

# Understanding EFL International Students' Academic Listening Strategies: A Literature Review

**Ahlam Ali Salim Halali** 

Faculty of Educational Studies, Universiti Putra Malaysia, 43400, UPM  
Serdang, Selangor, Malaysia  
Faculty of Languages, Department of English, Sebha University, 18758,  
Sebha State, Libya

**Lilliati Ismail** 

Faculty of Educational Studies, Universiti Putra Malaysia, 43400, UPM  
Serdang, Selangor, Malaysia

**Arshad Abd Samad** 

Taylor's University, Malaysia, 1, Lrg DK Senza, 47500 Subang Jaya,  
Selangor, Malaysia

**Abu Bakar Razali** 

Faculty of Educational Studies, Universiti Putra Malaysia, 43400, UPM  
Serdang, Selangor, Malaysia

**Nooreen Noordin** 

Faculty of Educational Studies, Universiti Putra Malaysia, 43400, UPM  
Serdang, Selangor, Malaysia

**Abstract.** Academic listening and interaction in international educational settings are essential for academic success. International students' language proficiency and prior practice in their home countries either facilitate or impede their academic success. Thus, internationalization has become a desirable trend among learners to further their studies in overseas institutions where English is the medium of instruction. Overseas education allows international students to gain new knowledge and improve their academic skills in various academic fields. However, a lack of English communicative competence and comprehension impedes learners' academic and communicative success. As a result, international students look for strategies to help them overcome their academic comprehension challenges. This paper explores and better explains EFL international students' academic listening challenges and strategies to motivate stakeholders to support international students in furthering their studies overseas. Thus, this paper reviews related literature on academic listening strategies through the traditional literature review

process. Therefore, this paper explores and better explains EFL international students' academic listening challenges and strategies to motivate stakeholders to support international students in furthering their studies overseas. The discussion of findings reveals that international students face challenges with understanding others in academic discourse. These challenges are due to their lack of prior English listening practice in their home countries. Thus, international students rely on strategies to overcome communication challenges and improve academic listening comprehension skills (i.e., memory, cognitive, and social strategies). The findings should encourage administrators of international institutions, researchers, and other stakeholders to revamp pre-sessional English language programs and conduct more research on international students' language learning experiences to help them succeed in their overseas study programs.

**Keywords:** international students; communicative competence; academic listening challenges; academic listening strategies

## 1. Introduction

This paper reviews the foundations of research investigating the relations among identified language learning challenges to explain how language learning strategies are formulated. More specifically, the discussion concentrates on international students' academic language performance issues. Listening is a passive activity that depends on a learner's development of knowledge, mental processing abilities, and strategies for receiving and comprehending the speech delivered by others. Thus, listening skills are essential to developing communication competence, which depends on practical experience using the target language. However, for EFL learners, there is often a learning deficit in target language use and practice, which explains their low levels of listening comprehension of the new language. This matter is particularly problematic for international students from EFL learning backgrounds exposed to content in a foreign language with unfamiliar terminology specific to their fields of study. International students must therefore utilize various types of knowledge relevant to the academic contexts they encounter to comprehend what they hear, which involves highly complex cognitive and behavioural processes (Juan & Zainol-Abidin, 2013).

Most international students find comprehension more difficult when listening to English rather than reading it, which may be partially explained by the fundamental differences between written and spoken language and how people listen and read. The listening process mainly involves the retrieval of information from long-term memory. Thus, learners' listening challenges could be negatively affected by factors such as their levels of linguistic competence and knowledge acquired through education as well as other affective factors such as personality characteristics and the ambiguities of tolerance, anxiety, and attitude, which can inhibit learners from successful listening comprehension (Brown, 2005). Therefore, these problems represent significant obstacles to EFL international students studying at universities where English is the medium of instruction and

communication with others in academic settings (Haduck, 2018; Stillwell, 2018; Tsai, 2017).

Several studies found that international students faced challenges in academic listening concerning connecting and understanding elements of content in lectures and other communicative activities, which extended to note-taking and understanding academic speech in interactions with others (Manjet, 2019; Stillwell, 2018; Tsai, 2017; Wolf & Phung, 2019). For example, Wolf and Phung (2019) found that international students experienced academic listening challenges inside and outside classroom settings. The research further found that international students' problems and challenges were attributable to their insufficient prior English learning experience. One reason for the difficulty in listening was "they mostly listened to textbook recordings and had little opportunity to listen to native speakers while learning English" (Wolf & Phung, 2019, p. 217). A similar study by Juan and Zainol-Abidin (2013) identified three stages of the listening process related to the academic listening challenges of international students, classified as "pre-listening, while-listening, and post-listening" (p. 395).

Liu and Kinginger (2021) and Shinagawa et al. (2022) found difficulties were encountered by students during the pre-, while-, and post-listening stages of the listening process, which hindered them when performing basic academic activities (Manjet, 2016). Besides, English academic language proficiency deficiencies may prevent students from fully comprehending and participating in English academic discourse. As academic language is challenging to acquire through short-term training (O'Malley & Chamot, 1990; Oxford, 1990), EFL international students may need to rely on strategies to aid them in overcoming their academic language challenges.

Cultural and individual differences between English users can hinder or enable second language learning and acquisition. Thus, in the transition from EFL to ESL language learning pedagogy, language learning strategies are useful in improving communicative competence. Due to cognitive differences, the implementation of these strategies varies depending on whether the learner is a child or an adult. Researchers only began to recognize the importance of adults' use of EFL and ESL strategies and the development of taxonomies in the mid-1970s (O'Malley & Chamot, 1990; Oxford, 1992; Rubin, 1981). Since then, learning strategies have drawn considerable attention from many researchers and other authors.

According to Oxford (1990), "language learning strategies are specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferrable to a new situation" (p. 8). These strategies were described by Rubin (1975) as techniques or tools that are useful for enhancing learning processes involved in acquiring knowledge specific to learners' needs in specific situations. Therefore, language learning strategies can be used to encourage learners to take advantage of opportunities to enhance and increase their interactions in academic contexts and thus improve their communicative competence.

## 2. Literature Review Analysis

### 2.1. Listening Strategies

Language strategies, “specific actions, behaviours, steps, or techniques that students use to improve their progress in developing the new language skills” Oxford (1990, p. 157) can facilitate the internalization, storage, retrieval, or the use of new language. O’Malley and Chamot (1991) and Oxford (1992) have enhanced and extended these strategies to include sociolinguistic competence and other linguistic competencies in language learning strategies. Recently, learning strategies have been defined as “an individual’s activities engagement in the learning process within a particular situated setting to accomplish their proximal goals (e.g., to learn a language for immediate gain) or/and ultimate ones (e.g., master language for academic/professional/national advancement)” (Hajar, 2019, p. 33).

Language learning strategies have been identified and classified by several authors. For example, O’Malley and Chamot (1990) organized language learning strategies according to cognitive, metacognitive, and social/affective strategy classifications, while Oxford (1990) classified them as cognitive, memory-related, compensatory, metacognitive, affective, and social strategies, which are the categories used in the present research. Ultimately, language learning strategies were classified according to two main complementary classes with six subcategories, as shown in Table 1.

**Table 1: Language learning strategies**

Type of Strategy	Function	Related Example	
Direct Strategies	Cognitive strategies	Enable “manipulation or transformation of the target language by the learner”	Practicing, receiving, sending messages, analysing and reasoning, and creating a structure for input and output
	Memory-related strategies	“Enable learners to restore verbal material and then retrieve it when needed for communication” and “moving information from ‘fact level’ to the ‘skill level’”	Creating mental linkages, applying images and sounds, reviewing well, employing actions
	Compensatory strategies	Enable learners to use the new language for either comprehension or production despite the limitation in knowledge; intended to make up for an inadequate repertoire of grammar and especially, vocabulary	Guessing (e.g., inferencing) intelligently in listening, reading, and overcoming limitations in speaking and writing
Indirect Strategies	Metacognitive strategies	Enable learners to perform actions that go beyond purely cognitive devices, and which provide a way for learners to coordinate their learning process	Centring learners’ own learning, arranging and planning learners’ own learning, and process

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		evaluating their own learning
Affective strategies	Enable learners to gain control over emotions, attitudes, motivation, and values	Self-encouragement: lowering anxiety, encouraging own self, taking own emotional temperature
Social strategies	Enable learners' communication that occurs between and among people	Asking questions, cooperating with others, and empathizing with others

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Source: Oxford (1990)

The direct strategies class is for strategies that deal directly with a new language, which entails mental processing, including cognitive, memory-related, and compensatory strategies. The indirect strategies are meant for general learning management and provide “indirect support for language learning through focusing, planning, evaluating, seeking opportunities, controlling anxiety, increasing cooperation and empathy and other means” (Lavasani & Faryadres, 2011, p. 192). The indirect strategies include metacognitive, affective, and social strategies (O’Malley & Chamot, 1990; Oxford, 1990; Rubin, 1975).

Because English language listening skills cannot be effectively learned in a short time, international students tend to adopt or develop strategies to assist their language learning. These strategies assist them in mitigating their language use challenges so that they can actively participate in academic discourse and improve their knowledge acquisition and academic performance in their fields of study. For instance, several related studies conducted in the UK (Dodge, 2016; Khalifa, 2010; Trenkic & Warmington, 2018) focused on international students in higher education from various perspectives. Dodge (2016) and Trenkic and Warmington (2019) found that even though international students had met the official English language proficiency requirements, they could not effectively participate in academic discussions or contribute to their fields of study as they were insufficiently proficient in academic listening.

International students’ perspectives on academic language strategies are divided into two categories. Some students tend to concentrate their efforts on applying strategies that involve processes to integrate and control information, such as metacognitive strategies for regulating self-monitoring and cognitive self-control when engaging in activities (Abdullah & Mahfoodh, 2019), while other international students tend to rely on memorization strategies (Lee et al., 2015) in response to factors such as anxiety, insufficient self-confidence, and the inclination to prefer autonomous learning.

The quantitative and qualitative results of research conducted by Lee et al. (2015) indicated high usage of cognitive strategies for academic listening, while the qualitative results indicated that “memorization was much higher than the survey

results ( $M = 2.37$ ,  $SD = .64$ )" (p. 922). These results agree with those of Oxford (1989) and Oxford and Ehrman (1992) concerning the influences of factors on English language learners' implementation of learning strategies. These listening strategies are associated with socializing factors and thus social and affective strategies. Their usage for developing academic listening depends on the extent to which learners can socialize in new academic settings and cultures. For example, Alghail and Mahfoodh (2016) found that international students relied on social strategies such as "joining English proficiency courses and attending seminars, workshops, and conferences" (p. 301) on their own initiative.

Wakamoto and Rose (2021) found that international students employed strategies of various types and varying degrees of usage associated with several factors. For instance, students studying in native English-speaking countries encounter different communication problems from those studying in ESL settings, and opportunities to practice listening in these two linguistic contexts also differ. Therefore, the English language learning strategies students employ vary in accordance with these factors. This finding is supported by Anthony and Ganesen's (2012) research, which compared the language learning strategies of local and international students. They also found that "the international students used the language learning strategies more frequently than the local students in the categories of memory, cognitive, metacognitive, and affective strategy" (p. 60). This finding supports the findings of researchers reporting contrasts in the types of language learning strategies used by international students from different countries and academic learning contexts.

The important roles of language learning strategies in the learning process and their effects on the listening challenges and strategies of 117 Chinese international students were investigated by Fu et al. (2018) using a mixed-method research design. The study found that although "participation and English proficiency level predicted direct strategies like memory, cognitive and compensatory strategies, participation was identified as the sole predictor of indirect strategies, like metacognitive, affective and social strategies" (p. 1891). As a result of the anxiousness and loneliness experienced by international students in new foreign educational settings, students rely on memory-related, cognitive, and compensatory strategies.

These strategies allow more time for self-improvement compared to social strategies requiring communication with others. Furthermore, the effectiveness of social strategies is questionable due to the students' lack of cross-cultural language training to prepare them for new international academic settings. The classifications of language learning strategies relevant to the present study are presented in detail in the following sections, which correspond to the related literature.

Listening depends on the cognitive processes of encoding and decoding meaning for storing and retrieving information and metacognitive processes involving meaningful practice. Various strategies are used to enhance attention and memory by relating social and cultural contexts with short- and long-term

memory. Listening comprehension is thus viewed as a receptive, “active process in which individuals focus on selected aspects of aural input, construct meaning from passages, and relate what they hear to existing knowledge” (O’Malley et al., 1989, p. 418). As a result, learners could adopt learning strategies to improve their listening comprehension abilities. Furthermore, Saraswaty (2018) observed that students “should have much more exposure to a variety of listening” (p. 147), which could be facilitated through the use of various listening strategies to assist in listening comprehension processes to overcome communication challenges.

The following subsections discuss related literature on the two major direct and indirect listening strategies classes. The direct strategies include cognitive, memory-related, and compensatory strategies, while the indirect listening strategies comprise metacognitive, affective, and social strategies (Oxford, 1990).

As mentioned above, direct listening strategies involve the cognitive processing of language to store and retrieve information. Based on related literature, the three direct strategy types relevant to this study are discussed in the subsections below.

#### *2.1.1. Cognitive Listening Strategies*

Cognitive listening strategies “involve active manipulation of the learning task” (O’Malley & Chamot, 1990, p. 423). These strategies include practising, receiving and sending messages, and analysing and reasoning to improve listening comprehension. Practising consists of the repetition and practice of sounds, recognition and use of formulae and patterns, and naturalistic practice Oxford (1990). These practising strategies are useful in the review of academic content to familiarise students with the subject matter. Receiving and sending messages involves understanding ideas quickly, thus enabling learners to precisely identify and concentrate on what they need to understand while disregarding non-essential information. These processes may rely on resources available online, or they could be in the form of offline resources such as electronic devices to obtain the meanings of utterances or to support comprehension of subject matter (Oxford, 1990; Yerken & Nguyen Luu, 2022).

The use of technology has become the most commonly used strategy for assisting learners in preparing for classwork and discussions. This approach can improve cognitive abilities in understanding meanings to increase comprehensible input and improve comprehension by listening to the pronunciation of academic terms (Oxford, 1990). Analysing and reasoning strategies involve deductive reasoning to arrive at assumptions about the meanings of what learners have heard by first understanding the overall idea of the content and then narrowing it to more specific ideas. Thus, students tend to predict meanings from academic content by focusing their attention on familiar words or expressions to reach a general understanding of the content. Oxford (1990) explained that analysing expressions involves relying on cognitive skills to mentally break down phrases into their components. This could be based on notes taken in context for later analysis to allow more time for processing the information.

The analysis and reasoning strategy components are contrastive analysis, translating, and transferring. Contrastive analysis involves phonological, lexical, and syntactic analyses to determine and connect the relations between parts of the speech content of discussions (Oxford, 1990; Shinagawa et al., 2022). This is usually implemented through cognitive processing while listening to the speech of others in context to facilitate the listener's ability to follow discussion content. Translation is an effective strategy for learners with low levels of communicative competence in English. This strategy relies on the learner's native language as a basis for understanding English discussions by focusing on familiar words and then moving on to new words and expressions. This is similar to transferring, which is a strategy involving the application of previously acquired linguistic knowledge and understanding of the learner's native language (Oxford, 1990). For instance, Arabic and English have similarities and differences that can be useful to support English language comprehension. An example of this is that the sentence position of adjectives in Arabic is the opposite of English. Therefore, with this knowledge, native Arabic speakers' understanding of English could be improved.

Finally, the last categories of cognitive listening strategies are taking notes, summarising, and highlighting linguistic input and output to support learners' listening comprehension. According to Oxford (1990), note-taking "is a very important strategy for listening" (p. 86). Note-taking is an advanced tool for learners with a high level of proficiency, whose listening is supported by their prior learning experience (Kim, 2006). Moreover, note-taking is essential for aiding the transmission of information into long-term memory. For example, McKnight (2004) reported "learning from academic lectures as deriving from individual listening and note-taking processes" (p. 352).

Thus, international students' learning has been found to improve as a result of improved listening comprehension gained through taking notes while listening to academic discourse. Summarising is another type of cognitive listening strategy that involves top-down cognitive processing. Learners can utilize this strategy with low levels of language proficiency to facilitate their recognition of topics in received listening content. At the same time, advanced learners may also use the method to summarise the target language (Juan & Zainol-Abidin, 2013). The last component of these strategies is highlighting, which has been reported by Pourfarhad et al. (2012) and Tuengkun (2014) as improving the listening comprehension abilities of international students. The strategy is interrelated with note-taking and summarising as it involves annotating notes and taking brief supplementary notes on received listening content such as keywords.

Previous research on learning strategies conducted by Tuengkun (2014) among 279 Asian international students found that cognitive strategies were used more than metacognitive and socio-effective strategies to improve English language comprehension due to the students' prior lack of English listening practice and exposure in naturalistic academic settings. Furthermore, a study conducted by Serraj and Noordin (2013) among Iranian students found that they relied on audio recording as a strategy to improve listening comprehension skills. This allowed



the students to spend more time listening to speech to understand the academic content more deeply.

### 2.1.2 *Memory-Related Listening Strategies*

Learners employ a variety of memory-related cognitive processes to improve their listening comprehension. Memory-related listening strategies involve creating mental linkages, applying sounds and images, reviewing acquired knowledge, performing actions, and developing strategies to enhance the retrieval of information from short- and long-term memory (O'Malley et al., 1989; Oxford, 1990).

According to Oxford (1990), the creation of mental linkages consists of grouping new words and other linguistic information into meaningful classifications or associations with contexts. This may involve associating new information with familiar concepts already stored in the memory as part of a learner's prior knowledge (O'Malley & Chamot, 1990). Implementation of this type of strategy could improve learners' listening comprehension by enabling them to remember information more easily and quickly, and associating new words with contexts allows the parsing of new words learners hear to apply them in meaningful contexts.

Strategies that rely on associating images and sounds involve forming mental images of what a learner has heard. Applying these associated images and sounds in the learning process helps learners commit new expressions they hear to memory, thus making the imagery of concrete value in facilitating learning. This may extend to learners creating associations between imagery and concepts such as parts of speech by using keywords in combination with images or sounds to remember what they hear or repeating sounds to memorize what is heard through audio repetition to facilitate the recall of information from memory (O'Malley & Chamot, 1990).

Reviewing what has been heard is an essential strategy for improving information recall and understanding meaning. Reviewing would usually involve repeated listening to increase students' familiarity with academic content. As discussed above, this could involve contextualising words to increase learners' listening comprehension, resulting in improved communicative competence (Oxford, 1990). Memory-related strategies can also involve employing actions, which are also referred to as total physical responses. This was explained by Oxford (1990) as being implemented when "students listen to a command and then physically act it out" (p. 66). Oxford (1990) illustrated further about learners physically acting lexical items out with the example of a learner teaching "himself to get a feeling of physical heat whenever he hears a new feminine noun" (p. 66). A listener could also listen carefully to what others were saying to act it out later to enable remembering and understanding the meaning of utterances. This could improve comprehensible input when similar utterances were used again in other circumstances.

Several studies have investigated memory-related strategies, including one by Juan and Zainol-Abidin (2013) on the pre-and post-listening challenges faced by Chinese students enrolled in a Malaysian university. These problems were found to result from the students' inadequate prior knowledge of vocabulary, which led to the research informants' heavy reliance on stories and images to improve their listening comprehension. The researcher mentioned, "Pictures could be the materials to enhance students' understanding of the learning materials as the students actively ask questions to get more information from the learning materials" (p. 391). Thus, the students tended to predict the meanings of unfamiliar words by linking them to pictures. Implementing this strategy motivated the students to become more attentive and curious about understanding listening materials, which raised the students' morale regarding effective learning of the subject matter.

Tuengkun (2014) study investigated the listening strategies employed by 279 Asian international students who faced listening comprehension challenges resulting from their inadequate prior knowledge and practice of English. The research found that the students focused on certain keywords about familiar words to form linkages between their memory ideas and the content of active discussions. The memory-related listening strategy was more frequently used compared to others, such as metacognitive and socio-affective listening strategies in improving their listening comprehension and communicative competence.

### *2.1.3. Compensatory Listening Strategies*

Compensatory listening strategies are utilized to overcome the effects of knowledge-related limitations on listening skills. These strategies are essential for aiding learners who sometimes do not know expressions, encounter ambiguous meanings, or fail to hear utterances used in academic discourse. In such cases, as Rubin (1975) stated, "The good language learner may be a good guesser" (p. 43). Clues aid in identifying familiar, understood words and other expressions from content and inferring the meaning of the rest Rubin (1975). This view of compensatory strategies is supported by a study conducted among Chinese students by Tsai (2017). The findings reported that compensatory strategies were beneficial to students in improving their listening comprehension.

Furthermore, the findings of a study by Liu (2011) substantiated the role of compensatory strategies in enhancing the learning of listening skills, explaining they are "built up by practicing with compensatory skills" (p. 26). Therefore, these strategies rely on intelligent guessing when listening through recognizing the use of linguistic or other clues. The linguistic clues are recognized based on previous acquired linguistic knowledge of the target language, such as syntax or morphology. Other clues may be unrelated or indirectly related to linguistics, such as social relations or situations or any other information from the immediate environment or prior knowledge and experience that might aid in guessing the meaning of the subject matter. Indirect listening strategies may be combined with the strategies discussed above but provide indirect support for language learning. These strategies are comprised of metacognitive, affective, and social listening

strategies, which are discussed in the following subsections based on the review of related literature.

#### 2.1.4. *Metacognitive Listening Strategies*

According to O'Malley and Chamot (1990), "metacognitive strategies are higher-order executive skills" (p. 44), which Oxford (1990) describes as involving centring, arranging, planning, and evaluating learning.

Centring learning is accomplished by reviewing newly acquired knowledge or learning materials and linking them with prior knowledge to review basic principles and other aspects of content in preparation for upcoming engagement in academic discourse. This is intended to lessen confusion and the possibility of becoming overwhelmed while processing new information. Moreover, with this strategy, language is learned with prior knowledge, allowing learners to focus their attention, thus enabling them to have directed and selective attention. (Humphreys, 2022; Oxford, 1990).

Directed attention assists learners in understanding a context's overall meaning, while selective attention focuses on particular details. Oxford (1990) noted that both of these modes of attention are important in listening. O'Malley and Chamot (1990) asserted that learners need interaction to facilitate understanding while paying attention. Another strategy is to delay speech production to focus attention on listening, automatically and dynamically, depending on a student's language communication skills (O'Malley et al., 1989; Oxford, 1990).

Language learning strategies involving arranging and planning assist learners in developing and improving listening abilities. These elements facilitate the discovery of what is needed in language learning. Thus, organizing learning materials involves considering their usefulness in the academic setting and facilitates the process of understanding when reviewing the organized content. Another strategy is setting achievement goals needed to improve listening comprehension. (Liu & Kinginger, 2021; O'Malley et al., 1989; Oxford, 1990).

Another strategy is identifying the purposes of language tasks, which requires identifying the topics of academic discourse to facilitate understanding of the subject matter. This strategy is supported by seeking practice opportunities whenever possible to become accustomed to listening to variation in speech (e.g., accents). Evaluating learning, as reported by Shinagawa et al. (2022), is important in relation to the other strategies and primarily involves self-monitoring and self-evaluation. Self-monitoring is the learners' noticing how they understand others when communicating with them while keeping track of any failures in understanding others' speech. Self-evaluation involves learners determining the extent to which they have improved their listening skills concerning the problems they have faced when communicating with others.

Bidabadi and Yamat (2011) investigated metacognitive strategies among 92 Iranian freshmen. Their research found that metacognitive strategies significantly and positively correlated with the students' listening proficiency and were used more frequently and actively than cognitive and socio-affective listening

strategies. Similarly, in Kazemi and Kiamarsi's (2017) research conducted among 60 students in language institutes in Yasouj, Iran, participants reported they relied more frequently on metacognitive strategies than cognitive and socio-affective strategies. Moreover, Liu's (2014) research among 80 participants showed positive effects of metacognitive strategies on improving listening, which was instrumental in cultivating correct language learning beliefs among learners. However, in contrast to the above studies, Tuengkun's (2014) study among 279 Asian international students found that metacognitive strategies were the least used by study participants in comparison to other strategies for improving their English language listening abilities.

#### *2.1.5 Affective Listening Strategies*

Affective listening is assisted by processes used to achieve targeted goals, including the reduction of anxiety, self-encouragement, and tracking emotional temperature. Reducing anxiety involves progressive relaxation and deep breathing, which would help to reduce anxiety throughout the learning process. Self-encouragement, which supports increasing motivation, has received considerable attention in previous research on Gardner and Lambert's (1959) instrumental and integrative classifications. However, language learning strategies also rely on internal and external motivation as affective factors in encouraging learning to improve listening comprehension. These types of motivation focus on making positive statements, taking risks wisely, and rewarding oneself. Taking emotional temperature involves self-assessment of one's feelings, motivation, and attitudes. The learner uses strategies to monitor and control these emotional factors by paying attention to their emotional responses, such as anxiety or fear, during interaction with others. This may be accomplished with the help of structured records such as checklists or diaries. Otherwise, learners may express their feelings to someone who could support or encourage their language development.

#### *2.1.6 Social Listening Strategies*

Social listening strategies are communication and engagement processes such as asking questions, cooperating, and empathizing with others. Asking questions involves two question types: asking for clarification and asking for verification. Asking for clarification includes asking a speaker to speak more slowly, paraphrase or repeat what was said, or explain the meaning of an utterance. Asking for verification is usually about learners' need to confirm the accuracy of their understanding of speech content and may include asking for corrections. (O'Malley et al., 1989; Rubin, 1975; Shinagawa et al., 2022).

For cooperating with others, the learner must seek opportunities for interaction with peers or professionals in academic settings to improve their listening comprehension (Rubin, 1975). Empathizing with others requires the development of cultural awareness and an understanding and awareness of the thoughts and feelings of others. In theory, this understanding or empathy would encourage learners to listen more attentively and gain a deeper understanding of the concepts shared by others (Rubin, 1975).

Socio-effective strategies were investigated in research by Tuengkun (2014) among 279 Asian international students, reporting that these strategies were the least used among participants in comparison with other strategies for improving English listening skills. However, a study conducted by Lang (2018) found that socializing strategies involving attentive listening were important to improving international students' listening skills to understand US English speakers. The importance of social listening strategies is also supported by Ngo's (2019) finding that from a socio-cultural perspective, social strategies improved listening skills.

### 3. Discussion

International students reported relying on several academic listening strategies to overcome their associated academic communication challenges, which is considered an essential method of improving and supporting the language processing abilities of learners (e.g., Halali et al., 2021; O'Malley & Chamot, 1990; Rubin, 1981; Ungureanu & Georgescu, 2012).

The findings on international students' implementation of communication strategies to overcome their communication challenges suggest that international students from various educational backgrounds have not gained adequate academic English knowledge as a result of English being treated as a foreign language and rarely used (Liu & Kinginger, 2021; Shinagawa et al., 2022). These challenges may arise from a greater need for communicative competence in academic listening as the students would be expected to engage in conversation and express themselves articulately.

According to Hymes (1976), communicative competence relies on tacit knowledge and the ability to use it. This relates to Piaget's (1936) theory on cognitive development, which explains learning as knowledge that is stored in memory. However, international students often lack the needed store of useful knowledge due to insufficient prior learning and practice in English. Therefore, academic listening strategies have been found to support the improvement of learners' listening comprehension abilities and reduce their L2-related anxiety (Fathi et al., 2020). Among the six sub-constructs of listening strategies considered in this review, international students relied more heavily on metacognitive strategies. In order of usage levels, these were followed by cognitive, compensatory, affective, memory-related, and social listening strategies reported by several studies (e.g., Halali et al., 2023, Kazemi & Kiamarsi, 2017; Saraswaty, 2018; Tuengkun, 2014; Tsai, 2017). For example, Tuengkun (2014) found that Asian international students studying in the US relied heavily on cognitive listening strategies for understanding academic discourse, while Tsai (2017) found that note-taking was a central component of listening strategies that improved academic listening comprehension.

The finding that metacognitive listening strategies were the most used by internationals is consistent with Kazemi and Kiamarsi's (2017) finding that these strategies were the most frequently used for improving listening comprehension. These strategies enhance paying more attention to others to improve understanding of academic discussions and taking advantage of opportunities to

listen to others in academic settings. These strategies, according to Shinagawa et al. (2022), indicate that internationals are autonomous learners who strive to improve cognitive skills to facilitate academic communication and improve learning. The discussion also indicates the students have self-awareness of their learning, which was also reported in previous research (Maftoon & Alamdari, 2020; Zarrabi, 2020) on metacognitive strategies. Fathi et al. (2020) reported that employing this type of listening strategy improved listening comprehension while reducing anxiety.

Fathi et al. (2020) reported that international students preferred cognitive listening strategies, which focus primarily on watching academic content on TV and YouTube videos followed by summarisation and note-taking. These strategies made the international students feel comfortable as they could perform the activities they chose and improve comprehension of content through repetitive listening with reduced anxiety. The strategies were complemented by note-taking with translation into the students' L1 to enhance understanding and improve abilities to store and retrieve information, which was also found effective by Juan and Zainol-Abidin (2013). These findings are also consistent with those of Yulisa (2018), who reported cognitive listening strategies were the second most implemented strategy by learners and were significantly correlated with improved listening comprehension. Compensatory listening strategies were the third most used strategies reported. These strategies involved guessing meaning from academic discourse and relating that to familiar content and the current academic context.

Thus, compensatory strategies concentrating on prior preparation along with guessing speech content facilitated linking prior input with new input by decreasing the response time needed in the processing of linguistic meaning, which was also reported in Tsai's (2017) findings on international students' reliance on compensatory listening strategies to overcome vocabulary deficiencies and improve listening skills. The study further supports the finding on the role of note-taking in improving listening comprehension. The present study's findings are consistent with Hong-Nam and Leavell's (2006) findings, which found compensatory strategies were the third most used strategy for improving listening comprehension; however, Mohammadipour (2018) found these strategies were the most frequently used among study participants.

Affective listening strategies are centred on the internal motivations of learning and the control of emotions to focus attention on important aspects of improving communicative competence and eventually achieving mastery of the target language through acquiring comprehensible input. Thus, in relation to their experiences with these strategies, the internationals who used them reported their attempts at calming themselves down and evaluating their weaknesses to improve their listening comprehension. In the qualitative responses, the informants recognized the importance of being autonomous adult learners who were expected to know how to manage their problems. Thus, effective listening strategies were ultimately found to enhance learners' self-confidence by encouraging self-reliance and self-motivation. However, these were among the

least used types of listening strategies, which agrees with several other studies (Alhaysony, 2017; Fu et al., 2018; Kazemi & Kiamarsi, 2017), which found metacognitive and cognitive strategies were preferred over affective strategies.

Memory-related listening strategies were reported as the second to last used by the international students, which is consistent with Gilakjani and Sabouri's (2016) finding that learners used "memory strategies most frequently and social strategies least frequently" (p. 125). These strategies are related to enhancing the restoration and retrieval of information with emphasis on related aspects of linguistic form such as grammar while engaged in academic discourse as an opportunity to improve understanding of the content of the communication. The functionality of these strategies highlighted the role of memory-related strategies in allowing international students to find their linguistic performance comfort zone related to the processes of storing and retrieving information between short- and long-term memory, which supported their control over anxiety resulting from the inability to understand academic discourse in English.

The arguments justifying international students' use of memorization through note-taking, indirectly confirm that their listening challenges stem from their lack of prior knowledge and resultant communication language anxiety. Social listening strategies, which were also reported by Humphreys (2022) as relating to interaction with others in the process of language learning, were reported as the least used listening strategies among international students. International students expressed their reluctance to utilize social listening strategies as they felt awkward and embarrassed when they misunderstood speech content, particularly when this would have meant asking for clarification or for someone to speak more slowly to aid in comprehension.

Therefore, their insufficient communicative competence due to negative prior learning experiences was linked to their avoidance of social interaction in ESL academic contexts. Furthermore, the discussion indicates that an individual student would have had a highly effective filter, which would have effectively blocked comprehensible input and contributed to their communication anxiety levels (Byrne et al., 2019; Krashen, 1982; Oxford, 1990). Thus, based on the above findings, the students' avoidance of social listening strategies to aid in improving their listening comprehension was largely due to their lack of prior learning experience, which led to anxiety regarding interaction with others in academic contexts.

Although the above findings contrast with those of some previous research (Chou, 2021; Kazemi & Kiamarsi, 2017) that found study participants with relatively more advanced levels of communicative competence reported their reliance on social listening strategies, other research has reported that participants were less reliant on social listening strategies due to high levels of communication anxiety (Bidabadi & Yamat, 2011; Serraj & Noordin, 2013).

Even though language practice through exposure to the L2 in authentic or natural settings is essential to developing cognitive skills essential to understanding and

reasoning, international students have been found to prefer metacognitive and cognitive listening strategies over social strategies. This indicates that most international students are independent, self-regulated learners and rely on self-awareness to improve their communicative competence.

The findings of Dave et al. (2021) and Kajiura et al. (2021) also support the importance of neural mechanisms to enhance L2 processing for improving listening skills through using prior knowledge. This is evident in that listening requires the processing of linguistic input but also relies on incorporating contextual cues from the communicative context (Dave et al., 2021). This is relevant to the above results as Kajiura et al. (2021) asserted that prior knowledge and experience with the L2 improve linguistic processing, leading to successful listening comprehension, stating that effective learning is dependent on “gaining new information by making use of prior knowledge” (p. 11).

However, the negative learning experiences of the international students combined with consequential communication anxiety led to preferences for other strategies instead of social listening strategies, which may have been of significant benefit if they had acquired adequate prior learning experience (Liu & Kinginger, 2021; Shinagawa et al., 2022). Therefore, social factors such as these often determine the students’ choices of listening strategies (Ellis, 1994). The reluctance to use social strategies may also be explained by Lee et al.’s (2015) affective factors in that the students lacked the tolerance needed for successful use. Thus, they tended to avoid explicitly exposing their challenges to others during academic discourse.

This review supports the conclusion that communicative competence (Hymes, 1976) enhances cognitive competence (Piaget, 1936). Cognitive processes useful in communication skills rely on both internal thoughts and external forces. Thus, learner’s competencies in communicative listening and speaking could be increased through positive learning experiences (Halali et al., 2022).

#### **4. Conclusion**

This review paper presented the foundations of research involving investigating and exploring the identified academic listening challenges and strategies among international students. The findings support the conclusion that listening skills are essential to developing communication competence, which depends on practical experience using the target language. However, for EFL learners, it was found that there is often a learning deficit in target language use and practice, which explains low levels of listening comprehension of the new language with unfamiliar terminology specific to their fields of study. As a result, international students were found to rely on several strategies to enhance their cognitive process to support themselves in their international academic settings and proceed to achieving academic success. Therefore, this information would guide developers, policymakers, and academic institutions about how to assist students to plan for their overseas educations, which could include any alterations to their academic English language preparation before enrolling in foreign institutions. The contributions of the research discussed above have great potential value to



such stakeholders considering the present dearth of literature on the issues explored. For example, suggestions from students on how to improve the overseas educational experience in the extant literature could be of value in enhancing academic language programmes for preparing students for overseas studies. Therefore, the findings discussed in this paper comprise valuable resources useful to policymakers in developing effective teaching and assessment methods to assist international students in overcoming their communication challenges

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