

Investigating EFL Learners' Autonomous Use of Vocabulary Learning Strategies Outside of School

*1Riki Ruswandi. 1Ulfah Fitri Utami. 1Zalsa Vini Tenisa Aprilianti

¹ Universitas Islam Nusantara, Indonesia

*Correspondence:

riki_rusw@uninus.ac.id

Submission History:

Submitted: May 29, 2024 Revised: August 16, 2024 Accepted: August 26, 2024



This article is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Abstract

As communication in English relies on a robust vocabulary, high school learners must now take responsibility for independently mastering vocabulary through effective learning strategies driven by the shift toward promoting learner autonomy in modern teaching methods. Therefore, this study examines the vocabulary learning strategies that English as a Foreign Language (EFL) learners use autonomously outside of school and the factors that influence their strategy choices. This qualitative study utilizes questionnaires and semistructured interviews involving 66 eleventh-grade students from Istiqamah High School in Bandung, Indonesia, who completed the questionnaires and 4 of whom participated in the interviews. The results of this study reveal that learners exhibit a moderate level of autonomy and use vocabulary learning strategies at a moderate level. Metacognitive strategies are the most frequently employed, followed by determination, affective, social, compensation, memory, and cognitive strategies. The study also highlights several factors that influence learners' awareness of the importance of autonomy and the use of vocabulary learning strategies, including gender—where males tend to show higher levels of autonomy and strategy use—age, with 18-year-olds demonstrating higher autonomy and 17-year-olds more actively using vocabulary strategies, and motivation, driven by personality, goal achievement, and the desire to improve language skills. Personal consistency in learning also emerged as a critical factor in learners' success in improving their vocabulary. This research implies that students may benefit from focusing on metacognitive strategies as a practical approach to learning vocabulary in English.

Keywords: Autonomy, vocabulary learning strategies, English language learner, high school

INTRODUCTION

Vocabulary is a critical component of language learning, particularly in the context of language acquisition. It forms the foundation that enables learners to express their ideas and comprehend complex texts. Unlike grammar or syntax, which can sometimes be flexible in communication, a lack of vocabulary directly hinders a learner's ability to articulate thoughts and grasp meaning (Alqahtani, 2015; Ghaedi & Shahrokhi, 2016). The significance of

vocabulary is heightened because it involves knowing words and the ability to use them accurately and effectively in specific contexts. Learners face the dual challenge of acquiring new vocabulary and retaining it for future use, both essential for engaging with academic texts and participating in scholarly discussions.

Furthermore, vocabulary acquisition requires a deep understanding of word meanings, usage, and context (Afzal, 2019). To address this, intentional learning strategies are crucial, where students autonomously focus on acquiring specific vocabulary. This approach, which involves deliberate study and internalization of new words, is efficient in academic settings where mastering complex texts is essential. In Indonesia, which learning English as the foreign language has a limited time, vocabulary acquisition needs to look forward on the learner autonomy.

Learner autonomy empowers students to take control of their language learning process, including setting goals, choosing learning methods, and evaluating progress (Mynard & Shelton-Strong, 2022). This autonomy allows learners to tailor their learning experiences, making independent decisions that enhance their vocabulary acquisition and overall language proficiency, thereby transforming vocabulary from a mere communication tool into a cornerstone of academic success and scholarly expertise.

Many academics believe that Learner Autonomy (LA) positively impacts EFL learners' English language acquisition (Tuan, 2021; Prem, 2021; Tilfarlioglu & Sherwani, 2018). In the English learning process, LA is considered one of the most fundamental internal factors influencing a learner's vocabulary acquisition, and the more learners exercise autonomy, the more likely they are to achieve high language proficiency (Şakrak-Ekin & Balçıkanlı, 2019). Another crucial factor that aids students in acquiring English is effective learning strategies. The learning process requires effective strategies, including creating plans to obtain and retain information through various processes. 'Language learning strategies' or 'learner strategies' are defined as learners' efforts to facilitate learning, making the process more purposeful (Nguyen & Terry, 2017; Gani et al., 2015).

Implementing specific vocabulary learning strategies is essential to maximize vocabulary learning. These strategies include organizing activities or steps during learning and using techniques to enhance understanding and retention. For example, connecting new vocabulary with previously learned material which known as 'memory strategy' (Oluwaseun et al., 2020), using mental steps to process language, known 'cognitive strategy' (Di Carlo, 2017), guessing and substituting vocabulary with similar meanings, known as 'compensatory methods' (Çetinavcı, 2014), accessing various English learning media, known as metacognitive techniques (Asraf & Supian, 2017), relying on positive attitudes which known as 'affective techniques' (Kossakowska-Pisarek, 2016), and engaging with other learners, teachers, or native speakers which known as 'social strategies' (Altalhab, 2016).

The responsibility for creating learning experiences primarily falls on the student, while the teacher's role is to facilitate the process (Nurchalis et al., 2022). Given the limited classroom time, EFL learners cannot acquire all the necessary vocabulary during lessons and are thus encouraged to explore alternative methods for vocabulary acquisition (Aysu, 2022). Fostering learner autonomy and utilizing Vocabulary Learning Strategies have been identified as practical approaches to support English vocabulary acquisition (Tilfarlioglu & Sherwani, 2018). By adopting suitable strategies, EFL learners can enhance their ability to

acquire vocabulary more efficiently (Liu, 2022) in limited time in learning English. As said by Sokip (2020) and Nurchalis et al. (2022) that limited time allocated for learning foreign languages, mainly English, in school settings often hampers students' ability to significantly enhance their language skills.

Additionally, research has examined the connection between learner autonomy and vocabulary learning strategies (Tilfarlioglu & Sherwani, 2018), described strategies used by autonomous EFL learners (Nayan & Mohd Rawian, 2022), and, in another case, focused on vocabulary learning strategies without addressing autonomy (Jafari & Kafipour, 2013). Additionally, other studies have promoted both autonomy and vocabulary learning strategies to teachers (Linh & Yen, 2022). Research on vocabulary learning autonomy in EFL contexts highlights the importance of empowering learners to take responsibility for their vocabulary development. Kartal and Balci (2021) investigated Turkish ELT student teachers' vocabulary learning autonomy and size, revealing moderate autonomy and sufficient vocabulary knowledge to comprehend unsimplified texts.

The previous studies above suggest that autonomy plays a significant role in expanding vocabulary. Similarly, Vela and Rushidi (2016) analyzed the effect of vocabulary notebooks on EFL students, finding that those using them showed significantly better vocabulary acquisition and a greater sense of responsibility for their learning. This supports the notion that tools promoting learner autonomy, such as vocabulary notebooks, effectively motivate students and enhance their language skills. Lestari and Hardiyanti (2020) explored the use of English songs as a medium for autonomous vocabulary learning among Indonesian students, finding that songs provided authentic language exposure, facilitated vocabulary retention, and created an enjoyable learning environment. The participants also applied cognitive and metacognitive strategies to improve vocabulary acquisition. These studies collectively emphasize that fostering learner autonomy, whether through structured tools or creative mediums like songs, plays a critical role in vocabulary acquisition and overall language proficiency.

However, a research gap exists in understanding these students' specific strategies and methods for autonomous learning, particularly in limited classroom hours. While many studies focus on learner autonomy in general, there has been little exploration into how students with restricted formal learning time successfully develop their English skills outside of school. This study seeks to fill that gap by investigating how Istiqamah High School students utilize autonomy to enhance their English learning. This research aims to identify the specific tools and resources students use for independent learning to provide insights into how schools with limited English instruction time can foster similar autonomy and success in their students.

METHOD

This study employs a qualitative approach with a case study design to gather in-depth information on various aspects such as learning styles, experiences, perceptions, and behaviour. The data collection process consists of two steps. First, a Likert scale questionnaire with 24 items, adapted from Nirattisai and Chiramanee (2014) and Hashemi and Hadavi (2015), was used to obtain general information regarding the frequency of vocabulary learning strategies and autonomy outside of school. A semi-structured interview

with ten questions follows this to identify factors influencing EFL learners' awareness of the significance of vocabulary learning strategies and autonomy. The Likert scale ratings were interpreted based on Nirattisai and Chiramanee's (2014) scale, where 0-1.49 indicates shallow use, 1.50-2.49 indicates low use, 2.50-3.49 indicates moderate use, 3.50-4.49 indicates high used and 4.50-5.00 indicates very high used.

Content validity was ensured by consulting multiple sources, including students and expert supervisors, to verify the accuracy and appropriateness of the research instruments. The population included all grade XI students at Istiqamah High School Bandung. Two sampling methods were employed: 1) The questionnaire used a census method, collecting responses from all 66 grade XI students (31 male and 35 female). 2) The interview used purposive sampling, selecting 4 participants based on the questionnaire results. These participants were chosen based on two main criteria: consistency in using English vocabulary learning strategies and high interest and motivation in independent learning outside of school. To interpret the data, the author analyzed the questionnaire findings using descriptive statistical analysis, including mean, standard deviation, and percentage. Additionally, content analysis was applied to summarize and draw conclusions from the data (Bengtsson, 2016). For the semi-structured interviews, thematic analysis was used to identify, analyze, and report patterns within the qualitative data. The results were categorized based on the strategies aligned with relevant theoretical frameworks, followed by continuous analysis to produce a clear and coherent explanation of the findings.

FINDING AND DISCUSSION

Based on the questionnaires and interviews with 11th-grade students at Istiqamah High School, the researcher first determined the level of autonomy outside of school and students' use of vocabulary learning strategies. The next step was identifying factors that influence students' awareness of the importance of these practices. This was achieved by tabulating each student's mean, standard deviation (S.D.), and percentage. These measures provide evidence that 11th-grade students at Istiqamah High School have implemented autonomy activities outside of school and utilized vocabulary learning strategies in their learning process, ensuring the accuracy and credibility of the research findings.

Table 1. Students' vocabulary learning strategies

Categories	Mean	S.D	Percentage
Determination	3.30	1.08	66%
Metacognitive	3.35	1.21	67%
Cognitive	2.60	1.00	52%
Social	2.90	1.08	58%
Affective	2.93	1.24	59%
Compensation	2.88	1.08	58%
Memory	2.84	1.05	57%

The research findings show that students most frequently use Metacognitive strategies (67%) for vocabulary learning. For example, students may plan their study sessions, organize their learning materials, or use apps like Quizlet to review vocabulary regularly. This high percentage reflects that many learners take a self-regulated approach to managing their learning, indicating an awareness of optimising their study routines for

better vocabulary acquisition. Similarly, Determination strategies (66%) are also commonly employed, with students often using context clues to guess the meaning of unfamiliar words. This demonstrates their resourcefulness and problem-solving ability when faced with new vocabulary independently. On the other hand, Cognitive strategies, such as repetition or writing words multiple times to memorize them, are used less frequently, with only 52% of students favouring this approach. This lower percentage suggests that traditional memorisation methods are not as popular among students, who may find more dynamic strategies like Metacognitive ones more effective and engaging.

Social strategies, with 58% usage, involve students seeking help from peers or teachers to understand vocabulary. Although used moderately, this indicates that while students occasionally rely on social interactions for learning, they do not depend heavily on others and prefer more independent methods. Similarly, affective strategies (59%), which involve managing emotions and motivation, are moderately used. For instance, students might stay motivated by connecting vocabulary learning to personal goals like career advancement, which helps them stay engaged.

Compensation strategies, also at 58%, are employed when students compensate for gaps in their vocabulary by using synonyms or descriptions in conversation. This indicates that learners often find alternative ways to communicate even when they cannot recall specific words. Lastly, memory strategies (57%), such as associating new words with images or familiar concepts, are used moderately. Although helpful for retention, students favour strategies promoting more active engagement and independent learning.

Table 2. Result of the questionnaire

No	Statement	Category	Mean	S.D.
1.	I listened to English songs to learn new vocabulary.	Metacognitive	3.98	0.95
2.	I watch movies in English to learn new vocabulary.	Metacognitive	3.80	0.94
3.	I guessed the meaning of the English word by analyzing the spoken sentence.	Determination	3.72	0.85
4.	If I do not understand a sentence in English, I encourage another person to slow down and repeat it.	Social	3.46	0.93
5.	I try to be relaxed and confident when speaking in English.	Affective	3.45	1.06
6.	I pushed myself to speak English despite my fear of making mistakes.	Affective	3.33	1.07
7.	I analyze pictures or gestures from others to comprehend the context of English words.	Determination	3.31	1.01
8.	If I cannot find a word in English, I substitute a word or phrase that conveys a similar context.	Compensation	3.24	1.06
9.	I connected a new English word with an experience that had happened.	Memory	3	1.05
10.	I have pronounced and written new words in English several times.	Cognitive	2.89	1.02
11.	I practised English with other students.	Social	2.87	1.01

12.	I rely on gestures when I cannot decide on a single word in an English conversation.	Compensation	2.87	1.13
13.	I use a bilingual dictionary (English-Indonesian). When I cannot comprehend the meaning of English vocabulary.	Determination	2.86	1.18
14.	I say English words out loud while studying.	Memory	2.78	1.05
15.	I use pictures to help me remember vocabulary more quickly.	Memory	2.74	1.05
16.	I compose notes, messages, letters or reports in English.	Cognitive	2.57	0.92
17.	When I cannot determine the correct words in English, I make up my own.	Compensation	2.53	0.94
18.	I try to interact with native English speakers.	Social	2.37	1.03
19.	I listened to a recording containing a list of English vocabulary words.	Cognitive	2.33	0.99
20.	I make time in my schedule to study English.	Metacognitive	2.28	0.94
21.	I reward myself every time I succeed in memorizing new vocabulary in English.	Affective	2.01	1.05

Based on the research findings, EFL learners at Istiqomah High School exhibit a moderate level of both autonomy and use of vocabulary learning strategies. This suggests that when learners know the importance of exercising autonomy, they are also more likely to recognize the value of utilizing vocabulary learning strategies. This aligns with the findings of Jafari and Kafipour (2013), who similarly discovered that EFL learners tend to use vocabulary learning strategies moderately across different categories. This study observed that EFL learners, with a study time ranging from approximately 15 minutes to 3 hours per day, can self-evaluate their learning challenges, identify practical solutions, and find resources that match their learning styles.

The study also revealed that metacognitive strategies were the most frequently used by students, often combined with social strategies, while cognitive strategies were the least utilized. These findings are consistent with Lestari and Wahyudin (2020), who found that metacognitive strategies are the most commonly adopted among EFL learners. Additionally, the study supports the research by Mohammad et al. (2013), which highlighted the positive impact of metacognitive strategies on vocabulary acquisition, particularly the strategy of "listening to English songs," frequently used by students. This preference for songs as a learning resource is likely due to their accessibility and appeal across diverse groups. Similarly, research by Sabeh et al. (2011) found that EFL learners prefer auditory learning, such as listening to English music, further corroborating the idea that music is an effective tool for vocabulary acquisition.

This study demonstrates that students prefer using music as a learning tool, finding it more effective than traditional memorization methods (Lestari & Wahyudin, 2020). However, this contrasts with Fu's (2021) research, which found that EFL learners rely more on determination and cognitive strategies, mainly focusing on understanding English words through their Chinese equivalents. Fu's study also noted that metacognitive and memory strategies were seldom used, which differs from the findings of this study, where these

strategies were among the most commonly employed. Similarly, Nirattisai and Chiramanee (2014) found that determination and social strategies were more frequently used, contrasting with the results here.

This research also highlights technology's significant role in supporting vocabulary learning (Hao et al., 2021). EFL learners increasingly use learning apps and social media platforms to enhance their vocabulary. For instance, TikTok has proven to be an effective tool, allowing students to find vocabulary learning materials easily through its search feature. The convenience offered by TikTok boosts students' motivation to learn, reinforcing findings from previous research that highlight its role in EFL learners' vocabulary acquisition (Rama et al., 2023). Additionally, interaction on Twitter helps learners acquire and practice new vocabulary by engaging with other users, supporting earlier studies that show how social interaction on Twitter enhances vocabulary acquisition (Sirait & Hanim, 2022). Another tool, Duolingo, was found to help learners by providing structured, guided lessons. This study shows that learners appreciate Duolingo's call-to-action learning features, aligning with previous research that confirms Duolingo's positive impact on vocabulary acquisition (Ajisoko, 2020). These findings collectively underscore the value of technology and social media in facilitating vocabulary learning for EFL students, offering interactive and convenient ways to improve language skills.

Furthermore, gender significantly influences EFL learners' choice to engage in autonomous activities and use vocabulary learning strategies. Males are more inclined to engage in autonomy and vocabulary learning strategies than females. This is mainly because males tend to find strategies that suit them better through autonomous activities outside of school rather than during formal learning. Yen et al. (2023) similarly found that males are likelier to pursue autonomous learning, believing that self-directed learning significantly impacts vocabulary acquisition success. Cultural influences and past experiences also play a role in this gender difference.

Another critical factor is age, with learners aged 17-18 more frequently engaging in autonomy and vocabulary learning strategies. Older learners tend to have more complex thought processes, making them more aware of the importance of these strategies. Although previous research suggests that language learners acquire foreign languages more efficiently at a younger age, older students are more conscious of the need for autonomy and strategic vocabulary learning as they recognize the increasing difficulty of acquiring and retaining new vocabulary with age. The final factor is motivation. When EFL learners are driven by a desire for personal growth, the achievement of specific goals, or the mastery of another language, they become more aware of the importance of engaging in autonomous activities and using vocabulary learning strategies.

Moreover, the factors identified in this study align with findings from Bai (2018), which highlight that age plays a crucial role in learners' choice of vocabulary learning strategies. Due to their maturity, older learners select more complex learning strategies than younger learners. Motivation is another significant factor, consistently recognized as one of the strongest influences driving students to use vocabulary learning strategies. However, regarding gender, this study contrasts with findings by Yen et al. (2023), who noted that female learners use vocabulary learning strategies more frequently than male learners. In contrast, this study found that males were likelier to engage in autonomous activities and

vocabulary strategies. This discrepancy could be due to other influencing factors, such as individual personality differences, social environments, and personal learning preferences, which were also noted in Yen et al.'s research.

Furthermore, Bravo et al. (2017) emphasized that motivation plays a critical role in implementing autonomy activities, reinforcing the findings of this study. The motivation factor is a driving force for EFL learners to engage in autonomous activities and consistently apply vocabulary learning strategies. This perseverance in autonomous learning is crucial in mastering vocabulary, as motivated learners are more likely to sustain their efforts and refine their learning strategies to improve vocabulary acquisition.

CONCLUSION

This research revealed that EFL learners in grade XI at Istiqamah High School acquire vocabulary through their awareness of the importance of using effective vocabulary learning strategies and implementing autonomous learning outside of school. The study demonstrated that these learners have a moderate level of autonomy and vocabulary learning strategy use. Gender and age influence these levels, with males and older learners generally showing higher autonomy and more frequent use of vocabulary learning strategies. High motivation also plays a crucial role, as motivated students are more likely to recognize the importance of autonomy and actively choose suitable vocabulary learning strategies. Autonomous learning allows EFL learners to learn at their own pace, making learning enjoyable and more effective. Selecting the right vocabulary learning strategy enhances the acquisition of new words. It adds an element of enjoyment through activities like listening to music, watching movies, using Duolingo, and interacting on platforms like TikTok and Twitter. In this study, metacognitive strategies were the most frequently used, often combined with social strategies, enabling learners to apply new vocabulary daily.

This study's limitation is that it focused solely on grade XI students at Istiqamah High School, which provides a narrow perspective. The findings may not fully represent other student populations or educational settings. Therefore, further research should explore vocabulary learning strategies and autonomy activities across a broader range of participants, including those with varying levels of autonomy and different educational backgrounds, to obtain more comprehensive and accurate insights. Future studies could also examine the long-term effects of different strategies on vocabulary retention and acquisition.

REFERENCES

Afzal, N. (2019). A study on vocabulary-learning problems encountered by BA English majors at the university level. *Arab World English Journal*, 10(3), 81–98. https://doi.org/10.24093/awej/vol10no3.6

Ajisoko, P. (2020). The use of Duolingo apps to improve English vocabulary learning. *International Journal of Emerging Technologies in Learning*, 15(7), 149–155. https://doi.org/10.3991/IJET.V15I07.13229

Alqahtani, M. (2015). The importance of vocabulary in language learning and how to be taught. *International Journal of Teaching and Education*, *3*(3), 21–34. https://doi.org/10.20472/te.2015.3.3.002

- Altalhab, S. (2016). Teaching and learning vocabulary through reading as a social practice in Saudi universities. *English Language Teaching*, 9(11), 67. https://doi.org/10.5539/elt.v9n11p67
- Asraf, R. M., & Supian, N. (2017). Metacognition and mobile-assisted vocabulary learning. *Arab World English Journal*, 8(2), 16–35. https://doi.org/10.24093/awej/vol8no2.2
- Aysu, S. (2022). The role of learner autonomy in vocabulary learning. *RumeliDE Dil Ve Edebiyat Araştırmaları Dergisi* (31), 1534-1545. https://doi.org/10.29000/rumelide.1222355
- Bai, Z. (2018). An analysis of English vocabulary learning strategies. *Journal of Language Teaching and Research*, 9(4), 849. https://doi.org/10.17507/jltr.0904.24
- Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus Open*, *2*, 8–14. https://doi.org/10.1016/j.npls.2016.01.001
- Bravo, J. C., Intriago, E. A., Holguin, J. V., Garzon, G. M., & Arcia, L. O. (2017). Motivation and autonomy in learning English as a foreign language: A case study of Ecuadorian college students. *English Language Teaching*, 10(2), 100. https://doi.org/10.5539/elt.v10n2p100
- Çetinavcı, B. M. (2014). Contextual factors in guessing word meaning from context in a foreign language. *Procedia Social and Behavioral Sciences*, 116, 2670–2674. https://doi.org/10.1016/j.sbspro.2014.01.633
- Di Carlo, S. (2017). Understanding cognitive language learning strategies. *International Journal of Applied Linguistics & English Literature*, 6(2), 114. https://doi.org/10.7575/aiac.ijalel.v.6n.2p.114
- Fu, S. (2021). Chinese EFL university students' self-reported use of vocabulary learning strategies. *English Language Teaching*, 14(12), 117. https://doi.org/10.5539/elt.v14n12p117
- Gani, S. A., Fajrina, D., & Hanifa, R. (2015). Students learning Strategies for developing speaking ability. *Studies in English Language and Education (SiELE)*, *2*(1), 16–28. https://doi.org/10.24815/siele.v2i1.2232
- Ghaedi, R., & Shahrokhi, M. (2016). The impact of visualization and verbalization techniques on vocabulary learning of Iranian high school EFL learners: A gender perspective. *Ampersand*, pp. *3*, 32–42. https://doi.org/10.1016/j.amper.2016.03.001
- Hao, T., Wang, Z., & Ardasheva, Y. (2021). Technology-assisted vocabulary learning for EFL learners: A meta-analysis. *Journal of Research on Educational Effectiveness*, 14(3), 645–667. https://doi.org/10.1080/19345747.2021.1917028
- Hashemi, Z., & Hadavi, M. (2015). Investigation of vocabulary learning strategies among EFL Iranian medical sciences students. *Procedia Social and Behavioral Sciences*, 192, 629–637. https://doi.org/10.1016/j.sbspro.2015.06.110
- Jafari, S., & Kafipour, R. (2013). An investigation of vocabulary learning strategies by Iranian EFL students in different proficiency levels. *International Journal of Applied Linguistics & English Literature*, *2*(6), 23–27. https://doi.org/10.7575/aiac.ijalel.v.2n.6p.23
- Kartal, G., & Balci, Ö. (2021). Vocabulary learning autonomy and vocabulary size of Turkish ELT student teachers: A correlational study. *Acta Educationis Generalis*, 11(1), 92–110. https://doi.org/10.2478/atd-2021-0007

- Kossakowska-Pisarek, S. (2016). Pedagogical implications of positive psychology: Positive emotions and human strengths in vocabulary strategy training. In *Second language learning and teaching* (pp. 93–114). https://doi.org/10.1007/978-3-319-32954-3_6
- Lestari, M., & Wahyudin, A. Y. (2020). Language learning strategies of undergraduate EFL students. *Journal of English Language Teaching and Learning*, 1(1), 25–30. https://doi.org/10.33365/jeltl.v1i1.242
- Linh, N. T. T., & Yen, P. H. (2022). EFL teachers' strategies and challenges in promoting high school students' autonomy in vocabulary learning. *European Journal of English Language Teaching*, 7(4). https://doi.org/10.46827/ejel.v7i4.4419
- Liu, M. (2022). The relationship between students' study time and academic performance and its practical significance. *BCP Education & Psychology*, *7*, 412–415. https://doi.org/10.54691/bcpep.v7i.2696
- Mohammad, N. K., Ali, N. F., Yaser, N. M., & Aboutaleb, N. S. (2013). The role of metacognitive strategies on Persian students' vocabulary learning. *Journal of Psychology Research*, *3*(5). https://doi.org/10.17265/2159-5542/2013.05.004
- Maynard, J., & Shelton-Strong, S. J. (2022b). Introduction: Autonomy support beyond the language learning classroom: A self-determination theory perspective. In *Multilingual Matters eBooks* (pp. 1–10). https://doi.org/10.21832/9781788929059-003
- Nayan, S., & Rawian, R. M. (2022). A preliminary study on learners' perception of out-of-class autonomous vocabulary learning strategies. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 7(5), e001487. https://doi.org/10.47405/mjssh.v7i5.1487
- Nguyen, H., & Terry, D. R. (2017). English learning strategies among EFL learners: A narrative approach. *IAFOR Journal of Language Learning*. https://doi.org/10.22492/ijll.3.1.01
- Nirattisai, S., & Chiramanee, T. (2014). Vocabulary learning strategies of Thai university students and its relationship to vocabulary size. *International Journal of English Language Education*, *2*(1), 273. https://doi.org/10.5296/ijele.v2i1.5366
- Nurchalis, N. F., Nurhamdah, N., Bakoko, R., & Afdaliah, N. (2022). Students' autonomous learning activities outside the classroom to master english as a foreign language. *Pedagogy Journal of English Language Teaching*, 10(1), 60. https://doi.org/10.32332/joelt.v10i1.4716
- Oluwaseun, O., Tolulope, F., Lukuman, B., & Ikechukwu, E. C. (2020). Improving pre-service teachers' memory and retention using durable memory strategies in an instructional technology course. *American Journal of Educational Research*, 8(11), 847–855. https://doi.org/10.12691/education-8-11-4
- Prem, R. (2021). Learner Autonomy: Learners' perceptions on strategies to achieve autonomy in an EFL classroom. *International Journal of Linguistics Literature & Translation*, 4(3), 150–158. https://doi.org/10.32996/ijllt
- Rama, M. A., Hamdani, Z., & Prihatini, C. (2023). Students' perception of using TikTok as an effective learning media in improving students' vocabulary. *Journal on Education*, *5*(4), 17079–17086. https://doi.org/10.31004/joe.v5i4.4047
- Sabeh, G., Bahous, R., Bacha, N. N., & Nabhani, M. (2011). A match or a mismatch between student and teacher learning style preferences. *International Journal of English Linguistics*, 1(1), 162–172. https://doi.org/10.5539/ijel.v1n1p162

- Şakrak-Ekin, G., & Balçıkanlı, C. (2019). Does autonomy really matter in language learning? Journal of Language and Education, 5(4), 98–111. https://doi.org/10.17323/jle.2019.8762
- Sirait, S., & Hanim, S. (2022). Improving students' vocabulary achievement by using twitter and instagram multimedia. *Journal of Classroom Action Research*, 1(2), 1–15. https://doi.org/10.52622/jcar.v1i2.93
- Sokip. (2020). Overcoming the problem of learning foreign language skills in the classroom. *Universal Journal of Educational Research*, 8(2), 723–729. https://doi.org/10.13189/ujer.2020.080246
- Tilfarlioglu, F. Y., & Sherwani, S. (2018). An analysis of the relationship among EFL learners' autonomy, self-esteem, and choice of vocabulary learning strategies. *Theory and Practice in Language Studies*, 8(8), 933. https://doi.org/10.17507/tpls.0808.05
- Tuan, D. M. (2021). Learner autonomy in English language learning: Vietnamese EFL learners' perceptions and practices. *Indonesian Journal of Applied Linguistics*, 11(2). https://doi.org/10.17509/ijal.v11i2.29605
- Vela, V., & Rushidi, J. (2016). The effect of keeping vocabulary notebooks on vocabulary acquisition and learner autonomy. *Procedia Social and Behavioral Sciences*, 232, 201–208. https://doi.org/10.1016/j.sbspro.2016.10.046
- Yen, P. H., Thuy Linh, N. T., Thi, N. A., Thao, L. T., Thuy, P. T., Tra, N. H., & Anh Thu, H. T. (2023). Unveiling the gender influence on autonomous vocabulary learning strategies among Vietnamese EFL teachers. *International Journal of Learning, Teaching and Educational Research*, 22(9), 140–155. https://doi.org/10.26803/ijlter.22.9.8