

A “Wake-Up Call” for EFL Students: Exploring the Metacognitive Learning Strategy in the *Professional Listening* Course

Karolis Anaktototy

Universitas Pattimura, Ambon, Indonesia

wakwyoya@gmail.com

ARTICLE HISTORY

Received : 2022-02-23

Revised : 2022-05-11

Accepted : 2022-05-19

KEYWORDS

Professional listening course

Self-reflection activities

Metacognitive strategy

Listening activities

Listening skills



ABSTRACT

Compared to the cognitive strategies to solve students' problems in English listening, studies on metacognitive strategies seem to be underexplored in Eastern Indonesian context. In order to contribute to this research gap, this study conducted an investigation on university students' awareness of metacognitive strategies. This mixed-method study used quantitative data from a questionnaire adopted from the Metacognitive Awareness Listening Questionnaire (MALQ). 178 English Education students (19-21 years old) at Pattimura University completed the questionnaire, and eight students were randomly selected to be interviewed to obtain qualitative data regarding their individual metacognitive strategies for planning, monitoring and evaluating their listening activities. The findings reveal more than 60% of the participants agree that they have a plan for their listening activities, can maintain focus during the activities, and evaluate how they performed. Qualitative data supported that the students do have a plan and monitor their learning process, as they can provide specific strategies of how they plan (e.g., taking notes, making sure that the room is suitable for listening tasks) and monitor (e.g., paying attention to keywords, using context to decipher audio's meaning if they encounter unfamiliar words) their learning process. However, the students seem to be unable to explain or define precisely what metacognitive strategy is, indicating their lack of learning the self-reflection process. These results demonstrated a need for more explicit instruction of metacognitive strategies to improve the students' learning process, which will be especially beneficial for the university's uniquely high-stakes course of Professional Listening.

1. Introduction

Being able to communicate appropriately is essential, especially in language learning. The past decades have undergone an explosion of various studies on foreign language learning (Chen, 2019; Hamuddin et al., 2020; Putri et al., 2020; Rahman & Weda, 2018). Learning a foreign language has many benefits, ranging from the pragmatic purpose of global communication to the self-preservation goal of maintaining elderly's cognitive abilities (Antoniou et al., 2013; Derin et al., 2020; Kroll & Dussias, 2017). Hence, learning a foreign language as second language learning is one of the most critical education matters in most schools worldwide (Lavasani & Faryadres, 2011). Nowadays, English has become a must to learn, and it is a compulsory subject in countries worldwide, including Indonesia (Luminita & Silvia, 2015). Thus, in the context of multilingualism, it faces an unprecedented need to transform the English language in the globalized world (Zein et al., 2020).

Generally, students will be taught the four basic English skills, and they are expected to maintain their balance, including listening, speaking, reading, and writing. These general language skills are indispensable for successful communication with others (Rodge et al., 2016), ensuring the ability to understand oneself in everyday situations (Klimova, 2014). Listening and reading are passive skills, while speaking and writing are active or productive skills (Rao, 2019). For listening skills, some factors have been reported to hamper tertiary students' comprehension of lectures, including the lecturers' chosen vocabulary, unfamiliar accents, and spontaneous delivery style (Aizawa et al., 2020).

This study argues that listening should be the first skill learned from the other three, specifically active listening. Active listening is where learners consciously try to comprehend what they hear, so it is different from passive listening and serves as a prerequisite for achieving interaction (Spataro & Bloch, 2018; Weger Jr et al., 2014). Listening skill has been

a significant concern for language teaching theoreticians and teachers since it is one of the main reasons to reach the oral output in communication (Yavuz & Celik, 2017). Among the four language skills and activities, the listening comprehension ability is perceived as the most difficult to improve (Trisno et al., 2019) because it is the most demanding of all the language skills in which language is pronounced and comprehended by students (Al-Nafisah, 2019). Therefore, by learning listening first, students have a higher chance of achieving better output in their study time and have a higher opportunity to learn the other three skills successfully.

Moreover, in terms of communication, students should be exposed to real-time English communication, where they should listen first before they begin to learn to speak. Ahmadi (2016) explains that if students wish to learn to communicate, they can first learn to understand the language they are listening to. If learners want to communicate with native speakers, they should first learn to understand what the native speakers say in actual language situations to understand the key point. However, some people think that native English-speaking teachers are the ideal model for language production (Walkinshaw & Oanh, 2014) as they have been acquiring their language naturalistically in early childhood (Tsehaye et al., 2021), but the effect of native-speaker can vary significantly from person to person based on not only their 'native' or 'non-native' positioning but also on geography, teaching context, and personal disposition (Lowe et al., 2016). Hence, listening is also necessary for teachers and learners to pay appropriate attention to meeting communication goals. In listening skills, students will be taught about listening strategies that help them in listening. The listening strategies can be conceptualized as one of the most influential individual difference factors in foreign language learning (Fathi et al., 2020). The strategies are varied to suit each student's condition to gain maximum listening achievement. In short, learners or students should be taught how to listen, not just tested on their listening (Graham, 2017).

With this understanding, the researcher is interested to find out the learning strategies that university students apply in their language learning process, specifically in listening activities. A significant chunk of the literature on listening studies has focused on exploring students' cognitive strategies in learning (Kim, 2016; Peelle, 2018). Cognitive strategies are strategies that learners use in order to learn more successfully, including repetition, note-taking, imagery, summarizing, and they all involve deliberate manipulation of language to improve learning (Wei, 2016).

What is under-explored is metacognitive strategies for listening activities, which are strategies that learners need to reflect on and identify their abilities and processes of learning. Unlike cognitive strategies,

which can be likened to a list of tactics that students can choose, metacognitive strategies depend on students' reflection of three variables: person (their knowledge and beliefs of themselves as a learner), task (their information about the task difficulty and available resources) and strategy (their knowledge of thoughts and actions that will be required to complete the task). In using metacognitive strategy in the classroom, learners will use their knowledge of the three variables in three ways: (1) Planning; the stage where learners preview initial ideas on how to accomplish a learning task, such as reflecting on what they know, what they want to know, how they will find out and what have they learned; (2) Monitoring; the stage where students are doing the task, in which they pause and take time to reflect how things are going; and (3) Evaluating; the stage where students consider how well they accomplished, how well they used the strategies and decide which ones they will use again or not. As a result of their self-reflection of their past successes and failures in learning, they would improve on their learning strategies and become more autonomous and will be able to achieve better learning outcomes (Stanton et al., 2021). Countless studies have explored cognitive listening strategies as teachers worldwide study students' listening problems and how to improve their listening comprehension (Bao, 2017; Gilakjani & Sabouri, 2016; Graham, 2017), but metacognitive strategies for listening activities remain under-explored.

In addition to this study's aim to close this research gap, this study also focused on metacognitive strategies because they can help students in the long term (Biwer et al., 2020; Hatie & Donoghue, 2016). Cognitive strategies are precise strategies that students may pick and choose, but if learners employ metacognitive strategies, they will benefit significantly because this type of strategy is flexible with different in different contexts, situations, and goals (Rovers et al., 2018). Past studies have recognized that metacognitive learning strategies improve students' English listening comprehension effectively. Bao (2017) concludes that the self-monitoring strategy, which belongs to metacognitive, is frequently used by students. Cao & Lin (2020) state that the metacognitive strategy's knowledge plays a crucial role in listening comprehension. This is supported by the findings in an article by Taghizadeh & Abady (2016), boldly claiming that learners who received metacognitive strategies instruction showed higher achievement in listening and a lot of progress in the use of metacognitive and self-regulation strategies than those who did not. Moreover, because they consciously understand what they are doing when they learn, metacognitive learners tend to be the most successful learners (Rahimi & Katal, 2012).

After considering the long-term benefits of the metacognitive strategy, the researcher is motivated to carry out a study exploring students' understanding of

metacognitive strategies at Pattimura University. The preliminary study through informal communication with the students was carried out to determine the extent of students' awareness of their learning strategies during their listening activities. Results of the preliminary study indicated that many of the students could not maximize their learning comprehension due to losing focus frequently. Therefore, this study intends to give the students a "wake-up call" by conducting a study on their awareness of metacognitive strategies, not only to force them to do a self-reflection of their learning process but also to increase their sense of responsibility for their study development. Therefore, this study posited three research questions:

- a) What are the students' metacognitive strategies in planning their listening activities in the Professional Listening Course?
- b) What are the students' metacognitive strategies in monitoring their listening activities in the Professional Listening Course?
- c) What are the students' metacognitive strategies in evaluating their listening activities in the Professional Listening Course?

The results of this study contributed a unique insight into students' metacognitive English listening strategies because the students in this study are enrolled in a course known as "Professional Listening". It is a unique course offered at Pattimura University, where the lesson plans focus on incorporating work-related texts, and the learning goals are meant to prepare students for professional or office communication. Previous studies on metacognitive strategies for English listening skills involved general listening activities in the classroom, so this study offers the novelty of strategies that are used by students whose listening activities are more high-stakes for their future employment.

2. Method

This research was designed as a mixed-methods study because the data were combined from the results of a quantitative survey and an open-ended interview (Creswell & Creswell, 2018). This research was conducted at the English Education Study Program at Pattimura University. The participants of this study are university students in their third semester who were enrolled in the study program's unique course known as *Professional Listening*. This study selected these students as the participants as they were going through the course, and this research was meant as a "wake-up call" for them to reflect on how they have been learning in the course.

As mentioned above, this study used two instruments to collect the data: a questionnaire and an interview. The survey was adapted from the Metacognitive Awareness Listening Questionnaire (MALQ) (Goh, 2017). Students' responses are grouped in three categories (i.e., disagree, agree, and strongly agree) and presented in percentages. The adapted questionnaire utilized in the survey has 22 items in total and was classified into six sections: planning/evaluation, directed attention, problem-solving, mental translation, personal knowledge, and expectation. Roughly 300 students who enrolled in the course were given the survey, and a total of 178 students (19-21 years old) submitted their responses.

After analyzing the survey's results, the researcher decided to support the quantitative data by interviewing some of the students to find out the extent of their understanding of metacognitive strategy. The interviewees were selected by random sampling from the total number of participants who filled the questionnaire. However, due to the challenges of the meeting caused by the Covid-19 pandemic, the researcher could only reach out to the students by asking them to write their answers to a list of open-ended questions, which they submitted through the WhatsApp application.

Table 2.1 List of Interview Questions

Metacognitive Strategy Stages	Interview Questions
Planning	Do you feel confident when asked to do a listening activity? Why?
	Before listening, do you have any preparations to help you in the listening section?
Monitoring	How often do you lose your focus in a listening activity? Why is that?
	If you ever lose your focus in a listening activity, are you able to get it back?
	How can you solve the problems in a listening activity you may face?
Evaluating	Are you able to translate the words you hear as you listen to the speaker?
	Do you recognize metacognitive learning strategies? How often do you apply the strategy in a real-time listening situation?
	What is your expectation for the use of a metacognitive learning strategy?

Eight (8) out of 178 questionnaire participants sent their answers to the questions. The students were asked to answer the questions in whatever language they were most comfortable with, so some answered in English while others were in Indonesian. The researcher transcribed and translated all of their answers and coded them in vivo (using their own words) to stay close to their intent and meaning. The coding scheme for the transcript excerpts is **Name: Question Item-Interview Theme** (example, EW:1-CF). To protect the identity of the eight students who volunteered to be interviewed online, their names are coded to EW, MK, RS, CS, AB, DN, HL, and PA. Their answers also generated five themes in common: confidence, preparation, focus, mental translation and metacognitive strategy, which this study included in the coding scheme as CF, PP, FF, MT, and MC, respectively.

3. Result

This study divided the results into three sections according to the three research questions: metacognitive strategies for the planning, monitoring and evaluating stages. Adapted from the Metacognitive Awareness Listening Questionnaire,

the data obtained from the questionnaire instrument encompassed six themes: planning/evaluation, directed attention, problem-solving, mental translation, personal knowledge, and expectation. This study divided these themes into suitable stages of metacognitive strategies. Based on the questionnaire items and results, this study selected the most common themes for further exploration: students' preparation and confidence in planning for their Professional Listening activities, focus and mental translation process during their activities and evaluation and self-reflection about their metacognitive strategies. This study then triangulated both sets of data to discuss the students' three stages of metacognitive learning strategies: Planning, Monitoring and Evaluating.

3.1 Planning Metacognitive Strategies

The planning stage of metacognitive strategy implementation involves students deciding what they need to learn and then deciding how they are going to learn that material. These include the questionnaire items that are asked about students' planning and personal knowledge and the interview question about students' preparation and confidence.

Table 3.1 Students' Questionnaire Results about Their Planning in Professional Listening Course Activities

Items on Planning	Disagree	Agree	Strongly Agree
1. Before I start to listen, I have a plan in my head for how I am going to listen.	23.15%	62.10%	14.73%
2. Before listening, I think of similar texts that I may have listened to.	27.36%	63.15%	9.47%
Items on Personal Knowledge	Disagree	Agree	Strongly Agree
1. I find that listening in English is more difficult than reading, speaking, or writing in English.	13.60%	43.20%	43.20%
2. I feel that listening comprehension in English is a challenge for me.	4.90%	24.70%	70.30%
3. I do not feel nervous when I listen to English.	22.20%	46.90%	30.90%

The questionnaire results showed that more than 60% of the students admitted that they plan to approach their professional listening tasks. In developing their plans, the students consciously think of similar texts they listened to in previous classes. Since the questionnaire only confirmed that some students have plans, the following interview tried and managed to obtain details of some of the students' plans.

"Note and focus are the most important things that I think I must prepare before I start to listen."

Excerpt 1_DN:4-PP

"Headset (?), earphone (?) And a notebook."

Excerpt 2_RS:4-PP

"Iya, untuk media yg digunakan, bila melakukan kegiatan listening di rumah, saya menambahkan speaker agar lebih jelas saat mendengar audio listeningnya lalu menyiapkan buku untuk menulis apa

yg saya dengar dari audio listening tersebut." (Translation) "Yes, for the media used, when I do listening activities at home, I add speakers to make it clearer when I hear the audio listening and then prepare a book to write what I hear from the audio listening."

Excerpt 3_AB:4-PP

"Ya tentu, seperti sarapan atau makan siang untuk membuat saya fokus dan meningkatkan fungsi otak saya. Menurut penelitian ahli sarapan yang baik dapat dilakukan sebelum pukul 9 pagi, dengan sarapan yang memenuhi kebutuhan tubuh seperti mineral, vitamin, protein, dan juga karbohidrat." (Translation) "Yes of course, like breakfast or lunch to make me focus and improve my brain function. According to expert research, a good breakfast can be done before 9 am, with breakfast that meets the body's needs such as minerals, vitamins, protein, and carbohydrates."

Excerpt 4_PA:4-PP

A couple of the interviewees share the same plans for their listening activities, namely, taking notes (Excerpts 1 and 2). Audio technology such as listening audios, headsets and earphones are also included as part of their preparation for listening activities (Excerpts 2 and 3). Other students who were interviewed more or less simply stated that they have a plan for their listening without elaborating the specifics, but one student provided a unique preparation strategy which is making sure that they eat breakfast in the morning (Excerpt 4).

“Ya, saya cukup merasa percaya diri. Kemampuan saya, listening saya sudah sangat baik, bahkan telah di upgrade ke level max. Tentu saya melatih listening saya dengan menonton video orang kulit hitam dengan accentnya atau British English.” (Translation) “Yes, I feel quite confident. My ability, my listening is very good, it has even been upgraded to max level. Of course, I practice my listening by watching videos of black people with their accent or British English.”

Excerpt 7_PA:2-CF

“Honestly, I really believe in my listening abilities, and I can proceed to each section well enough based on my experiences watching movies and listening to podcasts, where the podcaster uses various accents. There are times that I felt some difficulties because of the new words I heard.”

Excerpt 8_EL:2-CF

Having plans and solid preparation naturally means that students should feel confident with their performance in listening activities. Excerpts 7 and 8 showed that students feel very confident because they practice watching movies to familiarize themselves with multiple accents (e.g., British people, black people).

“Ya. Karena menurut saya aktivitas mendengar lebih menyenangkan dari aktivitas lainnya. Saya merasa lebih percaya diri dan menyelesaikan aktivitas tersebut dengan baik.” (Translation) “Yes. Because I think listening activities are more fun than other activities. I feel more confident and complete the activity well.”

Excerpt 9_CS:2-CF

“I am very confident when asked to do the listening activity. I do not know the specific reason, but I am just confident and excited when asked to do the listening activity.”

Excerpt 10_MK:2-CF

“Yes, I am pretty confident about that... Because I think listening is not that hard for me... compared to other language skills, I feel confident that I can listen carefully and clearly, and I also feel sure that I can process and understand the meaning of what I am listening to before in the best way...”

Excerpt 11_DN:2-CF

Reflecting the majority of Professional Listening students’ agreement about planning, many students

who were interviewed stated they have high levels of confidence in their listening ability. Interestingly, many students stated that they like listening more than the other language activity skills, finding it more fun and exciting.

“Tidak ada persiapan yang begitu signifikan hanya saja saya biasanya memastikan kondisi yang kondusif sehingga pada saat mendengar, tidak terganggu dan saya akan lebih memfokuskan diri saya saat itu.” (Translation) There is no significant preparation, it's just that I usually make sure the conditions are conducive so that when I listen, I'm not disturbed and I will focus more on myself at that time.”

Excerpt 5_CS:4-PP

“Actually, I do not have any preparation. All I have to do is just focus on the sound or the speaker.”

Excerpt 6_MK:4-PP

Table 3.1 also showed that almost 30% of the questionnaire respondents admitted that they do not have a plan for approaching their listening activities. This is somewhat supported by the interview results, as at least two students admitted as much. However, they both also provided their form of preparation, ensuring that the room was conducive for listening (Excerpt 5) and focusing while listening (Excerpt 6). Focusing while listening activity, however, would fall under the stage of monitoring metacognitive strategy because it is what students would do while they are undergoing their learning process.

“Tidak terlalu percaya diri karena saya sering merasa kewalahan bila audionya terlalu cepat dan membutuhkan beberapa kali mengulangi audio agar bisa paham seluruhnya.” (Translation) Not very confident because I often feel overwhelmed when the audio is too fast and need to repeat the audio several times to fully understand.

Excerpt 12_AB:2-CF

“Sometimes, but I have some problem in gathering along with information. And if I was asked by the lecturer to say again about the information I heard, I think I just only can interpret it, but some models in listening activity can be fun, for example, guessing how to write a word properly, and so on.”

Excerpt 13_RS:2-CF

“It is optional because I will be confident if I know a lot about the topic of the listening section.”

Excerpt 14_HL:2-CF

The students who were not confident about their listening skills provided the reasons for their doubts. Based on Excerpts 12 and 13, they do not feel confident because, from their experience, they had to keep repeating the audio repeatedly to understand as they are prone to mishear or misunderstand the meaning of the foreign language script. In some cases, they can feel confident in their listening skill if the task fulfils a specific requirement, which includes (but may not be limited to) extensive firsthand knowledge

of the topic (Excerpt 14). Without this background knowledge and ability to repeat the audio, some students are not confident about their performance in the Professional Listening course.

3.2 Monitoring Metacognitive Strategies

The monitoring stage of metacognitive strategy requires students to consider how they are doing while

learning and constantly track what they have learned and what they do not yet know. The data that fall under this stage are the questionnaire items on directed attention, mental translation, problem-solving, and the three interview questions on students' focus and translation while listening.

Table 3.3 Students' Questionnaire Results about Their Monitoring in Professional Listening Course Activities

Items on Directed Attention	Disagree	Agree	Strongly Agree
1. I focus harder on the text when I have trouble understanding it.	7.40%	37%	55.60%
2. When my mind wanders, I recover my concentration right away.	3.70%	39.50%	56.80%
3. I try to get back on track when I lose concentration.	2.50%	38.30%	59.20%
4. When I have difficulty understanding what I hear, I give up and stop listening.	51.90%	28.40%	19.70%
Items on Mental Translation	Disagree	Agree	Strongly Agree
1. I translate in my head as I listen.	7.40%	35.80%	56.80%
2. I translate keywords as I listen.	6.20%	28.40%	65.40%
3. I translate word by word as I listen.	24.60%	55.60%	19.70%
Items on Problem Solving	Disagree	Agree	Strongly Agree
1. I use the words I understand to guess the meaning of the words I do not understand.	6.20%	29.60%	64.20%
2. As I listen, I compare what I understand with what I know about the topic.	3.70%	42%	54.30%
3. I use my experience and knowledge to help me understand.	2.40%	24.70%	72.80%
4. As I listen, I quickly adjust my interpretation if I realize that it is not correct.	3.70%	45.70%	50.60%
5. I use the general idea of the text to help me the meaning of the words that I do not understand.	4.90%	33.40%	61.70%
6. When I guess the meaning of a word, I think back to everything else that I have heard to see if my guess makes sense.	5%	39.50%	55.50%

Directed attention is the act of concentrating and staying on task, so it is the same as focus. While students mostly "agree" that they have a plan, a vast majority "strongly agree" with the statements about how they can increase and recover their focus (>50% overall). In fact, more than half stated that they do not immediately give up whenever they lose focus during listening tasks.

"It is rare for me to lose my focus in the middle of a listening section."

Excerpt 15_HL:4-FF

"It happens again and again IF in the listening section there are some words that I know it is new for me."

Excerpt 16_RS:4-FF

As can be seen in Excerpts 15 and 16, some students in the Professional Listening reflected on the situations where they lost their focus. In contrast, listening is rare, and the opposite case also happens for some students who would frequently lose their focus.

"Seringnya saat dipertengahan audio hingga akhir karena saat saya mendengar kata yg terdengar kurang jelas, saya akan terpaksa pada bagian itu dan

kehilangan fokus pada audio yang masih berlanjut. [...] Cara agar saya kembali fokus ialah mengulang audio dari awal dan mengabaikan apa yang mengabaikan apa yang mengganggu saya (seperti beberapa kata yg saya tidak tahu). Cara ini lumayan efektif bagi saya, karena setelah mendengar audio listenign hingga selesai, nantinya saya bisa menebak apa maksud dari bagian-bagian yg saya tidak mengerti." (Translation) "Often in the middle of the audio to the end because when I hear a word that does not sound clear, I will get hung up on that part and lose focus on the audio that is still going on. [...] The way to get me to refocus is to repeat the audio from the beginning and ignore what is ignoring and what is bothering me (like some words I do not know). This method is quite effective for me, because after listening to the audio listening to the end, later I can guess what the meaning of the parts that I do not understand is."

Excerpt 17_AB:4-FF

"Seldom. I lose my focus when there is a transition on each section in a listening section."

Excerpt 18_EL:4-FF

"I do not really often lose my focus in a listening activity, but sometimes I lose my focus because of the other sounds that cover the speaker's sound."

Excerpt 19_MK:4-FF

According to the interviews, there are two primary reasons why students can lose focus in the middle of their listening activities. The first obstacle is the quality of the audio, where some words may be intelligible (Excerpt 17), the transition of each listening section can be disturbing (Excerpt 18), or external noise in the classroom environment disrupts the clarity of the speaker's noise (Excerpt 19).

“Sering kali. Mungkin karena saya tidak benar-benar fokus seperti misalnya mengantuk.” (Translation) “Often. Maybe because I am not really focused like for example sleepy.”

Excerpt 19_CS:4-FF

“Cukup sering, namun itu semua disebabkan oleh faktor eksternal atau karena terlalu letih.” (Translation) “Quite often, but it is all caused by external factors or from being too tired.”

Excerpt 20_PA:4-FF

“I do not think I often lose my focus when I am in a listening section. If I do lose it... It is probably because of my physical or mental condition that is not good...”

Excerpt 21_DN:4-FF

The second reason for their loss of focus is related to their mental and physical health. Referring to Excerpt 4 regarding how proper meals, particularly breakfast, can be a beneficial preparation strategy to ensure one's focus, students can fail to direct their attention constantly if they get sleepy (Excerpt 19), fatigued (Excerpt 20), or their mental condition was not up-to-par for the duration of the activity (Excerpt 21).

Regarding the technical skill of the listening activity, which is to find equivalents of the target language in the learners' language, Table 1 shows that the majority of the students stated that they could mentally translate the words they listen to in their head, either by focusing on important words (65% “strongly agree”) or every single word that they hear (55% “agree”).

“Tentu, karena saya sudah merasa percaya diri.” (Translation) “Of course, because I already feel confident.”

Excerpt 22_PA:7-TL

“As long as I know the meaning of the words, I can translate every single word that I hear.”

Excerpt 23_MK:7-TL

“I could do it, but I often need some time to do it.”

Excerpt 24_EL:7-TL

“I could translate well enough what the speaker said in my mind if the topic is interesting.”

Excerpt 25_HL:7-TL

Interestingly, many of the students mentioned conditions for their mental translation to be done

successfully. It seems that they can mentally translate the listening audio if they feel confident (Excerpt 22), possess the knowledge of every individual word's meaning (Excerpt 23), have enough time (Excerpt 24), or find that the topic is interesting enough for them to focus (Excerpt 25).

“Untuk yg unfamiliar words, saya berusaha mengerti konteksnya lewat kata lain yang dapat saya mengerti. Namun jika tidak dapat menangkap konteks sama sekali saya akan memakai insting dalam menjawab.” (Translation) “For unfamiliar words, I try to understand the context through other words that I can understand. But if I can't grasp the context at all I'll use instinct to answer.”

Excerpt 26_CS:6-FF

“If it is an unfamiliar word, I simply will try to process and connect the whole meaning of a sentence in my mind, and I do not think I have a problem with the inability to catch the context.”

Excerpt 27_DN:6-FF

“I search for the unfamiliar words I find and also try to keep back focusing on the audio so the context of what I know can help me to fix the missing words that I found.”

Excerpt 28_RS:6-FF

“For the problem like unfamiliar words, I usually write them down or just remember them. When the listening activity finishes, I will search in a dictionary or even Google translate about the meaning of the words.”

Excerpt 29_MK:6-FF

When asked about problems or challenges in listening that can make them lose focus, students talk about audio or health issues. However, when asked how they can solve those problems during their listening activities, the majority cited how unfamiliar words constitute a significant obstacle to their focus in listening activities. Excerpts 26, 27 and 28 all stated how students rely on the context to guess the overall meaning of the sentences they listen to whenever they stumble on and are halted by unknown words. These statements reflect the data from Table 3.2, in which more than 60% of the students “strongly agree” that they derive the context based on the words that they do know and think back on everything that they have previously listened to guess whether their budding conclusions would be correct or not.

“Cara saya untuk kembali fokus adalah dengan kembali mendengarkan listening section dengan seksama dan mencari kata kunci untuk menyimpulkan apa yang telah terlewat.” (Translation) “My way to refocus is to re-listen to the listening section carefully and look for keywords to conclude what has been missed.”

Excerpt 30_PA:5-FF

“Saya selalu mencari kata kunci dan menelaah maksud dari kalimat tersebut, dengan hal ini maka kata-kata yang tidak dapat dimengerti menjadi lebih

mudah.” (Translation) “I always look for keywords and examine the meaning of the sentence, with this the words that cannot be understood become easier.”

Excerpt 31_PA:6-FF

“By listening well and catching about the keywords and main idea.”

Excerpt 32_EL:6-FF

“To solve my problems during a listening section, I tend to catch the main idea of what the speaker said.”

Excerpt 33_HL:6-FF

61% of the students also “strongly agree” that they use the general idea of the text to help them figure out the meaning of the words that they could not

understand while the audio was playing. The interview data also supported this finding. The students would solve the problem of losing their focus by catching the keywords (Excerpts 30 and 31) or the main idea of the audio text (Excerpts 32 and 33) to figure out the overall meaning of the speakers.

3.3 Evaluation Metacognitive Strategies

The evaluation stage of metacognitive strategy requires students to reflect on how well they met their learning objectives after completing their tasks. The data that fall under this stage is the questionnaire items on evaluation and expectation, as well as the interview question about students' awareness of metacognitive strategy.

Table 3.4 Students' Questionnaire Results about Their Evaluation in Professional Listening Course Activities

Items on Evaluating	Disagree	Agree	Strongly Agree
1. After listening, I think back to how I listened and about what I might do differently next time.	17.89%	67.36%	14.73%
2. As I listen, I periodically ask myself if I am satisfied with my level of comprehension.	26.31%	62.36%	11.57%
3. I have a goal in mind as I listen.	15.78%	71.57%	12.63%
Items on Expectation	Disagree	Agree	Strongly Agree
1. I am satisfied with the use of metacognitive strategy in the professional listening class.	5%	37%	58%

Table 3.4 shows that most students only “agree” with statements that indicate how active they engage in self-reflection. 67% of students think back about how they did and what they would do differently in the future, which means that there is still a significant number of students in the Professional Listening Course that does not reflect how well they performed.

“Yes, I recognize the metacognitive strategy and sometimes I also apply that strategy in listening class, but if I learn by myself at home, I rarely use this strategy.”

Excerpt 34_MK:1-MC

“Iya, saya lumayan sering menggunakan cara belajar metacognitive ini dalam melakukan kegiatan listening secara real-time karena membuat saya lebih fokus dalam menemukan inti pembicaraan dari audio yg sedang didengarkan.” (Translation) “Yes, I quite often use this metacognitive learning method in doing listening activities in real-time because it makes me more focused on finding the essence of the conversation from the audio that is being listened to.”

Excerpt 35_AB:1-MC

“Tahu dan saya sering menggunakannya saat nonton film, series, drama, sinetron, video YouTube, dan video singkat lainnya yang beredar di sosial media.” (Translation) “I know and I often use it when watching movies, series, dramas, soap operas, YouTube videos, and other short videos circulating on social media.”

Excerpt 36_PA:1-MC

There are 58% of the students "strongly agree" that they are satisfied with using metacognitive strategy in the Professional Listening Course. In the interview session, the students were asked to elaborate on their metacognitive learning strategy knowledge and how they use it in the professional listening class. However, none of the participants elaborated on how they defined it or provided different ideas and strategies.

For the most part, all of the eight students who volunteered to be interviewed in this study only stated that "they know" of the strategy but never provided their definition of it. At most, they only revealed what situations they apply metacognitive strategy, which is when they are in the classroom (Excerpts 34 and 35), watching audiovisual media (Excerpt 36).

“Nope, but I think I have ever done it before, still understanding what metacognitive is.”

Excerpt 37_RS:1-MC

“At first, I actually do not exactly know what metacognitive learning strategy is. however, I then search fr the explanation on Google and read several articles... Well, I think I often use the strategy.”

Excerpt 38_DN:1-MC

Some students do admit that they have no idea about what metacognitive strategy is (Excerpt 37). In Excerpt 38, a student said that they had to browse the

internet to answer the question, but their answer still resembled the other students: they only said that they often used the strategy and did not illuminate how well they understood what it means.

“I expect it to work very well because the idea of metacognitive learning strategy is really helpful for the students. I think some students with lower academic levels and scores are having a hard time with learning by themselves.”

Excerpt 39_EL:8-MC

“My expectation is actually this metacognitive learning strategy is an excellent method to be used in learning, especially when u have problems in some situations.”

Excerpt 40_RS:8-MC

“I also believe that metacognitive learning strategy is beneficial because students can learn with their methods and teachers could adjust.”

Excerpt 41_HL:8-MC

“Nah ini penting, saya harap semua mahasiswa dapat tahu apa itu listening metacognitive, sehingga mahasiswa dapat tahu belajar dengan mudah dan tentu meningkatkan kemampuan mereka. Sehingga pembelajaran menjadi aktif dan kreatif.” (Translation) “Now this is important, I hope that all students can know what metacognitive listening is, so that students can learn to learn easily and of course improve their abilities. So that learning becomes active and creative.”

Excerpt 42_PA:8-MC

“Well, my expectation of course supaya this strategy may help students better in improving their listening skill, however, this strategy kalau mau digunakan kayaknya membutuhkan arahan dan bimbingan juga dari dosen dan self-management. Dari mahasiswa juga penting...” (Translation) “Well, my expectation, of course, is that this strategy may help students better in improving their listening skills, however, if you want to use this strategy, it seems that it requires direction and guidance from lecturers and self-management from students is also important...”

Excerpt 43_DN:8-MC

Although none of the students articulated how they understand what metacognitive is, as can be seen in Excerpts 39 to 43, they have stated how beneficial the strategy can be for both students and teachers. Some stated that it could significantly help students who have problems with their listening performance, and others stated that the strategy could boost their competence and even creativity.

4. Discussion

The findings revealed that the students in the Professional Listening Course do apply the metacognitive learning strategies, but primarily only in the Planning and Monitoring Cycle. The students never indeed elaborated on their understanding of metacognitive strategies that would show how much

they evaluate their learning process. Nonetheless, they do provide data about how frequently they apply it and how beneficial the strategy can be for both students and teachers. Ultimately, the study successfully achieved its goal of increasing students' awareness of metacognitive learning strategies as the results implied that students who were not very familiar with it actually searched for more information to understand the concept. The results of this study contributed to showcasing various kinds of strategies as well as problems in listening faced by the unique demography of English students who enrolled in a high-stakes, work-focused, Professional Listening Course.

The findings of how metacognitive strategies in all three stages have been improving students' listening performances are supported by Taheri & Mahsa (2018), who explained that students could show better performance in metacognitive learning strategies if they are once taught and exposed to them first. It is also in line with the result of research on how learning-related emotions influence the metacognitive learning strategies, which in turn mediate the effect of emotions on academic performance (Hayat et al., 2020).

In terms of the number of students who stated that they are aware of metacognitive strategies, this finding contradicts a previous study that reported that undergraduates have deficient awareness of metacognitive learning strategies (Rahimi & Katal, 2012). In this study, the participants have high expectations of the use of metacognitive learning strategies in the Professional Listening Course and wish the lecturer could use the strategy even more in teaching the professional listening class. Despite their seemingly high expectation of the learning strategies' effectiveness, the data demonstrated their lack of recognition of the concept of metacognitive itself. The students provided a sufficient number of details about their metacognitive planning strategies (e.g., taking notes, ensuring audio technology quality, ensuring the room's suitability, maintaining health) and monitoring strategies (focusing on keywords to translate the meaning, relying on the context if they stumble over unknown words, mitigating for disruption from external noise), yet they were unable to provide any specific action related to self-evaluation of their learning process. This result implies a particular nuance that future measurements of students' awareness of metacognitive learning strategies should pay attention to.

At the very least, this research successfully brought the students' attention to the concept of metacognitive strategies. They showed a level of proactiveness by looking up resources to understand the concept. Moreover, the students in this present study also suggested addressing the number of students who remain unaware of metacognitive strategies, which is that lecturers should act as a

catalyst for students' investment in their learning development. This is in line with Limueco & Prudente (2019) and Hamzah et al. (2022). Langdon et al. (2019) added that metacognitive strategy use might only be improved when it is more integrated into the course and not just a "one-shot" application. Overall, this study contributed to the current mission of introducing an explicit focus on metacognitive strategy to improve students' proficiency and performance in language skills (Forbes & Fisher, 2018).

Additionally, it is found in the findings that the metacognitive learning strategy helps the participants in mastering their professional listening materials. Using the learning strategy as the basic strategy, students can combine what strategies they learned in the professional listening class. From the data gained in the interview, it is confirmed by the participants that the metacognitive learning strategy helps them overcome the difficulties they may find in a listening section/ activity. This finding supports the previous study by Mohaved (2014), who reported that metacognitive strategy has a positive effect on students' listening performance. Overall, the students show positive responses at each stage. It answers the second research question and verifies the idea that metacognitive learning strategies positively assist the students in mastering and learning professional listening materials.

In their result of the study, Taheri & Mahsa (2018) also explained that their students' highest use of metacognitive strategies was classified as problem-solving, and the lowest was classified as personal knowledge. Basically, the participants in this study have the same result, yet they show an honest and adverse reaction to personal knowledge than any other strategies mentioned in the questionnaire. They mentioned that listening skill is more accessible than the other three fundamental skills in English learning but humbly admitted that they could be nervous in any listening session as they are giving an English speech. This statement is enough to ensure that the participants' highest use of strategies would be on personal knowledge. They know their limit and then use problem-solving strategies to help them break through their limit. It is in line with the research of Teng (2021) that metacognitive knowledge is of great value for enhancing a learner's vocabulary knowledge. However, according to Tanner (2012), the ability of students to use the metacognitive approaches in their learning can be varied.

On the other hand, Tian et al. (2018) found that metacognitive can be used to predict students' mathematics performance. Even metacognitive is found to be an effective approach for improving the ADHD students' science knowledge learning abilities (Zheng et al., 2021). All of these show that learning strategies such as cognitive and metacognitive strategies have had the most effects on the academic

achievement of school and university students in different courses (Fooladvand et al., 2017).

This study is limited in terms of the depth of data it can offer. As the researcher was unable to meet with the students face-to-face for interviews and long sessions of online interviews through video communication were also not possible due to time constrictions, most of the interview data were short answers provided by the students. The interview method by WhatsApp did not allow the researcher to ask students to be more elaborate or explain specific ideas or points in their submitted answers. Therefore, there is still much room for this study to improve, namely by conducting a more robust method to obtain a richer data set.

Further suggestions for future research are as follows: (1) students should try to experiment with a metacognitive learning strategy with any other associated listening strategies to find out the most suitable strategy to further assist them in doing listening sessions; (2) teachers and lecturers could try to embed metacognitive learning strategy in their lesson plan more often as the strategy is found to be beneficial for the students and it is what the students expect in the professional listening class further on; (3) future researchers could develop this research deeper and broader by incorporating more aspects such as frequency, suitable listening strategies, and the time range in the future. It is also recommended to do further research, such as experimental studies, in order to have more comprehensive results. Of particular importance is to raise awareness of the importance of self-reflection in their learning process so that students can expand or replace their current roster of strategies with a better repertoire.

5. Conclusions

This study has successfully achieved its two-pronged goal of determining the extent of Professional Listening to students' knowledge of metacognitive strategies and awakening the awareness of this strategy in students who were unfamiliar with it. The key result that can be taken from this study is that the EFL students who were taught in this uniquely work-focused listening course possessed multiple strategies that they do to plan and monitor their learning process. However, this study did not determine if students engaged in any solid self-reflection activities to evaluate how well they performed on their tasks. This study implies that lecturers should actively inform students about the concept of metacognitive strategies so that they can plan, monitor, and evaluate whether the various cognitive strategies they have used will be used again or discarded in future tasks to become autonomous learners.

6. Acknowledgement

This research was supported/partially supported by the Faculty of Teacher Training and Educational

Science, Pattimura University T. We thank our colleagues from (the English Education Study Program) who provided insight and expertise that greatly assisted the research, although they may not agree with all of the interpretations/conclusions of this paper. Gratitude is also extended to the Unilak Language Editing Team (ULET) of Universitas Lancang Kuning for their assistance in improving the language quality of the manuscript.

References

- Ahmadi, S. M. (2016). The Importance of Listening Comprehension in Language Teaching. *International Journal of Research in English Education*, 7–10.
- Aizawa, I., Rose, H., Thompson, G., & Curle, S. (2020). Beyond the threshold: Exploring English language proficiency, linguistic challenges, and academic language skills of Japanese students in an English medium instruction programme. *Language Teaching Research*, 1–25. <https://doi.org/10.1177/1362168820965510>
- Al-Nafisah, K. I. (2019). Issues and Strategies in Improving Listening Comprehension in a Classroom. *International Journal of Linguistics*, 11(3), 93–106. <https://doi.org/10.5296/ijl.v11i3.14614>
- Antoniou, M., Gunasekera, G. M., & Wong, P. C. M. (2013). Foreign language training as cognitive therapy for age-related cognitive decline: A hypothesis for future research. *Neuroscience and Biobehavioral Reviews*, 37(10), 2689–2698. <https://doi.org/10.1016/j.neubiorev.2013.09.004>
- Bao, X. (2017). A Study on Listening Strategies Instructed by Teachers and Strategies Used by Students. *International Journal of English Linguistics*, 186–195. <https://doi.org/10.5539/ijel.v7n2p186>
- Biwer, F., Egbrink, M. G., Aalten, P., & de Bruin, A. B. (2020). Fostering Effective Learning Strategies in Higher Education – A Mixed-Methods Study. *Journal of Applied Research in Memory and Cognition*, 9(2), 186–203. <https://doi.org/10.1016/j.jarmac.2020.03.004>
- Cao, Z., & Lin, Y. (2020). A Study on Metacognitive Strategy Use in Listening Comprehension by Vocational College Students. *English Language Teaching*, 129–139. <https://doi.org/10.5539/elt.v13n4p127>
- Chen, J. (2019). ‘To Blog, Not to Block’: Examining EFL Learners’ Language Development and Intercultural Competence in the Blogosphere Through the Sociocultural Lens. In *Literacy Unbound: Multiliterate, Multilingual, Multimodal* (pp. 225–245). Springer. https://doi.org/10.1007/978-3-030-01255-7_12
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (5th ed.). SAGE Publications.
- Derin, T., Nursafira, M. S., Yudar, R. S., Gowasa, N. S., & Hamuddin, B. (2020). Persuasive Communication: What Do Existing Literature Tells Us About Persuasive Communication Among Students? *Utamax: Journal of Ultimate Research and Trends in Education*, 2(1), 12–18. <https://doi.org/10.31849/utamax.v2i1.3468>
- Fathi, J., Derakhshan, A., & Torabi, S. (2020). The Effect of Listening Strategy Instruction on Second Language Listening Anxiety and Self-Efficacy of Iranian EFL Learners. *SAGE Open*, 10(2), 1–13. <https://doi.org/10.1177/2158244020933878>
- Fooladvand, M., Yarmohammadian, M. H., & Zirakbash, A. (2017). The effect of cognitive and metacognitive strategies in academic achievement: A systematic review. *New Trends and Issues Proceedings on Humanities and Social Sciences*, 1, 313–322. <https://doi.org/10.18844/gjhss.v3i1.1780>
- Forbes, K., & Fisher, L. (2018). The impact of expanding advanced level secondary school students’ awareness and use of metacognitive learning strategies on confidence and proficiency in foreign language speaking skills. *The Language Learning Journal*, 46(2), 173–185. <https://doi.org/10.1080/09571736.2015.1010448>
- Gilakjani, A. P., & Sabouri, N. B. (2016). Learners’ Listening Comprehension Difficulties in English Language Learning: A Literature Review. *English Language Teaching*, 9(6), 123–133.
- Goh, C. C. M. (2017). Metacognitive Awareness Listening Questionnaire (MALQ) (Vandergrift, Goh, Mareschal, & Tafaghodtari, 2006). In *The sourcebook of listening research: Methodology and measures* (pp. 430–437). <https://onlinelibrary.wiley.com/doi/abs/10.1002/9781119102991.ch45>
- Graham, S. (2017). Research into practice: Listening strategies in an instructed classroom setting. *Language Teaching*, 50(1), 107–119. <https://doi.org/10.1017/S0261444816000306>
- Hamuddin, B., Rahman, F., Pammu, A., Baso, Y. S., & Derin, T. (2020). Cyberbullying Among EFL Students’ Blogging Activities: Motives and Proposed Solutions. *Teaching English with Technology*, 20(2), 3–20. <https://doi.org/10.4018/IJCBPL.201910010>
- Hamzah, H., Hamzah, M. I., & Zulkifli, H. (2022). Systematic Literature Review on the Elements of Metacognition-Based Higher Order Thinking Skills (HOTS) Teaching and Learning Modules.

- Sustainability*, 14(2), 813–825.
<https://doi.org/10.3390/su14020813>
- Hatie, J. A., & Donoghue, G. M. (2016). Learning Strategies: a Synthesis and Conceptual Model. *Science of Learning*, 1(1), 1–13.
<https://doi.org/10.1038/npjscilearn.2016.13>
- Hayat, A. A., Shateri, K., Amini, M., & Shokrpour, N. (2020). Relationships between academic self-efficacy, learning-related emotions, and metacognitive learning strategies with academic performance in medical students: a structural equation model. *BMC Medical Education*, 20(1), 76–87. <https://doi.org/10.1186/s12909-020-01995-9>
- Kim, Y.-S. G. (2016). Direct and mediated effects of language and cognitive skills on comprehension of oral narrative texts (listening comprehension) for children. *Journal of Experimental Child Psychology*, 141, 101–112.
<https://doi.org/10.1016/j.jecp.2015.08.003>
- Klimova, B. F. (2014). Detecting the Development of Language Skills in Current English Language Teaching in the Czech Republic. *Procedia - Social and Behavioral Sciences*, 158, 85–92.
<https://doi.org/10.1016/J.SBSPRO.2014.12.037>
- Kroll, J. F., & Dussias, P. E. (2017). The benefits of multilingualism to the personal and professional development of residents of the US. *Foreign Language Annals*, 50, 248–259.
<https://doi.org/10.1111/flan.12271>
- Langdon, J., Botnaru, D. T., Wittenberg, M., Riggs, A. J., Mutchler, J., Syno, M., & Caciula, M. C. (2019). Examining the effects of different teaching strategies on metacognition and academic performance. *American Physiological Society*, 414–422.
<https://doi.org/10.1152/advan.00013.2018>
- Lavasani, M. G., & Faryadres, F. (2011). Language learning strategies and suggested model in adults processes of learning second language. *Procedia - Social and Behavioral Sciences*, 15, 191–197.
<https://doi.org/10.1016/j.sbspro.2011.03.072>
- Limueco, J. M., & Prudente, M. S. (2019). Flipped classroom enhances student’s metacognitive awareness. *IC4E '19: Proceedings of the 10th International Conference on E-Education, E-Business, E-Management and E-Learning*, 70–74.
<https://doi.org/10.1145/3306500.3306507>
- Lowe, R. J., Kiczowski, M., & Lu, X. (2016). Native-speakerism and the complexity of personal experience: A duoethnographic study. *Cogent Education*, 3(1), 1–16.
<https://doi.org/10.1080/2331186X.2016.1264171>
- Luminita, L. M., & Silvia, L. C. (2015). Teaching Compulsory and Optional Subjects in Contemporary Schools. *Procedia - Social and Behavioral Sciences*, 180, 627–631.
<https://doi.org/10.1016/j.sbspro.2015.02.170>
- Mohaved, R. (2014). The Effect of Metacognitive Strategy Instruction on Listening Performance, Metacognitive awareness and Listening anxiety of Beginner Iranian EFL Studen. *International Journal of English Linguistics*, 88–89.
<https://doi.org/10.5539/ijel.v4n2p88>
- Peelle, J. E. (2018). Listening Effort: How the Cognitive Consequences of Acoustic Challenge Are Reflected in Brain and Behavior. *Ear and Hearing*, 39(2), 204–214.
<https://doi.org/10.1097/AUD.0000000000000494>
- Putri, S. E., Hamuddin, B., Nursafira, M. S., & Derin, T. (2020). Discourse Analysis in E-Learning-Based Course Using Moodle Platform: An Experimental Design. *A General Theory of Crime*, 2(1), 19–26.
<https://doi.org/10.31849/reila.v2i1.3960>
- Rahimi, M., & Katal, M. (2012). Metacognitive strategies awareness and success in learning English as a foreign language: an overview. *Procedia - Social and Behavioral Sciences*, 31, 73–81.
<https://doi.org/10.1016/j.sbspro.2011.12.019>
- Rahman, F., & Weda, S. (2018). Students’ Perceptions in Appreciating English Literary Works through Critical Comment: A Case Study at Hasanuddin University and Universitas Negeri Makassar. *Asian EFL Journal*, 20(3), 149–172.
- Rao, P. S. (2019). The Importance of Speaking Skills in English Classrooms. *Alford Council of International English & Literature Journal (ACIELJ)*, 2(2), 6–18.
- Rodge, K., Melby-Lervag, M., & Lervag, A. (2016). Improving the General Language Skills of Second-Language Learners in Kindergarten: A Randomized Controlled Trial. *Journal of Research on Educational Effectiveness*, 9(1), 150–170.
<https://doi.org/10.1080/19345747.2016.1171935>
- Rovers, S. F., Stalmeijer, R. E., van Merriënboer, J. J., Savelberg, H. H., & de Bruin, A. B. (2018). How and Why Do Students Use Learning Strategies? A Mixed Methods Study on Learning Strategies and Desirable Difficulties With Effective Strategy Users. *Front Psychology*, 9, 1–12.
<https://doi.org/10.3389/fpsyg.2018.02501>
- Spataro, S. E., & Bloch, J. (2018). “Can You Repeat That?” Teaching Active Listening in Management Education. *Journal of Management Education*, 42(2), 168–198.
<https://doi.org/10.1177/1052562917748696>

- Stanton, J. D., Sebesta, A. J., & Dunlosky, J. (2021). Fostering Metacognition to Support Student Learning and Performance. *CBE - Life Sciences Education*, 20(2), 1–7. <https://doi.org/10.1187/cbe.20-12-0289>
- Taghizadeh, M., & Abady, A. (2016). The Effects of Metacognitive Strategy Training on the Listening Comprehension and Self-Regulation of EFL Learners. *International Journal of Foreign Language Teaching & Research*, 4(16), 37–54. http://jfl.iaun.ac.ir/article_586731.html
- Taheri, P., & Mahsa, Z. (2018). The Contribution of Metacognitive Strategies to EFL Learners' Listening Comprehension Task Types. *Teaching English Language*, 12(2), 169–169. <https://doi.org/10.22132/tel.2018.82864>
- Tanner, K. D. (2012). Promoting Student Metacognition. *CBE Life Sciences Education*, 11(2), 113–120. <https://doi.org/10.1187/cbe.12-03-0033>
- Teng, M. F. (2021). Exploring awareness of metacognitive knowledge and acquisition of vocabulary knowledge in primary grades: a latent growth curve modelling approach. *Language Awareness*, 1–25. <https://doi.org/10.1080/09658416.2021.1972116>
- Tian, Y., Fang, Y., & Li, J. (2018). The Effect of Metacognitive Knowledge on Mathematics Performance in Self-Regulated Learning Framework—Multiple Mediation of Self-Efficacy and Motivation. *Frontiers in Psychology*, 9(2518), 1–11. <https://doi.org/10.3389/fpsyg.2018.02518>
- Trisno, E., Emzir, & Mayuni, I. (2019). *Students' Problem in Listening Comprehension at University Level*. Atlantis Press.
- Tsehaye, W., Pashkova, T., Tracy, R., & Allen, S. E. (2021). Deconstructing the Native Speaker: Further Evidence From Heritage Speakers for Why This Horse Should Be Dead! *Front Psychology*, 12, 717352. <https://doi.org/10.3389/fpsyg.2021.717352>
- Walkinshaw, I., & Oanh, D. H. (2014). Native and Non-Native English Language Teachers: Student Perceptions in Vietnam and Japan. *SAGE Open*, 4(2), 1–9. <https://doi.org/10.1177/2158244014534451>
- Weger Jr, H., Bell, G. C., Minei, E. M., & Robinson, M. C. (2014). The Relative Effectiveness of Active Listening in Initial Interactions. *International Journal of Listening*, 28(1), 13–31. <https://doi.org/10.1080/10904018.2013.813234>
- Wei, N. (2016). Gender differences in the use of English vocabulary learning strategies in Chinese senior high schools. *Studies in Literature and Language*, 12(4), 58–62. <https://doi.org/10.3968/8225>
- Yavuz, F., & Celik, O. (2017). The Importance of Listening in Communication. *Global Journal of Psychology Research: New Trends and Issues*, 7(1), 8–11. <https://doi.org/10.18844/gjpr.v7i1.2431>
- Zein, S., Sukyadi, D., Hamied, F., & Lengkanawati, N. (2020). English language education in Indonesia: A review of research (2011–2019). *Language Teaching*, 53(4), 491–523. <https://doi.org/10.1017/S0261444820000208>
- Zheng, H., Dong, Y., Sun, Y., Yang, J., Yuan, C., Wang, J., & Dong, W. (2021). Effectiveness of Metacognitive Regulation Intervention on Attention-Deficit-Hyperactivity Disorder Students' Scientific Ability and Motivation. *Front Psychology*, 12(747961), 171–180. <https://doi.org/10.3389/fpsyg.2021.747961>