304	1.00	5.00	2.8586	.86920
Valid N (listwise)	304					

Regarding the role of teachers, the students recorded medium scores on almost all the items relating to this matter. The statement "My teachers always set aside time for students' questions if they need the help" recorded the highest mean score ($M = 3.28$, $SD = 1.21$), followed by "My teachers introduce useful technologies, digital tools in English learning" ($M = 3.17$, $SD = 1.09$) and "My teachers encourage us to learn English independently basing on learning plans" ($M = 3.13$, $SD = 1.04$). The other statements were: "My teachers create interacting and learning environment for students to practise English outside the classroom" ($M = 2.87$, $SD = .95$); "The evaluation of learning results by teachers is always fair and authentic for each learner" ($M = 2.86$, $SD = .87$); "My teachers create opportunities for students to practise English more inside the classroom" ($M = 2.85$, $SD = 1.10$); "My teachers guide and adjust learning methods to suit their students" ($M = 2.70$, $SD = .96$); "My teachers are on hand to help students while their students try new learning technologies" ($M = 2.67$, $SD = 1.11$); "My teachers provide guidance on how to learn English effectively with support of AI and technologies" ($M = 2.66$, $SD = 1.33$); and "My teachers offer helpful feedback that helps their students become a more autonomous learner" ($M = 2.54$, $SD = 1.19$).

C. The undergraduates' views on the learning environment as a means of promoting their English under the influence of digital technologies and AI tools

Table 6 illustrates the learners' opinions on the extent to which the learning environment supported them in improving their English under the influence of digital technologies and AI tools. The students agreed with some items with relatively high scores, for instance "Students can learn everywhere, everywhen on HUNRE's E-learning" ($M = 3.36$, $SD = 1.00$), followed by "The syllabus, textbooks and reference books are interesting and easy to follow and use" ($M = 3.09$, $SD = .93$) and "It is easy to find out different sources of information and knowledge in the HUNRE library" ($M = 3.05$, $SD = .93$). Nonetheless, the students' ratings of several other items were not high. These include "HUNRE provides good internet access and advanced

equipment for students' learning English" (M = 2.28, SD = 1.20); "The opportunities to practise English are available at HUNRE" (M = 2.30, SD = 1.04); "Students are more autonomous in managing their time since studying on HUNRE LMS" (M = 2.37, SD = 1.23); "Available facilities (i.e., space, light, tables, chairs, noise, etc.) are suitable for the English learning process" (M = 2.43, SD = 1.01); "It's easy for students to access and use HUNRE's Learning Management System (LMS)" (M = 2.53, SD = 1.05); "Digital contents (video lectures, learning materials, references) are relevant" (M = 2.60, SD = 1.00); and "It's convenient for students to access and share digital materials on virtual room" (M = 2.73, SD = 1.19). The detailed statistics are set out in Table 6 below.

Table 6. Descriptive statistics for the learning environment

Code	Contents	N	Min.	Max.	M	SD
Q26	HUNRE provides good internet access and advanced equipment for students' learning English.	304	1.00	5.00	2.2895	1.20303
Q27	The syllabus, textbooks and reference books are interesting and easy to follow and use.	304	1.00	5.00	3.0855	.93656
Q28	Available facilities (i.e., space, light, tables, chairs, noise, etc.) are suitable for the English learning process.	304	1.00	5.00	2.4375	1.01606
Q29	It is easy to find out different sources of information and knowledge in the HUNRE library.	304	1.00	5.00	3.0493	.93389
Q30	The opportunities	304	1.00	5.00	2.3026	1.04069

Code	Contents	N	Min.	Max.	M	SD
	to practice English are available at HUNRE.					
Q31	It's easy for students to access and use HUNRE's Learning Management System (LMS)	304	1.00	5.00	2.5329	1.05253
Q32	Digital contents (videos lectures, learning materials, reference..) are relevant.	304	1.00	5.00	2.5987	1.00664
Q33	It's convenient for students to access and share digital materials on virtual room.	304	1.00	5.00	2.7336	1.19876
Q34	Students can learn everywhere, everywhen on HUNRE's E-learning.	304	1.00	5.00	3.3651	1.00899
Q35	Students are more autonomous in managing their time since studying on HUNRE LMS.	304	1.00	5.00	2.3750	1.23648
Valid N (listwise)	304					

V. DISCUSSION

The results of this research show that autonomous English learning among second-year non-English majors at HUNRE is influenced by several factors, including their perception of learning autonomy and their actions regarding autonomy, the role of English teachers, and the

learning environment. All of these factors involve the presence of digital technology and AI tools.

In terms of the students' perception and behaviour concerning autonomous learning, the findings indicate that the learners' understanding of the role of autonomous English learning and of the support offered by digital technologies and AI tools is clear, covering matters such as the importance of autonomy in learning English and the benefits of technology and AI for autonomy in English learning. This outcome is consistent with Dickinson (1994), Benson (2001, 2012), Cripps (2020), and Mercer (2011), who found that learners' self-concept, attitude, and readiness, together with the advantages of digital technology, may contribute to the improvement of students' autonomy in English learning. However, the learner behaviour observed in this study, which reflects a lack of autonomy in English learning, indicates that students are not performing well in autonomous English learning activities, particularly with the support of digital technology and AI tools. Such activities include setting clear personal learning goals, actively looking for opportunities to practise English outside the classroom, regularly evaluating progress in learning English without being required to do so by teachers, finding ways to study, and selecting technologies to apply. This finding is inconsistent with the findings of earlier studies such as Holec (1981), Tough (1979) and Littlewood (1999), which described learning autonomy as including "setting objectives, selecting learning content and methods, monitoring learning progress, and evaluating outcomes", or determining learning goals, identifying resources, implementing learning strategies, and evaluating outcomes. This may indicate a situation in which the autonomous English learning activities of second-year non-English majors at HUNRE are not yet clearly defined and are not very effective.

Concerning students' perceptions of the teacher's role in promoting autonomous English learning with the support of technology and AI tools, the results of this study indicate that many students agreed that teachers are a crucial factor in promoting learners' autonomy in English learning with the support of digital technology, through activities such as encouraging students to learn English independently on the basis of learning plans; providing guidance on how to learn English effectively with the support of AI and technology; creating an interactive learning environment for students to practise English outside the classroom; supporting students in solving learning problems; evaluating learning results; and introducing useful technologies and digital tools for English learning. This finding is in line with the results of Higgs (1988), Borg and Al-Busaidi (2011), Cotterall (1995), and Al-Khasawneh et al. (2024), which emphasised the essential role of teachers in enhancing students' learning autonomy.

This research also explored the students' views on the learning environment as a means of promoting their autonomous English learning. According to the findings, many participants reported that the learning environment is crucial and necessary for promoting autonomy in learning English. They stated that easy access to digital learning resources, learning on an LMS platform, and a suitable training programme are factors that help enhance learning autonomy. This finding is consistent with the results of Cripps (2020), Al-Khasawneh et al. (2024) and Mohebbi (2024), which confirmed the importance of the learning environment in boosting learners' autonomy through, for instance, curriculum design, ubiquitous learning, technology-supported learning environments, adequate infrastructure, and equitable access to AI technologies. However, when evaluating in detail the learning environment that HUNRE provides to students, such as internet access, opportunities for practising English, advanced equipment for learning English, and the LMS platform, many students felt that these aspects were not given sufficient attention by HUNRE, and that this was a barrier to promoting their autonomy in learning English.

VI. CONCLUSION AND RECOMMENDATION

The main objective of this research was to investigate the key factors that affect autonomous English learning under the influence of digital technologies and AI tools among second-year non-English majors at a public university in Hanoi, Vietnam. A quantitative research method was employed, gathering data from 304 students. The results indicate that English learning autonomy is influenced by several aspects involving digital technologies and AI tools, including learners' perceptions and behaviour regarding learning autonomy, the role of teachers, and the learning environment. Many participants replied that most of these factors contribute to developing their learning autonomy; however, there were also many challenges, such as the need for a good learning environment with available facilities and a smart e-learning platform to promote their learning autonomy.

Having investigated the factors affecting autonomous English learning among second-year non-English majors under the influence of digital technologies and AI tools, the authors recommend that further research be developed with a larger scope in the context of the transformation of higher education in Vietnam under groundbreaking educational policies.

VII. ACKNOWLEDGEMENTS

The authors extend their appreciation to Hanoi University of Natural Resources and Environment for supporting this study through the grassroots project coded HUNRE.2026.04.02.

VIII. REFERENCES

- Al-Khasawneh, F., Huwari, I., Alqaryouti, M., Alruzzi, K., & Rababah, L. (2024). Factors affecting learner autonomy in the context of English language learning. *Jurnal Cakrawala Pendidikan*, 43(1), 140–153. <https://doi.org/10.21831/cp.v43i1.61587>
- Alm, A. (2024). Exploring autonomy in the AI wilderness: Learner challenges and choices. *Education Sciences*, 14(12), Article 1369. <https://doi.org/10.3390/educsci14121369>
- Avazmatova, M. (2022). The role of learner autonomy in foreign language learning. *Humanising Language Teaching (HLT) Magazine*.
- Bei, E., Mavroidis, I., & Giossos, Y. (2019). Development of a scale for measuring the learner autonomy of distance education students. *European Journal of Open, Distance and E-Learning*, 22(2), 133–144. <https://doi.org/10.2478/eurodl-2019-0015>
- Benson, P. (2001). *Teaching and researching autonomy in language learning*. Longman/Pearson Education.
- Benson, P. (2012). Autonomy in language learning, learning and life. *Synergies France*, 9, 29–39.
- Borg, S., & Al-Busaidi, S. (2011). *Learner autonomy: English language teachers' beliefs and practices* (ELT Research Paper 12-07). British Council.
- Chan, M. (2015). Language learner autonomy and learning contract: A case study of language majors of a university in Hong Kong. *Open Journal of Modern Linguistics*, 5(2), 147–180. <https://doi.org/10.4236/ojml.2015.52013>
- Cotterall, S. (1995). Readiness for autonomy: Investigating learner beliefs. *System*, 23(2), 195–205. [https://doi.org/10.1016/0346-251X\(95\)00008-8](https://doi.org/10.1016/0346-251X(95)00008-8)
- Cripps, T. (2020). We are mobile magicians but digital refugees: Helping prospective English teachers explore technology and ubiquitous learning. *Electronic Journal of Foreign Language Teaching*, 17, 168–189.
- Dang, T. T. (2010). Learner autonomy in EFL studies in Vietnam: A discussion from a sociocultural perspective. *English Language Teaching*, 3(2), 3–9.
- Dickinson, L. (1994). Learner autonomy: What, why and how? In V. J. Leffa (Ed.), *Autonomy in language learning* (pp. 2–12). Universidade Federal do Rio Grande do Sul.
- He, G., et al. (2025). Predicting learner autonomy through AI-supported self-regulated learning: A social cognitive theory approach. *Learning and Motivation*, 60(4), 1–13.

- Higgs, T. V. (Ed.). (1988). *Planning, implementing, and evaluating foreign language programs: A guide for teachers*. National Textbook Company.
- Holec, H. (1981). *Autonomy and foreign language learning*. Pergamon Press. (Original work published 1979, Council of Europe)
- Jegadeesan, R. P., Priya, G. A. R., & Thampi, A. K. S. (2025). Fostering independence through technology: Enhancing learner autonomy in teaching English as a second language. *International Journal of Social Science and Humanities Management Research*, 4(1), Article N04.
- Kemala, Z. (2016). An analysis of factors influencing the autonomous learners in learning English. *ELTIN Journal*, 4(1), 11–20.
- Le, H. T. Q., Dang, T. T., & Bui, Q. T. T. (2024). EFL tertiary students' perception of learner autonomy in the out-of-class learning context: Situation and discussions. *HNUE Journal of Science*, 69(3), 33–43.
- Le, T. N. A. (2018). EFL students' voices on learner autonomy at a university in the Mekong Delta. *VNU Journal of Foreign Studies*, 34(2), 26–38.
- Le, X. Q. (2013). *Fostering learner autonomy in language learning in tertiary education: An intervention study of university students in Ho Chi Minh City, Vietnam* [Unpublished doctoral dissertation]. University of Nottingham.
- Littlewood, W. (1999). Defining and developing autonomy in East Asian contexts. *Applied Linguistics*, 20(1), 71–94. <https://doi.org/10.1093/applin/20.1.71>
- Liu, X. (2023). A study on the learner autonomy in learning English of Chinese EFL students in Shandong Institute of Science and Technology Vocational College. *The EURASEANs: Journal on Global Socio-Economic Dynamics*, 8(5(42)), 194–207.
- Mai, V., Nguyen, Q. C., Duong, N. T., & Tran, Q. M. T. (2025). The impact of teaching strategies in blended learning on students' self-directed learning capability at Hanoi University of Science and Technology. *Vietnam Journal of Education*, 9(1), 86–98.
- Mercer, S. (2011). Language learner self-concept: Complexity, continuity and change. *System*, 39(3), 335–346. <https://doi.org/10.1016/j.system.2011.07.006>
- Mohebbi, A. (2024). Enabling learner independence and self-regulation in language education using AI tools: A systematic review. *Cogent Education*, 12(1), Article 2433814. <https://doi.org/10.1080/2331186X.2024.2433814>

- Najeeb, S. S. R. (2013). Learner autonomy in language learning. *Procedia - Social and Behavioral Sciences*, 70, 1238–1242. <https://doi.org/10.1016/j.sbspro.2013.01.183>
- Nguyen, C. T. N., & Nguyen, T. T. (2020). Non-language-major students' autonomy in learning English in Vietnam. *Arab World English Journal*, 11(3), 184–192.
- Nguyen, T. H. H., Ho, T. N., Do, T. M. D., & Pham, T. T. T. (2024). Factors affecting learner autonomy in EMI studying of English-major students at some economics universities in Hanoi, Vietnam. *International Journal of Language Instruction*, 3(3), 36–53.
- Nguyen, T. T. H., & Duong, M. T. (2025). Factors influencing learner autonomy in higher education: Non-English majors' perceptions. *TNU Journal of Science and Technology*, 230(4), 79–86.
- Nguyen, T. V. (2011). Language learners' and teachers' perceptions relating to learner autonomy: Are they ready for autonomous language learning? *VNU Journal of Science, Foreign Languages*, 27, 41–52.
- Noorwali, S., & Sabir, M. (2025). Investigating technology use and learners' autonomy among Saudi EFL learners. *Arab World English Journal (AWEJ), Special Issue on CALL*(11), 126–143.
- Tough, A. (1979). *The adult's learning projects* (2nd ed.). Ontario Institute for Studies in Education.
- Tran, K. M. A., Le, M. T., & Le, T. T. (2025). Learner autonomy in LMS reading assignment: A study on student participation and their perspectives at a university in Ho Chi Minh City. *Journal of Science and Technology*, 74(2).
- Tran, T. B. T., & Vuong, T. K. (2022). Factors affecting learner autonomy in tertiary level English learning: A study at Van Lang University. *International Journal of TESOL & Education*, 3(1), 1–18. <https://doi.org/10.54855/ijte.23311>
