

Exploring Vandergrift's Metacognitive Strategies Use and Its Impact on Listening Comprehension: A Comprehensive Review

Wandi Syahfutra^{1*}, Maria Safriyanti²⁾ Titiek Fujita Yusandra³⁾

¹⁾Universiti Malaysia Kelantan, ²⁾Universitas Riau, ³⁾Universitas Negeri Padang
Kota Karung Berkunci 36, Pengkalan Chepa, 16100 Kota Bharu

*Corresponding Author, email: e19e0054f@siswa.umk.edu.my

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Abstract

This article aimed to explore various metacognitive strategies use and its impact on listening comprehension based on five components or factors of Vandergrift's metacognitive awareness listening questionnaire (MALQ) at different research areas. The reviewed articles were conducted by using literature review approach in which ten selected articles published from 2016 to 2021 at reputable international journals to be reviewed comprehensively. The selected articles were explored at different learning atmospheres to find out metacognitive strategies use and its direct impact on listening comprehension. The reviewed results were discussed in detail based on various findings of metacognitive strategies components (*problem-solving, person knowledge, mental translation, planning and evaluation and directed attention*) that highly used by language learners and also its impact during learning listening. In conclusion, metacognitive strategies use on listening comprehension has contributed crucially for L2 and EFL learners to regulate, direct, monitor, and control their cognitive ability during language learning process and this self-regulation based learning has influenced listening learning outcome.

Keywords: *Vandergrift, Metacognitive, Strategies Use, Impact, Listening Comprehension*

Introduction

Remarkably, listening skill is often overlooked by language learners but it actually exists among another skill. In other words, listening skill is regarded as '*Cinderella skill*' because it has been treated as a secondary skill and as a means to an end, rather than an end in itself (Nunan, 2002). Actually, listening skill has the important role in language learning and it has functioned as a boost skill for oral language skills in 1960s. and then since 1980, listening skill has been admitted as a primary vehicle for language learning (Rost, 2013). It also can be considered that listening is an essential skill which develops faster than speaking and often affects the development of reading and writing abilities in learning a new language (Tafarobjiyeganeh, 2013).

Meanwhile, strategy use in learning language is a must in relation to have effective learning and for learning achievement. So, language learning strategy has been discussed by the experts in order to show how strategy has important role to achieve successful learning.

O'Malley & Chamot (1990) categorized learning strategies into three types; *metacognitive*, *cognitive*, and *socio-affective* (social/affective) strategies. Metacognitive strategy focuses on the involvement of someone knowledge in learning process, planning for learning, monitoring learning while it is taking place, or self-evaluation of learning after the task has been completed. Cognitive strategy refers to “the one that involves mental manipulation or transformation of materials or tasks and intends to enhance comprehension, acquisition, or retention” (p. 229). Social/affective is related to social interactions that assist comprehension, learning, retention of information, and mental control over personal affect that interferes with learning. In other words, good listeners use many strategies simultaneously and in accordance with the task at hand. They may listen regularly to a radio broadcast (metacognitive), take notes on the key points (cognitive) and then meet fellow students in the cafe (for their doughnut) and tell them all about what they just listened to (socio-affective) (Wilson, 2008; Kök, 2017).

Dealing with metacognitive strategy, it must be known that the term of metacognition becomes basic concept for experts to expand the function and the involvement this concept toward all learning fields. *Metacognition* concept was coined by Flavell (1976) as “one’s knowledge concerning one’s own cognitive processes and products or anything related to them (Bozorgian et al., 2020). Specifically, Vandergrift (2006) developed the measurement instrument to assess L2 learners’ metacognitive awareness and perceived use of strategies while listening to oral texts in L2. It is called metacognitive awareness listening questionnaire (MALQ). Indeed, MALQ was developed and validated based on various theoretical and empirical considerations in relation to listening learning process. Therefore, MALQ becomes the potential uses for both teaching and research (Vandergrift et al., 2006).

The validated MALQ consists of five factors of metacognitive awareness: *problem-solving*, *planning and evaluation*, *mental translation*, *person knowledge and directed attention*. It can be underlined that each five factor has certain items to represent each strategy. *Problem-solving* represents a group of strategies used by listeners to inference (guess at what they do not understand) and to monitor these inferences. There are six items that relates to the first factor. Second factor goes to *planning and evaluation*. It refers to the strategies listeners use to prepare themselves for listening, and to evaluate the results of their listening efforts. There are four items for this factor. Factor three, *mental translation*, focuses on strategies that listeners must learn to avoid if they are to become skilled listeners. It has three items to be considered during learning process. Then, for the fourth factor, *person knowledge*, represents to listeners’ perceptions concerning the difficulty presented by L2 listening and their self-efficacy in L2 listening. It belongs to three items for this factor. The last factor is *directed attention*. This factor is explained as strategies that listeners use to concentrate and to stay on task. The four items are under this factor (Vandergrift et al., 2006).

Referring to MALQ explanation above, it became the measurement tool to describe various learners’ metacognitive strategy use and its impact on listening comprehension. It can be noted that there is a meaningful relationship between metacognition and listening comprehension success.

Method

The descriptively analysis with literature review approach was used to explore the metacognitive strategies use and its impact on listening comprehension. Ten collected articles

published from 2016 to 2021 became the main documents to be reviewed comprehensively. Those articles were selected based on the reputable journals and various implementations at different learning environments. The reviewed article lists could be seen in the table below:

Table 1 Reviewed Article Lists

Article	Published Year	Journal
Exploring the Effect of Metacognitive Strategy Instruction on Metacognitive Awareness and Listening Performance Through a Process-Based Approach	2016	<i>International Journal of Listening</i>
EFL Saudi Undergraduate Students' Use of Metacognitive Listening Strategies	2016	<i>Arab World English Journal</i>
A Task-based Language Teaching Approach to Developing Metacognitive Strategies for Listening Comprehension	2017	<i>International Journal of Listening</i>
Metacognitive Pedagogical Sequence for Less-Proficient Thai EFL Listeners: A Comparative Investigation	2019	<i>RELC Journal</i>
The Relationship Between Iranian Female Dentistry Students' Metacognitive Awareness and Listening Performance in English for General Purposes (EGP)	2019	<i>Philosophy Study Journal</i>
Metacognitive Intervention and Awareness: Listeners with Low Working Memory Capacity	2020	<i>International Journal of Listening</i>
(Re) Discovering Metacognitive Listening Strategies in L1 Contexts: What Strategies Are the Same in the L1 and L2 Context?	2020	<i>International Journal of Listening</i>
College students' metacognitive strategy use in an EFL flipped classroom	2020	<i>Computer Assisted Language Learning</i>
The Application of Metacognitive Strategies in Computer-Assisted Listening Comprehension Class	2021	<i>Advances in Social Science, Education and Humanities Research Proceedings of the 17th International Conference of the Asia Association of Computer-Assisted</i>

		<i>Language Learning (AsiaCALL 2021)</i>
The relationship between L2 listening and Metacognitive Awareness across Listening tests and Learner Samples	2021	<i>International Journal of Listening</i>

Those articles were analyzed referring to five factors or components that were related to *problem-solving, person knowledge, mental translation, planning and evaluation and directed attention* use impacts toward listening comprehension enhancement. Then, its analysis was explored and explained to show how importantly the impacts of metacognitive strategies uses were for L2 or foreign listening learning process outcome.

Result and Discussion

Importantly, the exploration focused on five components or factors suggested by Vandergrift (2006) on his metacognitive awareness listening questionnaires (MALQ). They are *problem-solving, person knowledge, mental translation, planning and evaluation and directed attention*. Each component has been utilized by learners as the measurement tool or assessment during listening learning process. Therefore, it can be seen the different results of each component by learners at different learning contexts. Those were explored that which factors became dominantly use among them especially for listening comprehension.

First result of metacognitive strategies use that impacted directly on listening instruction was the research conducted for Iranian EFL learners. The researcher explored metacognitive strategy instruction effect on five factors of metacognitive awareness and listening performance through a process-based approach. It showed that metacognitive strategy instruction led to a considerable variance in overall listening performance and learners' metacognitive awareness. It can be explored that among five factors of learners' metacognitive awareness, four factors (*person knowledge, mental translation, planning and evaluation, directed intention*) had impacted significantly for listening performance, while *problem-solving* was still not found significantly (Maftoon & Fakhri Alamdari, 2016).

The second research result focused on dominant factors of metacognitive strategies use for listening comprehension and its impact for listening achievement especially toward Saudi Arabian female learners. The results of overall analysis indicated that learners used more *problem-solving* and *directed attention* strategies than *person knowledge, mental translation, and planning and evaluation* during listening process. In other word, both strategies were used more commonly than other three strategies. Therefore, the results also impacted significant for learners' listening comprehension (Altuwairesh, 2016).

Next finding was referring to the research conducted for Taiwanese university students. It focused on developing metacognitive strategies for listening comprehension via a task-based language teaching approach. The finding showed between control group and experimental group equally used five metacognitive factors during listening process and there was no statistically significant difference between both groups. However, the task-based language teaching design in the experimental group classes had a much more positive effect on

developing the intermediate Chinese EFL learners' metacognitive strategies for listening comprehension (Chou, 2017).

The fourth research finding went to less-proficient Thai EFL learners' L2 listening metacognition development that was assessed through five factors of listening metacognitive awareness. The result proved that three-related factors; *problem solving, planning and evaluation, and directed attention* had significant gains for intervention group of learners' metacognition development, while in control group, there was only *planning and evaluation* found to be significant gain. However, less-proficient Thai learners used all factors of metacognitive strategies gradually and developed better knowledge about how to listen, and listening for pleasure activities can be assigned to motivate them to take control of their learning both in and outside the classroom (Tanewong, 2019).

Then, the research on the relationship between Iranian female dentistry students' metacognitive awareness and listening performance. The result exposed a weak positive relationship between learners' metacognitive awareness scores and listening performance. However, during listening process activities, learners still used more *problem solving, directed attention and planning evaluation* than other factors to help them improve listening performance (Ismail Baniadam et al., 2019).

Next research finding focused on metacognitive strategies use and awareness by Iranian learners with low working memory capacity in learning English. The result indicated *directed attention, mental translation, and person knowledge* were used more than another factor. It can be said that learners' metacognitive awareness was functioned significantly higher use shown by the experimental group. This result affected a moderate effect size in terms of listening performance (Shih & Huang, 2020).

Uniquely finding, it was found the comparative study on metacognitive strategies use between L1 and L2 listeners. The research participants came from US students in using metacognitive strategies before, during, and after listening process. The results showed that there were 13 probes from 21 probes which were parts of 3 factors of the MALQ (*problem-solving, directed attention, planning-evaluation*) were reflected in L1 listeners. Whereas, *person knowledge* probes explicitly set up the comparison of listening in two languages and three probes which were related to *mental translation* represented one language to another. Meanwhile, for L2 listeners, they used all probes (21 items) of metacognitive strategies use before, during, and after listening process. However, the results displayed numerous implications for L1 and L2; how to teach listening, future research, and curriculum development (Janusik & Varner, 2020).

Differently, there was a research that referred to metacognitive strategy use for an EFL flipped classroom students in Taiwan university. The researchers utilized different terms to measure learners' metacognitive strategies use. Those terms were categorized as *planning, self-monitoring, self-evaluation, directed attention, and selective attention*. Students employed five major metacognitive strategies in the flipped classroom context for both in-class and out-of-class learning activities. The results indicated that there were two factors why students chose the strategies during learning process. They were the expected learning outcome and peer learning. It means that the use of *planning, self-monitoring, self-evaluation, and directed attention* strategies had impact on learners' learning outcome especially for listening comprehension. Then, another factor, peer learning, prompted the use of *planning, self-*

monitoring, and self-evaluation strategies inside and outside the class. That is, in order to be successfully engaged in pair/group discussions or complete tasks/presentations, the students knew they had to be prepared for the class (Bozorgian et al., 2020).

The ninth research referred to the application of metacognitive strategies in computer-assisted listening comprehension class at Vietnamese English major in Van Lang University. The experimental group learners did listening comprehension class activities for ten weeks by regulating their metacognitive strategies use and assisted by computer assisted language learning (CALL) program. A lot of students in the experimental group represented a high awareness of *planning and self-evaluation*, leading to the necessary strategies to help learners prepare themselves for the upcoming and self-evaluate their effort of listening. About the aspect of *directed attention*, investigated listeners performed certain effective strategies to help them listen more comprehensively. *Mental translation* was one of the most salient aspects that learners of English should pay attention to. After the treatment, most participants underlined the consciousness of *problem-solving* strategies. They were able to self-manipulate their response to tasks whenever they realized some faults made. The aspect of *person knowledge* revealed the students' awareness of listening comprehension. This is reflected on three issues, how learners perceived listening comprehension, their anxiety when listening to tasks, and one's belief in his or her capacity of listening comprehension. Finally, the findings showed that metacognitive strategy instruction positively affects students' listening comprehension competence (LU, 2021).

The last but not least, the research which was conducted to the relationship between L2 listening and metacognitive awareness across listening tests for students of English-as-a-foreign-language (at different cohorts; 2019 and 2020) at a Japanese University. The result showed that *person knowledge, mental translation, and directed attention* were related to listening comprehension in both listening tests (TOEFL ITP and TOEFL iBT). However, *problem solving* was not related in either listening test. Further, *planning and evaluation* strategies were related to listening comprehension only in the TOEFL ITP. Also, there was a comparison between the TOEFL ITP results of the 2019 and 2020 cohorts showed that only *person knowledge* was related to listening comprehension across the two cohorts, indicating a strong generalizability of *person knowledge* and weak generalizability of the remaining metacognitive strategies across learners. As for the effects of listening tests, three aspects of metacognitive awareness (i.e., *person knowledge*, [the avoidance of] *mental translation*, and *directed attention*) were related to listening comprehension in both tests. *Problem solving* was not related in either test. Regarding the effects of learner samples, *person knowledge* was consistently related to listening comprehension, suggesting a strong generalizability of the findings across learners. In contrast, other aspects of metacognitive awareness were inconsistently related to listening comprehension. This suggested their weak generalizability. Consequently, the relationship between L2 listening comprehension and metacognitive awareness is moderately and highly affected by (a) listening comprehension tests and (b) learner samples, respectively (In'nami & Koizumi, 2021). Many of the studies that examined the relationship between language learning and achievement, in particular, achievement in listening comprehension, have indicated that good language learners are the ones who are better off with the use of metacognitive strategies (planning, monitoring, and evaluation) (Barjesteh & Ghasemina, 2019).

Further discussion focused on how important the metacognitive strategies had in order to help learners achieve their listening learning outcomes. Theoretically, metacognitive strategies include in *self-regulated* learning theory. This learning theory explores how self-regulation is roughly equivalent to metacognitive awareness in which learners (individuals) monitor, direct, and regulate their actions in the processes for goals attainment. It can be explained that learners self-regulatory are activated during learning process by monitoring, directing, and regulating metacognitive components; metacognitive knowledge, experience, and strategies (Schunk, D. H, 2012). Therefore, various results indicated that the facts of metacognitive strategies use occurs differentll based on learners' self-regulation activation while learning. The good manageable sel-reguration in learning can affect learning target achievement.

Thus, the metacognitive strategies or metacognitive instruction is useful in terms of improving listening proficiency and raising students' awareness of their language learning (Ismail Baniadam et al., 2019). Also, Goh's ideas describe how beneficial effects of metacognitive strategies instruction toward listening competence: to effect in both process and product of the learning, to make learners keep information easily (Goh, 2010), and help learners to deal with challenging tasks better (Fahim & Fakhri, 2014).

Nevertheless, using the MALQ can enable and empower L2 learners to become self-regulated listeners who can better capitalize on the aural input that they receive. By increasing their awareness of the listening process, students can learn how to become better listeners, which, ultimately, will enable them to learn/acquire another language more quickly and more efficiently (Vandergrift et al., 2006).

Overall, these studies show that metacognition is an important asset for second language learners. If learners' metacognitive awareness is increased through instruction as early as possible, learners' listening comprehension as well as their overall language proficiency will be positively affected

Conclusion

The explorations of ten reviewed articles about learners' metacognitive strategies use and its impact on listening comprehension have exposed variously different findings at each research subject target. The findings of those studies can be regarded as crucial contribution to support the use and training of metacognitive strategies in language learning during listening comprehension process. Metacognitive awareness has helped students to find opportunities in order to increase their listening performance. Through one of listening measurements, the metacognitive awareness listening questionnaires (MALQ) suggested by Vandergrift (2006) have helped learners to measure or assess their perceptions about listening comprehension competence. Therefore, there is a need for greater emphasis on how to listen and even how to engage learners directly in improving their listening comprehension through metacognitive strategy instruction so that learners can manage their own learning and acquire self-control and self-regulation in the process of listening. Indeed, the use of metacognitive strategies could help learners identify their strengths, weaknesses, goals, and actions in relation to listening comprehension

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