**International Journal of Evaluation and Research in Education (IJERE)**
Vol. 13, No. 4, August 2024, pp. 2731~2738
ISSN: 2252-8822, DOI: 10.11591/ijere.v13i4.28356 

# English learning autonomy among vocational college students in China: based on the three-aspect model

**Jing Zhang, Siti Zuraidah Md Osman**
Department of School of Education Studies, Universiti Sains Malaysia, Penang, Malaysia

**Article Info**

***Article history:***

Received Oct 31, 2023
Revised Dec 24, 2023
Accepted Feb 12, 2024

***Keywords:***

Autonomous behaviors
Autonomous psychology
English learning autonomy
Self-management learning ability
Vocational college students

**ABSTRACT**

Based on the three-aspect model of learner autonomy, this study examines levels of English learning autonomy and potential correlation factors, such as gender, admission sources, and field of majors, in a newly-built vocational college in China. The study employs a random sampling survey method and surveyed 280 students from a Chinese public vocational college. After data analysis with quantitative methods, this study found that 48.6% respondents presented high-level English learning autonomy, followed by 43.6% and 7.9% students with moderate-level and low-level English learning autonomy respectively. Additionally, vocational college students developed moderate self-management learning ability (mean=3.57) and autonomous behaviors (mean=3.48) remained to be improved even though vocational college developed high level of autonomous psychology (mean=3.81). With regard to influential factors of English learning autonomy among vocational college students, admission sources can be considered as the most important factor to determine different levels of English learning autonomy, but no significant correlation exists between English learning autonomy and gender or field of majors. In response to such situation, suggestions are put forward to enhance English learning autonomy from the perspective of learning agenda, learning strategies, self-assessment, reflection, and digital learning materials.

*This is an open access article under the CC BY-SA license.*

***Corresponding Author:***

Siti Zuraidah Md Osman
Department of School of Education Studies, Universiti Sains Malaysia
11800 USM Penang, Pulau Pinang, Malaysia
Email: sitizuraidah@usm.my

## 1. INTRODUCTION

Learner autonomy is widely acknowledged as a crucial component of language learning, and has been frequently discussed since 1971 when Centre de Recherches et d'Applications Pédagogiques en Langues (CRAPEL) was established [1]. As a prominent figure in the field of English learning autonomy, Holec [2] made a project report illustrating that "an autonomous learner is willing to take charge of his/her own learning and is capable of specifying aims and purposes, choosing relevant methods, organizing and carrying out tasks and applying criteria for evaluation." As a matter of fact, English learning autonomy among vocational college students is still a critical issue that draws attention from Chinese scholars and educators [3]–[6]. For example, Mo and Yan [4] pointed out that English as a foreign language (EFL) learners in vocational colleges and universities showed weaknesses in time management, learning schedules, and self-regulating learning habits after classes. In order to tackle with such deep-rooted issues, English learning autonomy is highlighted as one of the four significant core competencies in the English curriculum standards for higher vocational education (2021 edition), stating that autonomous learners should set clear English learning goals, effectively plan learning time and tasks, adopt appropriate English learning strategies

and resources and evaluate their learning outcomes. Considering the fact that English learning autonomy and language proficiency are mutually supporting and fully integrated with each other [7], further efforts must be made to examine the status quo and correlation factors of English learning autonomy among non-English major students in Chinese vocational colleges.

To date, the research centering on English learning autonomy has been gaining popularity in inner factors, such as definitions and dimensions [8], [9], motivation [3], [10], self-efficacy [11], [12], together with the practice to foster learner autonomy [13]–[15]. However, few studies investigated external factors such as the society, peers or learning environments in the context of Chinese vocational colleges [16]. Worse still, even though Chinese scholars and educators discussed this topic through theoretical studies, teaching reform reports and empirical studies for nearly two decades, some empirical studies failed to follow the accepted research practices in variable definition, research design, scale development, and application of inferential statistical methods [17]. Therefore, this study attempts to probe into correlation between external factors and English learning autonomy from the aspects of admission sources and field of majors in a Chinese vocational college.

Notably, this study adopts the three-aspect model proposed by Benson that learner autonomy can be described as control over abilities, psychology, and behaviors [18]. First of all, from Holec's definition, self-management learning ability constitutes a major dimension for autonomous language learning, including specifying aims and purposes, choosing relevant methods, organizing, and carrying out tasks and applying criteria for evaluation. Similarly, Murray [19] put forward an operationalized definition through categorizing autonomy as "taking responsibility for goal setting, materials selection, strategy implementation, monitoring progress, and assessment". Secondly, when it comes to the psychological dimension, "willingness" and "confidence" are considered as critical factors for autonomous language learners [20], because autonomous learners develop willing, proactive, and reflective attitudes towards their learning [21]. Moreover, without confidence in learning decisions and abilities, learners would find learning goals far from attainable, which in turn discourages them to grow into autonomous learners [22]. Another element of learner autonomy is closely related to metacognitive awareness, because autonomous learners tend to be metacognitively aware of planning, monitoring, and evaluating their learning [23]. Thirdly, it is autonomous behaviors that can be the best evidence of learner autonomy, such as controlling over learning strategies, situations, and content [24]. Nunan [25] proposed a learner autonomy model related to "learners' actions, including awareness, involvement, intervention, creation, and transcendence". In addition, the models formulated by previous studies [18], [26] further explained learning behaviors exhibited by autonomous language learners.

Therefore, this study aims to figure out the levels and correlated external factors of autonomous learning among non-English major students in a vocational university during the post-epidemic era. The research questions are: i) what is the level of English learning autonomy among vocational college students from the perspectives of ability, psychology, and behaviors?; ii) is there any correlation between English learning autonomy of vocational college students and their gender, major or admission sources?; and iii) what are suggestions to foster vocational college students' English learning autonomy?

## 2. RESEARCH METHOD

The research investigated the level of English learning autonomy among vocational college students and examined whether there was any correlation between English learning autonomy and students' gender, admission sources or majors. Given such research objectives, the research utilized a quantitative descriptive research design to figure out students' level of English learning autonomy from the perspectives of ability, psychology, and behaviors, and examine the correlation between several variables.

### 2.1. Sample/participants

This research took place in a Chinese vocational college. Participants were first-year students who have studied the course of college English for one year, and their majors ranged from humanities to science and engineering. Moreover, unlike undergraduates, not all vocational college students had the experience of attending the college entrance English exam (CEEE), because vocational colleges would not only admit students passing the college entrance exam, but also organize the single-enrolled exam to recruit students from secondary vocational schools. Therefore, students with and without the experience of attending CEEE were separated in this research. Besides, random sampling was applied in this research and students volunteered to answer the questionnaire. Table 1 summarizes the demographic characteristics of participants, including gender, major, and admission sources.

### 2.2. Instrument

The questionnaire adopted in this study was the autonomous English learning scale (AELS) developed by Lin [20]. According to the data analysis from SPSS 25.0, the Cronbach's coefficient is 0.992,

and the split-half reliability is 0.943, both of which are qualified for the requirements of psychometrics. The AELS is comprised of 38 questions based on Likert's five-point scale, from "strongly disagree" to "strongly agree", with a focus on three dimensions (autonomous psychology, self-management learning ability, and autonomous behaviors). The following are sample questions of three sub-dimensions: i) autonomous psychology (10 items): students are responsible for deciding their learning goals; ii) self-management learning ability (16 items): I am able to make English learning plans according to my current situation; and iii) autonomous behaviors (12 items): apart from the textbooks I select learning materials that suit myself.

### 2.3. Data collection and analysis

With the method of random sampling, this research selected respondents who volunteered to answer the questionnaire. The questionnaire was delivered online through Wenjuanxing, a Chinese questionnaire platform. Each student took nearly ten minutes to complete answers, and 282 questionnaires were then collected, of which 280 were valid copies. The population includes 1,000 students from this vocational college, so that the sample size of 280 is reasonable according to the random sampling method when the population includes 1,000 students with confidence level 95% and confidence interval 5% [27]. To address the research questions, the study interpreted the data from the aspects of percentages, standard deviations (SD), mean value, and independent groups t-test functions with SPSS 25.0. Table 2 lists three categories of students' learning autonomy levels according to different mean range.

Table 1. Summary of participants' demographic characteristics

| Variables | Characteristics | N | % |
|---|---|---|---|
| Gender | Male | 141 | 50.4 |
| | Female | 139 | 49.6 |
| Total | | 280 | 100 |
| Admission sources | CEEE | 184 | 65.7 |
| | None-CEEE | 96 | 34.3 |
| Total | | 280 | 100 |
| Major | Humanities and social science | 105 | 37.5 |
| | Science and engineering | 175 | 62.5 |
| Total | | 280 | 100 |

Table 2. Mean range for English learning autonomy level

| Mean range | Interpretation |
|---|---|
| 1.00–2.49 | Low level of English learning autonomy |
| 2.50–3.49 | Moderate level of English learning autonomy |
| 3.50–5.00 | High level of English learning autonomy |

## 3. RESULTS

In response to the first research question, this study summarized the descriptive quantitative data analysis from Tables 3 to 6. Table 3 lists percentages, SD, mean value of English learning autonomy and three sub-dimensions. With regard to the mean value, the overall level of English learning autonomy among vocational college students is 3.61, followed by three sub-dimensions including autonomous psychology (mean=3.81), self-management learning ability (mean=3.57), and autonomous behaviors (mean=3.48). It suggests vocational college students demonstrated moderate-level autonomous behaviors in their daily learning even with strong awareness of autonomous behaviors. This finding can be also discovered from the proportion of vocational colleges students with low-level, moderate level, and high-level English learning autonomy. Specifically, 43.6% of vocational college students reported high-level autonomous behaviors, which is 21% less than that of high level of autonomous psychology. It is also noted 12.1% of vocational college students recognized their low-level of autonomous behaviors, which should also arouse attention from vocational college teachers and educators.

Table 3. Descriptive statistics of English learning autonomy among vocational college students

| Dimension | Item | Mean | SD | Min. | Max. | Percentage (%) | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Low | Moderate | High |
| English learning autonomy | 38 | 3.61 | 0.94 | 1.00 | 5.00 | 7.9 | 43.6 | 48.6 |
| Autonomous psychology | 15 | 3.81 | 0.81 | 1.00 | 5.00 | 2.9 | 32.5 | 64.6 |
| Self-management learning ability | 11 | 3.57 | 0.99 | 1.00 | 5.00 | 10.0 | 40.0 | 50.0 |
| Autonomous behaviors | 12 | 3.48 | 1.06 | 1.00 | 5.00 | 12.1 | 44.3 | 43.6 |

Table 4 displays the mean value, SD, and level of students' autonomous psychology. The mean value for autonomous psychology was 3.81, higher than overall level of English autonomous learning and the other two sub-dimensions. It is noted that vocational college students realized their responsibility of learning English (item 1, mean=4.05), evaluating learning outcomes (item 5, mean=3.98), selecting suitable learning materials (item 4, mean=3.92), setting learning goals (item 3, mean=3.89). However, participants showed less confidence in overcoming difficulties in their learning process (item 8, mean=3.62) and also were confused about suitable learning strategies (item 10, mean=3.62).

Table 4. Descriptive statistics for autonomous psychology among vocational college students

| Items | Mean | SD | Level |
|---|---|---|---|
| 1. Students are responsible for their English learning. | 4.05 | 0.93 | High |
| 2. Students are responsible for deciding learning content. | 3.69 | 1.03 | High |
| 3. Students are responsible for deciding their learning goals. | 3.89 | 0.95 | High |
| 4. Students are responsible for selecting learning materials that suit them. | 3.92 | 0.93 | High |
| 5. Apart from the teachers, students are responsible for evaluating learning outcomes. | 3.98 | 0.88 | High |
| 8. I believe I can overcome difficulties in my learning process. | 3.62 | 1.06 | High |
| 10. I am able to use effective learning strategies that suit me. | 3.62 | 1.06 | High |
| 11. I have a clear idea of my advantages and disadvantages in English learning. | 3.71 | 1.04 | High |
| 13. I will learn more when I am interested in a topic. | 3.89 | 0.94 | High |
| 15. I will encourage myself when I meet setbacks in the learning process. | 3.79 | 0.98 | High |
| Autonomous psychology | 3.81 | 0.81 | High |
| English autonomous learning | 3.61 | 0.94 | High |

The detailed analysis of students' self-management learning ability can be found in Table 5. The mean value of students' self-management learning ability is 3.57, lower than that of English autonomous learning (mean=3.61) and autonomous psychology (mean=3.81), but higher than that of autonomous behaviors (mean=3.48). Of the 16 items, participants reported moderate levels regarding item 17 (I have my own learning plans apart from the teachers' assignments) and item 18 (I give a process evaluation to make sure the tasks finished). Such findings remind teachers that more efforts should be made to improve the ability of setting learning plans and making process evaluation among vocational college students.

Table 5. Descriptive statistics for self-management learning ability of vocational college students

| Items | Mean | SD | Level |
|---|---|---|---|
| 6. I am able to make English learning plans according to my current situation. | 3.66 | 1.05 | High |
| 7. I believe I can complete learning tasks according to learning plans. | 3.61 | 1.06 | High |
| 9. I often ask myself whether I finish learning plans as scheduled. | 3.59 | 1.05 | High |
| 11. Every time when I begin a learning task, I know my aims. | 3.65 | 1.04 | High |
| 14. I can use different strategies for different learning tasks. | 3.74 | 1.01 | High |
| 16. I have my objectives for English learning. | 3.54 | 1.13 | High |
| 17. I have my own learning plans apart from the teachers' assignments. | 3.48 | 1.14 | Moderate |
| 18. I give a process evaluation to make sure the tasks finished. | 3.47 | 1.13 | Moderate |
| 19. I can finish the learning tasks according to my plan. | 3.55 | 1.09 | High |
| 20. I will monitor how I implement my learning plan after a period of time. | 3.54 | 1.07 | High |
| 21. I will reflect how I have learnt. | 3.54 | 1.09 | High |
| 22. I will evaluate my learning outcomes by finding out problems and solutions. | 3.59 | 1.08 | High |
| 23.When I finish a task, I evaluate if I have attained the goal. | 3.59 | 1.08 | High |
| 24. I have a clear idea how I should improve my English. | 3.56 | 1.09 | High |
| 25. I know how to improve my English based on my weak points. | 3.55 | 1.06 | High |
| 26. I can evaluate my progress and make a plan accordingly. | 3.55 | 1.10 | High |
| Self-management learning ability | 3.57 | 0.99 | High |
| English autonomous learning | 3.61 | 0.94 | High |

Table 6 displays the statistical data for the autonomous behaviors of vocational college students. The mean score of this sub-dimension is 3.48, the lowest one among three sub-dimensions of English learning autonomy. Moreover, the below-average score of items 32 to 37 indicates that higher vocational college students displayed disqualified learning behaviors in English reading, writing, speaking, and had less independence in evaluating learning outcomes. Besides, higher vocational college students did not acquire the cultural knowledge in order to supplement English learning. In summary, students' autonomous behaviors of learning English are obviously not as good as their autonomous psychology (mean=3.81) and self-management ability (mean=3.57).

Table 6. Descriptive statistics for autonomous behaviors of vocational college students

| Items | Mean | SD | Level |
|---|---|---|---|
| 27. I preview the learning materials for classroom teaching. | 3.51 | 1.09 | High |
| 28. Apart from the textbooks I select learning materials that suit myself. | 3.63 | 1.06 | High |
| 29. I review what I have learnt recently. | 3.60 | 1.07 | High |
| 30. I use the library and the internet to increase English knowledge. | 3.56 | 1.10 | High |
| 31. I try to improve my listening by using the internet. | 3.54 | 1.11 | High |
| 32. I have the habit of reading English. | 3.41 | 1.14 | Moderate |
| 33. I have the habit of writing in English | 3.33 | 1.20 | Moderate |
| 34. I use all the possible means to improve my oral English. | 3.42 | 1.15 | Moderate |
| 35. I select the suitable pace to finish the self-access listening tasks. | 3.43 | 1.16 | Moderate |
| 36.After learning one or two units, I will test my learning outcomes. | 3.45 | 1.13 | Moderate |
| 37. I learn the cultures of English-speaking countries to supplement my English learning. | 3.44 | 1.12 | Moderate |
| 38. I consult my teachers or classmates when I don't understand. | 3.56 | 1.11 | High |
| Autonomous behaviors | 3.48 | 1.06 | Moderate |
| English autonomous learning | 3.61 | 0.94 | High |

In order to address the second research question, this study summarized mean value, SD, and t-test analysis from Tables 7 to 9. Table 7 illustrates the correlation between students' gender and English learning autonomy. Obviously, the mean value of female students' English learning autonomy is 3.54, which is 0.14 less than that of male counterparts (mean=3.68). As for three sub-dimensions, the mean of female students also reported lower level of their autonomous psychology, self-management ability, and autonomous behaviors than that of male students. In this case, male students demonstrated higher learning autonomy than female counterparts from the perspective of autonomous psychology, self-management ability, and autonomous behaviors. Furthermore, there are no significant correlation between gender and English learning autonomy and its sub-dimensions ($p>0.05$).

Table 7. Mean, SD, and t-test analysis of English learning autonomy based on gender

| Dimension | Male | | Female | | t | *p* |
|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | | |
| English learning autonomy | 3.68 | 1.01 | 3.54 | 0.85 | 1.242 | 0.215 |
| Autonomous psychology | 3.84 | 0.89 | 3.79 | 0.72 | 0.492 | 0.623 |
| Autonomous abilities | 3.65 | 1.06 | 3.49 | 0.91 | 1.305 | 0.193 |
| Autonomous behaviors | 3.58 | 1.12 | 3.39 | 0.99 | 1.517 | 0.130 |

Note: male=141; female=139

Table 8 explains quantitative data of English learning autonomy among vocational college students who attended the CEEE is 3.72, while that of students without experience is 3.39. The mean score of students with the CEEE experience is higher than that of students without the CEEE experience concerning three sub-dimensions. The results of the t-test showed significant difference between three sub-dimensions and admission sources ($p<0.05$). Such innovative finding suggests that more effective teaching and learning strategies should be applied in English learning according to individual differences of students without CEEE experience.

Table 8. Mean, SD, and t-test analysis of English learning autonomy based on admission sources

| Dimension | CEEE | | None-CEEE | | t | *p* |
|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | | |
| English learning autonomy | 3.72 | 0.92 | 3.39 | 0.93 | 2.840 | 0.005 |
| Autonomous psychology | 3.93 | 0.93 | 3.60 | 0.86 | 3.213 | 0.001 |
| Autonomous abilities | 3.69 | 0.99 | 3.36 | 0.97 | 2.655 | 0.008 |
| Autonomous behaviors | 3.60 | 1.05 | 3.26 | 1.05 | 2.553 | 0.011 |

Note: CEEE: college entrance English exam; CEEE=184; non-CEEE=96

Table 9 shows that the English learning autonomy level of students studying science and engineering students (mean=3.63) is higher than that of students studying humanities and social sciences (mean=3.56). It is found that no significant difference ($p>0.05$) between students' majors and English learning autonomy, but the result indicated that students' studying science and engineering showed higher learning autonomy than their counterparts studying in social sciences. Moreover, students of all majors developed moderate level of autonomous behaviors in contrast to high level of autonomous psychology and self-management learning abilities.

Table 9. Mean, SD, and t-test analysis of English learning autonomy based on majors

| Dimension | Humanities and social sciences | | Science and engineering | | t | *p* |
|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | | |
| English learning autonomy | 3.56 | 0.91 | 3.63 | 0.92 | -0.622 | 0.534 |
| Autonomous psychology | 3.81 | 0.79 | 3.81 | 0.82 | -0.059 | 0.953 |
| Self-management learning abilities | 3.52 | 0.97 | 3.60 | 1.00 | -0.716 | 0.475 |
| Autonomous behaviors | 3.42 | 1.08 | 3.52 | 1.05 | -0.804 | 0.422 |

Note: science and engineering=175; humanities and social sciences=105

## 4. DISCUSSION

In response to the first research question, this study concluded that vocational college students possessed slightly high level of English learning autonomy (mean=3.61), especially high level of autonomous psychology (mean=3.81). However, their self-management learning ability (mean=3.57) and autonomous behaviors (mean=3.48) remained to be improved even though vocational college students developed high level of autonomous psychology (mean=3.81). This result is compatible with the empirical study [28] who found that learners were psychologically ready, but not behaviorally ready for autonomy.

When it comes to different aspects of autonomous behaviors, this study revealed that vocational college students failed to set their learning goals and make process evaluation during their learning. Consistently, Zou [29] also pointed out similar problems after conducting a survey in a Chinese vocational college. By contrast, if accomplishing English learning objectives and goals, vocational college students could utilize learning strategies to achieve English learning autonomy, according to a recent study from Yang [3].

With regard to influential factors of English learning autonomy among vocational college students, gender cannot be considered as an important factor to determine different levels of English learning autonomy. From an empirical study, Xu [16] also reported that male students' English learning autonomy is slightly higher than that of female peers in the first-year's study. Despite the conclusion that female students had slightly lower level of English learning autonomy than male counterparts, this study found that the overall level of English learning autonomy and its sub-dimensions did not show close correlation with students' gender ($p$>0.05) after data analysis with t-test.

An innovative finding of this study is illustrated that students without the CEEE experience were prone to develop low level of English learning autonomy and three aspects. Results of the t-test ($p$<0.05) showed significant difference between the experience of attending the CEEE and English learning autonomy among vocational college students. Even though researchers indicated that students with low English proficiency were more likely to display low level of autonomous behaviors [5], [11], to the author's knowledge, few discussions have been made about relations between admission sources and English learning autonomy among vocational college learners. This finding is quite meaningful for vocational instructors and policymakers because more efforts should be made with regard to individual differences of vocational college students during the vocational educational reform.

Finally, English learning autonomy and its sub-dimensions did not have significant correlation with different majors, even though students' studying science and engineering showed higher learning autonomy than their counterparts studying in social sciences. Nevertheless, their level of autonomous behaviors is the lowest sub-dimension for students of all majors. In other words, discrepancies existed between learners' self-perceived autonomous abilities and behaviors. This problem is also illustrated by Lin and Reinders [28] who asserted that "perceived ability to manage their learning did not seem to support self-reported learning behaviors". As such, English teachers should pay more attention to fostering students' autonomous behaviors through effective guidance and strategies, such as blended learning [5], [30], or flipped teaching [1].

In view of the suggestions to foster vocational college students' English learning autonomy, the first and foremost action that must be made is to help students formulate their learning agenda, such as setting learning goals, and making process evaluation. The ability of formulating learner agendas for English learning represents a decisive feature of autonomous learners [31]. Students with strong English learning autonomy could formulate their longer-term learning agenda and also make informed micro-level decisions inside and outside the classroom [18]. On the other hand, self-assessment and reflection are described "as a key psychological component of autonomy" by numerous researchers. Learners could become more active and autonomous through reflecting upon their learning process and learning strategies to decide what to do next [1]. Thanh [32] conducted an experiment among second-year non-English major students through 15-week session learning program and noticed that it is conducive to learners to be more independent when making self-assessment of listening and speaking skills through practical tasks and reflections on their own performance.

Training learning strategies is another important focus when fostering English learning autonomy of vocational college students because autonomous learning behaviors including "planning, guiding, and monitoring, organizing and evaluating", are what educators describe as metacognitive learning strategies [6].

O'Malley and Chamot [33] categorized learning strategies into "metacognitive strategies", "cognitive strategies", and "social/affective strategies" according to the information processing theory. Learning strategies can "reflect the learner's degree of autonomy and are mechanisms by which the learner develops still greater autonomy" when learners take specific actions to improve his or her language learning [34]. From an empirical study, Ding and Shen [15] observed that learners would like to apply metacognitive strategies, motivation control strategies, and emotion control strategies to develop their English learning autonomy when learning language massive open online courses (MOOCs).

## 5. CONCLUSION

Based on the three-aspect model of learner autonomy, this study examines levels of English learning autonomy and potential correlation factors, such as gender, admission sources, and field of majors, in a newly-built higher vocational college in China. With a random sampling survey method, this study surveyed 280 vocational college students and made quantitative analysis with SPSS 25.0. According to data analysis, it is found that vocational college students possessed the awareness of English learning autonomy, especially high autonomous psychology, but their autonomous behaviors remained to be enhanced with effective teachers' intervention, suitable teaching, and learning strategies. With regard to influential factors of English learning autonomy among vocational college students, admission sources can be considered as the most important factor to determine different levels of English learning autonomy, but no significant correlation exists between English learning autonomy and gender or field of majors.

This study also put forward suggestions about improving English learning autonomy for vocational college teachers and students. Firstly, vocational college students should be encouraged to clarify and monitor their learning agenda for their English learning. Secondly, the training of metacognitive learning strategies is urgent in the classroom teaching at vocational colleges and universities. Consequently, English teachers in vocational colleges should take the initiative in cultivating students with their self-directed learning strategies, especially metacognitive strategies, which is of great significance to enhance students' English learning autonomy. Thirdly, vocational college students are encouraged to develop the habit of regular self-assessment and reflection on the effectiveness of their learning. In this sense, English teachers in vocational colleges are suggested to play a leading role in guiding students to evaluate and reflect on their English learning process and outcome on a regular basis. Finally, it is essential for teachers and vocational colleges to combine various English learning resources into properly-designed online platform for students to create favorable environment for students' English learning autonomy.

To sum up, this study sheds light on the direction of fostering autonomous learning behaviors among vocational college students, especially students without the experience of attending the college entrance English exam. Moreover, the findings are quite meaningful for vocational instructors and policymakers because more efforts should be made with the regard to individual differences of vocational college students during the vocational educational reform. In addition, the research framework and methodology can be applied in similar studies focusing on the topic of English learning autonomy. Admittedly, there are several limitations of this study. Advanced analysis methods and larger sample size from diversified vocational colleges are essential to explore this multifaceted topic. Therefore, future studies will be carried out with in-depth analysis to explore relations between English learning autonomy and other variables, such as motivation, self-efficacy, performance, anxiety, enjoyment, and grit.

## REFERENCES

[1] Y. R. Tsai, "Promotion of learner autonomy within the framework of a flipped EFL instructional model: perception and perspectives," *Computer Assisted Language Learning*, vol. 34, no. 7, pp. 979-1011, 2021, doi: 10.1080/09588221.2019.1650779.
[2] H. Holec, *Autonomy and Foreign Language Learning*. Oxford, UK: Pergamon, 1981.
[3] Z. Yang, "EFL higher vocational students' motivational regulation and learner autonomy in online learning context in China," *Journal of Theory and Practice of Social Science*, vol. 3, no. 3, pp. 20-27, 2023, doi: 10.53469/jtpss.2023.03(03).06.
[4] H. Mo and X. Yan, "Problems and countermeasures of cultivating autonomous English learning ability in vocational colleges based on informationization," *Journal of Contemporary Educational Research*, vol. 5, no. 6, pp. 1-7, 2021, doi: 10.26689/jcer.v5i6.2205.
[5] H. Bai, "A survey on the students' English autonomous learning ability in higher vocational colleges under the blended teaching mode," *Vocational Technology*, vol. 21, no. 6, pp. 90-96, 2022.
[6] B. Shen, B. Bai, and W. Xue, "The effects of peer assessment on learner autonomy: an empirical study in a Chinese college English writing class," *Studies in Educational Evaluation*, vol. 64, p. 100821, 2020, doi: 10.1016/j.stueduc.2019.100821.
[7] J. Cheng, G. S. Raj, and J. T. T. Ai, "The correlations among learning motivation, autonomy and language proficiency in Chinese EFL context," *LEARN Journal: Language Education and Acquisition Research Network*, vol. 11, no. 1, pp. 1-14, 2018.
[8] W. Peeters, "Applying the networking power of Web 2.0 to the foreign language classroom: a taxonomy of the online peer interaction process," *Computer Assisted Language Learning*, vol. 31, no. 8, 2018, doi: 10.1080/09588221.2018.1465982.
[9] P. S. Rao, "Learner autonomy: trends and issues in ELT," *ACADEMICIA: An International Multidisciplinary Research Journal*, vol. 8, no. 11, pp. 84-96, 2018, doi: 10.5958/2249-7137.2018.00064.2.
[10] Y. Lu and D. R. Berg, "Taiwanese university students ideal L2 selves and autonomy: does high school program make a difference?" *International Journal of Educational Methodology*, vol. 5, no. 4, pp. 564–575, 2019, doi: 10.12973/ijem.5.4.567.

[11] Y. Chen, "Correlation between self-efficacy and English performance," *International Journal of Emerging Technologies in Learning (iJET)*, vol. 15, no. 8, pp. 223-234, 2020, doi: 10.3991/ijet.v15i08.13697.
[12] B. Bai and W. Guo, "Influences of self-regulated learning strategy use on self-efficacy in primary school students' English writing in Hong Kong," *Reading & Writing Quarterly*, vol. 34, no. 6, pp. 523-536, 2018, doi: 10.1080/10573569.2018.1499058.
[13] R. L. Oxford, "Expanded perspectives on autonomous learners," *Innovation in Language Learning Teaching*, vol. 9, pp. 58-71, 2015, doi: 10.1080/17501229.2014.995765.
[14] R. Shadiev, W. Y. Hwang, and T. Y. Liu, "Investigating the effectiveness of a learning activity supported by a mobile multimedia learning system to enhance autonomous EFL learning in authentic contexts," *Educational Technology Research and Development*, no. 66, pp. 893-912, 2018, doi: 10.1007/s11423-018-9590-1.
[15] Y. Ding and H. Shen, "Delving into learner autonomy in an EFL MOOC in China: a case study," *Computer Assisted Language Learning*, vol. 35, no. 3, pp. 247-269, 2022, doi: 10.1080/09588221.2019.1681464.
[16] J. Xu, *A study on the developing laws of Chinese college students' English autonomous learning ability and its affecting factors*. Beijing: Foreign Language Teaching and Research Press (in Chinese), 2014.
[17] L. Lin, "Promoting learner autonomy in college English teaching: research methods, problems and reflections," *Foreign Language World*, no. 05, pp. 80-88, 2018.
[18] P. Benson, *Teaching and Researching: Autonomy in Language Learning*. New York: Routledge, 2001.
[19] G. Murray, "Exploring the social dimension of autonomy in language learning," in *Social Dimensions of Autonomy in Language Learning*, G. Murray Ed. London, UK: Palgrave Macmillan, 2014, pp. 3-14.
[20] L. Lin, "Development and validation of the autonomous learning scale," *Foreign Language World*, vol. 157, no. 4, p. 8, 2013.
[21] D. Little, L. Dam, and L. Legenhausen, "Language learner autonomy: what, why and how," *Second Language Acquisition*, vol. 4, no. 1, pp. 1-21, 2017.
[22] D. C. Henri, L. J. Morrell, and G. W. Scott, "Student perceptions of their autonomy at University," *Higher Education*, vol. 75, pp. 507-516, 2018, doi: 10.1007/s10734-017-0152-y.
[23] F. Teng, "Learner autonomy: an educational goal of teaching English as a foreign language," in *Autonomy, agency, and identity in teaching and learning English as a foreign language*, F. Teng Ed. Singapore: Springer Singapore, 2019, pp. 1-20.
[24] P. Benson and D. Nunan, *Learners' stories: Difference and diversity in language learning*. Cambridge, UK: Cambridge University Press, 2005.
[25] D. Nunan, "Designing and adapting materials to encourage learner autonomy," in *Autonomy and Independence in Language Learning*, P. Benson and P. Voller Eds. New York: Addison Wesley Longman, 1997, pp. 192-203.
[26] W. Littlewood, "Self-access: why do we want it and what can it do?" in *Autonomy and Independence in Language Learning*, P. Benson and P. Voller Eds. New York: Addison Wesley Longman, 2014, pp. 79-91.
[27] L. Cohen, L. Manion, and K. Morrison, *Research methods in education*, 8th ed. New York: Routledge, 2017.
[28] L. Lin and H. Reinders, "Students' and teachers' readiness for autonomy: beliefs and practices in developing autonomy in the Chinese context," *Asia Pacific Education Review*, vol. 20, pp. 69-89, 2019, doi: 10.1007/s12564-018-9564-3.
[29] L. Zou, "Problems and countermeasures of students' English study strategies in higher vocational schools in Leshan, Sichuan, China," in *Proceedings of the 6th International Conference on Education, Language, Art and Inter-cultural Communication (ICELAIC 2019)*, 2019, vol. 378: Atlantis Press, pp. 144-146, doi: 10.2991/assehr.k.191217.097.
[30] X. Wang and W. Zhang, "Improvement of students' autonomous learning behavior by optimizing foreign language blended learning mode," *Sage Open*, vol. 12, no. 1, pp. 1-10, 2022, doi: 10.1177/21582440211071108.
[31] J. Huang and P. Benson, "Autonomy, agency and identity in foreign and second language education," *Chinese Journal of Applied Linguistics*, vol. 36, no. 1, pp. 7-28, 2013, doi: 10.1515/cjal-2013-0002.
[32] N. T. Thanh, "Promoting learner autonomy through self-assessment and reflection," *VNU Journal of Foreign Studies*, vol. 35, no. 6, pp. 146-153, 2019, doi: 10.25073/2525-2445/vnufs.4483.
[33] J. M. O'Malley and A. U. Chamot, *Learning Strategies in Second Language Acquisition*. Cambridge, UK: Cambridge University Press, 1990.
[34] R. L. Oxford, *Language Learning Strategies: What Every Teacher Should Know*. New York: Newbury House Pub, 1990.

## BIOGRAPHIES OF AUTHORS

**Jing Zhang** is an English lecturer in the Department of Public Basic Education at Linyi Vocational University of Science and Technology. She studied for a doctorate in higher education at the School of Education Studies at the Universiti Sains Malaysia from 2022. Her research interests include English teaching and learning, computer-aided language learning, and educational psychology. She can be contacted at email: gracezhangusm@student.usm.my.

**Siti Zuraidah Md Osman** is a senior lecturer in the Department of School of Education Studies, Universiti Sains Malaysia, 11800 USM Penang, Pulau Pinang, Malaysia. She holds a Ph.D. in Instructional System Development from Universiti Sains Malaysia, Malaysia. Her research focuses on educational technology, TVET education, and accounting education. She can be contacted at email: sitizuraidah@usm.my.