FWU Journal of Social Sciences, Summer 2022, Vol. 16, No.2, 68-85
DOI: *http://doi.org/10.51709/19951272/Summer2022/5*

Identifying Metacognitive Listening Comprehension Strategies of Saudi ESP Students

Saleem Mohd Nasim, Farooq AlTameemy, and Abdulhameed Alhamod
Prince Sattam bin Abdulaziz University, Al-Kharj, Saudi Arabia

This research aims to find out the metacognitive listening comprehension strategies (MLCS) of 320 (178 males and 142 females) Saudi English for Specific Purposes (ESP) students using the Metacognitive Awareness Listening Questionnaire (MALQ) in a Preparatory Year Deanship. The descriptive statistical analysis of the data showed that participants employed problem-solving, directed attention, and person knowledge more (higher-moderately) than planning and evaluation and mental translation (lower-moderately). For females, the dominant set was problem-solving, and for male participants, it was the directed attention sub-scale. The least preferred group by both genders was mental translation. On the independent samples t-test, there was no statistically significant difference between the means of sub-scales and the overall means of male and female ESP learners (except for mental translation). It implies that both sexes were not much different in using the MLCS while listening to ESP texts. They approximately used the strategies equally. Recommendations were made for students, instructors, and syllabus designers to integrate explicit metacognitive instructions for preparing, planning, managing, monitoring, assessing, and reflecting on ESP listening activities .

Keywords: MALQ, metacognitive listening comprehension strategies (MLCS), metacognition, Preparatory Year Deanship,

Listening skill is indispensable for learning a language (Rost, 2001). It comes first in the line of succession among all language skills (Ratebi & Amirian, 2013) and, by providing vital inputs for the development of reading, speaking, and writing proficiency (Renukadevi, 2014), it helps foster communicative competence (Yildiz & Albay, 2015). It is not only the most commonly employed ability in the classroom (Vogely, 1998, as cited by Namaziandost et al., 2019) but also in daily life (Shariyevna & Israilova, 2020), which consumes up to 40–50% of our total communication time in comparison to other skills (Adler et al., 2021; Mendelsohn, 1994, as cited by Al-Alwan et al., 2013).

Despite the cardinal role of the listening skill, it is often disregarded by EFL/ESL instructors (Field, 2009) and neglected by learners. In addition to that, many

Correspondence concerning this article should be addressed to Dr. Saleem Mohd Nasim, Assistant Professor, English Language Unit, Preparatory Year Deanship, Prince Sattam bin Abdulaziz University, 11942, Al-Kharj, Saudi Arabia*s.nasim@psau.edu.sa, saleemmohdnasim@gmail.com

learners barely know how to listen effectively. This situation creates obstacles to developing their language proficiency. Many learners fail to acquire the language properly. As a result, they cannot interact in English inside and outside the classroom and do poorly on their exams, which can be a source of anxiety and frustration in language learning (Arnold, 2000; Graham, 2006; Öztürk, 2021), and pose a challenge. Since listening is such an important skill, it should be given special care in learning and teaching it. Scholars have proposed different techniques to develop listening proficiency. One way to assist learners to improve their auditory competency is to educate them on effectual strategies and make them conscious of their cognitive processes in listening. These strategies facilitate the learning process and make it more enjoyable, self-directed, and efficacious (Oxford, 2013). In the absence of these strategies, listening comprehension becomes difficult, problematic, and ineffective (Mendelsohn, 2006). Therefore, learners should be mindful of strategies to develop better listening comprehension. This awareness and monitoring process is called 'metacognition' (Mokhtari & Reichard, 2002), and these strategies are termed 'metacognitive strategies'.

Many researchers have recently acknowledged and verified that students' listening comprehension is supported and improved by inculcating metacognitive strategies (Al-Alwan et al., 2013; Bidabadi & Yamat, 2011; Chang, 2013; Esmaeili et al., 2017; Goh, 2014; Rahimi & Katal, 2012; Ratebi & Amirian, 2013; Selamat & Sidhu, 2011; TafarojiYeganeh, 2013; Vandergrift, 2003). They claim that if learners are aware of metacognitive strategies, they will deal with difficulties in listening more actively and consciously rather than simply giving up (Goh, 2000). Oxford (2013) also asserted that metacognitive strategies help arrange the state for learning, setting short-term and long-term goals and checking students' understanding of the content during listening activities. Similarly, Read and Barcena (2015) maintain that for the development of listening comprehension, metacognition is crucial and, therefore, should be integrated into any framework of SLA both explicitly and implicitly.

English for Specific Purposes (ESP) orientates itself towards English language instruction needed for specific situations, typically related to occupational settings (Salmani-Nodoushan, 2020). It is different from English for General Purposes (EGP) (Wingate, 2015, as cited in Yu & Liu, 2018) in teaching methods, context, and learning conditions. It is influenced more by psychology than linguistics (Hutchinson & Waters, 1987, as cited in Moafi, 2020). It is more concerned with how learners learn the language than how content is delivered. Also, most ESP teachers prefer top-down activities to bottom-up ones as ESP learners must recognize the topics, identify keywords to understand vocabulary, grammar structures, and answer comprehension-based questions (Cheng, 2016, as cited in Yu & Liu, 2018). Activities such as making guesses, predicting, listing, and ordering information are also part of ESP. For listeners, background knowledge of the context, topic, and speakers is a prerequisite for this approach. Therefore, the implications of metacognition in the context of ESP are very promising.

It would not be unfair to mention that most ESP books emphasize developing just reading and writing skills. Consequently, students have inadequate real-life communication skills, i.e., speaking and listening. Apart from this, ESP learners have a low level of metacognitive abilities required for successful language learning (Aziz et al., 2011; Terzić, 2015). Therefore, students' listening activities should incorporate

metacognitive strategies to help them become efficient learners. By increasing the learners' knowledge of metacognitive strategies, they will become motivated to control their learning processes by following the stages of planning, monitoring, and evaluating (Vandergrift, 2002, 2003) in ESP situations. As ESP syllabuses accommodate the needs and demands of future professionals, Widdowson (1983; as cited in Nasim & Mujeeba, 2021) suggests integrating the techniques that help students develop their learning strategies and styles for ESP to achieve the intended goals.

Teaching and learning ESP are not the same as ESL/EFL (Chen & Hung, 2015). ESP students have different objectives, interests, and unique characteristics. They adapt and adjust themselves when they start studying ESP (Nasim & Mujeeba, 2021). Therefore, identifying and making them cognizant of metacognitive strategies will be fruitful.

Theoretical Framework and Literature Review

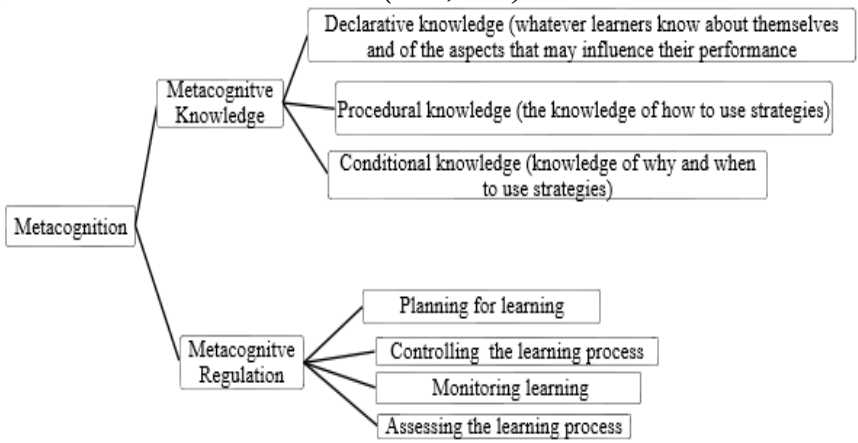
Listening comprehension is a complex process. To comprehend the oral messages, a listener engages himself actively in many mental tasks and utilizes a number of mental processes. These mental processes are called 'listening strategies'. There are four types of these strategies: cognitive, metacognitive, affective, and social. The mental abilities and processes associated with knowledge are referred to as 'cognitive listening strategies'. The capacity to comprehend one's own manner of learning and integrating information is referred to as metacognitive techniques. Affective strategies are focused on emotion management, and social strategies deal with learning by interacting with others (Bao & Guan, 2019).

Several studies have underlined how metacognitive strategies have affected the process of second language learning, and their effects are reflected in planning, processing, and evaluating learning. There is a strong relationship between metacognitive involvement and learners' variables such as academic performance (Rezvan et al., 2006; Vrugt & Oort, 2008;), motivation (Abdelrahman, 2020; Abdelshiheed et al., 2020), learning styles (Zarrabi, 2020), gender (Bacon, 1992, as cited in Gilakjani & Sabouri, 2016; Vandergrift, 1997), and unskilled and skilled L2 students (Bacon, 1992, as cited in Gilakjani & Sabouri, 2016; Goh, 2000; O'Malley & Chamot, 2012) producing positive results in L1 and L2 listening. Research focusing on metacognitive differences between males and females showed that females were constantly more informed of metacognitive strategies than males (Akin, 2016; Bacon, 1992, as cited in Gilakjani & Sabouri, 2016; Fayyaz & Kamal, 2014). On the contrary, Niemivirta (1997) and Mahmud and Nur (2018) witnessed quite the opposite. Osa-Omoregie and Musa (2017) recorded higher mean scores for males and females. Moreover, Mohseny and Raeisi (2009), Mohamed (2012), and Memnun and Akkaya (2009) reported no significant difference between the two.

Many quantitative and qualitative methods to explore the MLCS have been developed. Still, among the quantitative methods, the Metacognitive Awareness Listening Questionnaire (MALQ) developed and standardized by Vandergrift et al. (2006) is the most popular. It is deeply rooted in the theory of metacognition proposed by Flavell (1976, 1979). His metacognitive framework of learning can be represented as follows:

Figure 2

Metacognitive Framework based on Flavell (1976, 1979)



Because this study collects data through MALQ, a review of some studies investigating MLCS via only MALQ is presented below.

Rahimi and Katal (2010) used MALQ to assess the MLCS among Iranian EFL undergraduates with different majors. More than 60% of respondents were significantly informed about their metacognitive listening strategies. Though females significantly used more strategies under the directed attention sub-scale than male participants did, both sexes had a similar general awareness of metacognitive listening comprehension strategies. The findings also indicated that students with English majors were more conscious of planning & evaluation and problem-solving strategies. However, students with non-English majors used more mental translation strategies.

Sobhani (2015) investigated the link between gender and metacognitive listening comprehension strategies. His sample comprised 60 Iranian EFL students (30 females and 30 males) aged 19–30 years. Data was collected through a questionnaire used in Vandergrift's (1997) study, which was similar to MALQ in content. The difference between the metacognitive strategies for listening in terms of their gender was statistically non-significant. Similarly, Fayyaz and Kamal (2014) employed a modified version of MALQ among three hundred and fourteen (175 females and 139 males) ESL learners aged 18 to 30 enrolled in public and private language institutions in Pakistan. The overall difference between the means was non-significant, but female participants used significantly more metacognitive listening strategies in this study.

In a recent study on Malaysian twelfth graders, which consisted of randomly selected 23 male and 17 female students and the MALQ, Erizandy (2020) found that only 55% were aware, and 45% were unaware of their MLCS. The dominant strategies belong to planning & evaluation, and the lesser-known ones were under directed attention.

Alhaisoni (2017) and Altuwairesh (2016) investigated the MLCS of Saudi students in two different universities. Their participants ranked directed attention and problem-solving as more popular MLCS sub-scales than others, while they ranked person knowledge and mental translation as the least popular. However, the researchers did not

make a comparison between the two sexes. Apart from this, their studies were in EFL contexts only. The researchers could not find any research related to the use of MLCS by ESP students based on gender differences, either in Saudi Arabia or around the globe. Therefore, an attempt to fill in the gap of metacognitive listening comprehension strategies employed by Saudi ESP male and female learners during English listening comprehension activities was made in this study.

Statement of the Problem

The scarcity of literature on the use of MLCS by male and female ESP learners motivated the researchers for this study. Classifying both genders on individual items and sub-scales will be highly important for ESP learners listening to the oral text via listening clips. The study purports to answer the following:

Research Questions

1. What are Saudi female and male ESP students' least and most preferred metacognitive listening comprehension strategies (MLCS)?
2. What are the most and least employed strategy sub-scales by female and male ESP students?
3. What is the mean difference in metacognitive listening comprehension strategies (MLCS) sub-scales between female and male ESP students?
4. What is the mean difference in metacognitive listening comprehension strategies (MLCS) between female and male Saudi ESP students?

Hypotheses

1. H_1: There is a significant difference in the overall use of MLCS between female and male Saudi ESP learners.
   H_0: There is no significant difference in the overall use of MLCS between female and male Saudi ESP learners.
2. H_1: There is a significant difference in using the MLCS sub-scales between female and male Saudi ESP students.
   H_0: There is no significant difference in using the MLCS sub-scales between female and male Saudi ESP students.

Method

Research Design

This study is quantitative in nature, and its framework is a descriptive research design. It used the survey method to collect data. A six-point Likert scale, MALQ, was administered through a convenience sampling technique to identify the metacognitive listening comprehension strategies of Saudi ESP students. Questionnaires, as Oxford (1996) stated, are among the most effective and comprehensive approaches to measuring the frequency of using language-learning strategies.

Sample

The MALQ was distributed to all the available participants. They were second-semester ESP students of the Preparatory Year Deanship (PYD) at Prince Sattam bin Abdulaziz University (PSAU), Saudi Arabia. They were between 16 and 23 years old, native speakers of Arabic with a minimum of nine years of exposure to English before entering the program (Khoshaim, 2017). The ESP program has two tracks: English for

Medical Purposes (EMP) and English for Technical Purposes (ETP). EMP students study 'Career Paths' by Evans et al. (2012), and ETP students study 'Tech Talk' by Hollett and Sydes (2009) for 9 hours per week in a 15-week semester. The subjects were simultaneously studying Q: Skills for Success, Special Edition, Level 2 Listening and Speaking. In the first semester, they studied Q: Skills for Success, Special Edition, Level 2 Reading and Writing. They will be admitted to different specializations such as nursing, physiotherapy, dentistry, or other medical or technological fields if they secure the required grades and fulfil other university criteria for admission. The researchers received 320 responses (178 males and 142 females).

Instrument/Measure

The research tool used in this study had two parts. In the first part, the respondents identified their gender, whereas the other part was the MALQ. This measure is a comprehensive tool comprising twenty-one statements grouped into five sub-scales representing five facets of cognitive aspects. The construct was developed and validated by Vandergrift et al. (2006) to assess the metacognitive knowledge of L2 learners. It is also deeply rooted in the theory of metacognition proposed by Flavell (1976, 1979) and research from the areas of listening comprehension and self-regulation. The description of the MALQ is given below.

a) Problem-solving strategies are six in number. Listeners use them to make inferences.
b) Listeners use five statements from the planning and evaluation sub-scale to prepare to listen and assess the outcome of their listening efforts.
c) Three items on the mental translation sub-scale inquire whether participants use translation from L2 to L1 while listening or not.
d) There are three items in the person knowledge group as well. They are perceptions of listeners regarding their self-efficacy in L2 learning and the difficulties caused by listening (Sparks & Ganschow, 2001).
e) The directed attention sub-scale includes four strategies, which are the techniques listeners use to stay focused and perform listening tasks attentively if they lose concentration (Rost, 2002).

After translating the questionnaire MALQ from English into Arabic, it was sent to three bilingual professors who were native speakers of Arabic and had the participants' socio-cultural affiliation. They checked the content validity of the content so that students understood all twenty-one statements better. The reliability coefficients of all statements and the sub-scales were also calculated using Cronbach's alpha. The five discrete groups of MLCS, with their reliability coefficients, are presented in Table 1.

Table 1
Distribution of items on sub-scales

Sub-scale	Items	Cronbach's alpha
Directed attention (DA)	2, 6, 12, and 16	0.72
Mental translation (MT)	4, 11, and 18	0.72
Person knowledge (PK)	3, 8, and 15	0.67
Planning and evaluation (PE)	1, 10, 14, 20, and 21	0.78
Problem-solving (PS)	5, 7, 9, 13, 17, and 19	0.80
Overall		0.74

The MALQ, comprising twenty-one statements, was a closed-ended measure with a six-point Likert scale. Each statement had 6 (strongly agree), 5 (agree), 4 (partially agree), 3 (slightly disagree), 2 (disagree), and 1 (strongly disagree). There was no neutral point for them to avoid hedging. Their choices were their preferences for the MLCS they used while listening to the English text.

Procedure

The researchers administered the questionnaire on Google Forms to the participants via WhatsApp in the thirteenth week of the semester. The data was collected using Google Forms and WhatsApp due to their convenience, cost-effectiveness, and ease of access to the participants. Better randomization and reducing sampling bias are also reasons for using WhatsApp (Ullrich, 2018). The participants were informed about the purpose of the research and its methodology in advance. They were also assured of the secrecy of their preferences and told that the results would not change their grades.

For analyzing data, the study adopted descriptive and inferential statistical methods. The participants' choices were coded as mentioned above. To compute frequency, percentage, means, standard deviations, independent samples t-tests, and mean differences, IBM SPSS-25 was used. The sub-scales from 21 statements were divided into five clusters (as per the MALQ). The means and standard deviations were interpreted according to the following criteria based on Khiewsod (2016): Lowest = 1.00-1.83; Low = 1.84-2.67; Lower moderate = 2.68-3.50; Higher moderate = 3.51-4.33; High = 4.34-5.16; Highest = 5.17-6.00

Results

RQ 1: What are Saudi female and male ESP students' least and most preferred metacognitive listening comprehension strategies (MLCS)?

For answering the first research question, the mean scores and SDs on all individual strategies of females and males with their overall mean score on the MALQ are shown in Table 2. The sub-scales to which these items belong are also indicated.

Table 2

Gender-wise Description of MLCS with their Mean Scores and SDs

	Sub-scale	Strategy	Male		Female	
			Mean	SD	Mean	SD
1.	PE	Before I start to listen, I have a plan in my head for how I am going to listen.	3.31	1.48	3.04	1.68
2.	DA	I focus harder on the text when I have trouble understanding.	3.75	1.60	3.74	1.54
3.	PK	I find that listening in ESP is more difficult than reading, speaking, or writing in ESP.	3.42	1.57	3.35	1.62
4.	MT	I translate in my head as I listen.	3.56	1.66	2.81	1.92
5.	PS	I use the words I understand to guess the meaning of the words I don't understand.	3.74	1.79	4.12	1.37
6.	DA	When my mind wanders, I recover my concentration right away.	3.79	1.42	3.61	1.73
7.	PS	As I listen, I compare what I understand with what I know about the topic.	3.96	1.52	3.88	1.67

8.	PK	I feel that listening comprehension in ESP is a challenge for me.	3.72	1.50	3.57	1.51
9.	PS	I use my experience and knowledge to help me understand.	4.03	1.36	3.64	1.67
10.	PE	Before listening, I think of similar texts that I may have listened to.	3.22	1.57	3.06	1.52
11.	MT	I translate keywords as I listen.	3.44	1.59	3.20	1.84
12.	DA	I try to get back on track when I lose concentration.	4.05	1.44	3.78	1.61
13.	PS	As I listen, I quickly adjust my interpretation if I realize that it is not correct.	3.95	1.44	3.92	1.55
14.	PE	After listening, I think back to how I listened, and about what I might do differently next time.	3.52	1.43	3.43	1.39
15.	PK	I don't feel nervous when I listen to ESP.	3.69	1.53	3.75	1.64
16.	DA	When I have difficulty understanding what I hear, I give up and stop listening.	3.85	1.42	3.55	1.54
17.	PS	I use the general idea of the text to help me guess the meaning of the words that I don't understand.	3.98	1.58	4.16	1.53
18.	MT	I translate word by word, as I listen.	3.11	1.67	3.00	1.58
19.	PS	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.	3.36	1.61	3.54	1.84
20.	PE	As I listen, I periodically ask myself if I am satisfied with my level of comprehension.	3.70	1.47	3.63	1.52
21.	PE	I have a goal in mind as I listen.	3.96	1.66	3.85	1.54
		Total	3.67	1.54	3.55	1.61

As shown in Table 2, the average of all means belongs to a higher moderate level for both genders (overall mean for males: M = 3.67, SD = 1.54; overall mean for females: M = 3.55, SD = 1.61), but many individual strategies are also related to lower moderate and higher moderate level use. No strategy comes under the low category, i.e., a mean score of less than 2.68. Out of 21 strategies, male ESP learners showed higher moderate use of 15 MLCS (12, 9, 17, 7, 21, 13, 16, 6, 2, 5, 8, 20, 15, 4, 14) and a lower moderate preference for 6 MLCS (11, 3, 19, 1, 10, 18). On the other hand, female ESP learners showed higher moderate level preference for 14 MLCS (17, 5, 13, 7, 21, 12, 15, 2, 9, 20, 6, 8, 16, 19) and lower moderate preference for 7 MLCS (14, 3, 11, 10, 1, 18, 4). Both male and female learners have commonly preferred (12, 9, 17, 7, 21, 13, 16, 6, 2, 5, 8, 20, 15) reflecting the higher moderate level and (11, 3, 1, 10, 18) belonging to the lower moderate level. Among common strategies (higher moderately preferred by both genders), two belong to personal knowledge, four to directed attention, two to planning and evaluation, and five to problem-solving.

Out of 21 individual strategies, Saudi male ESP learners placed strategy no. 12 first, which belongs to DA (M = 4.05, SD = 1.44), whereas the least used strategy for them was no. 18, which belongs to MT (M = 3.11, SD = 1.67). On the other hand, most Saudi female ESP learners' favorite strategy was no. 17 under PS (M = 4.16, SD = 1.53). Strategy no. 4, which belongs to MT, is the least employed by female ESP learners (M = 2.81, SD = 1.92).

RQ 2: What are the most and least employed strategy sub-scales by female and male ESP students?

For the second question, Table 3 indexes the mean scores of the five sub-scales with their SDs used by Saudi ESP male and female learners. Their overall mean scores and SDs are also displayed.

Table 3

Gender-wise mean scores of five sub-scales with SDs (males = 178; females = 142)

Strategies	Gender	Mean	SD	Overall Mean	Overall SD
DA	Male	3.86	1.09	3.78	1.13
	Female	3.67	1.18		
PS	Male	3.84	1.12	3.85	1.12
	Female	3.88	1.12		
PK	Male	3.61	1.21		
	Female	3.56	1.21	3.59	1.21
PE	Male	3.54	1.08		
	Female	3.40	1.15	3.48	1.11
MT	Male	3.37	1.26	3.21	1.38
	Female	3.00	1.49		

The mean score range of the five sub-scales of the MLCS for males was 3.37–3.86 and 3.00–3.88 for females on a scale of 1-6. Both Saudi female and male ESP learners indicated mental translation as their least used sub-scale of the MLCS (for male learners: M = 3.37, SD = 1.26 and for female learners: M = 3.00, SD = 1.49). On the other hand, directed attention was the most preferred (M = 3.86, SD = 1.09) for males, but for females, it was problem-solving (M = 3.88, SD = 1.12).

RQ 3: What is the mean difference in MLCS sub-scales between female and male Saudi ESP students?

An independent-samples t-test was run to investigate how female and male ESP students differ in using the sub-sections of the MALQ. In Table 4, the findings for each dependent variable are shown discretely.

Table 4

Independent Samples t-test for Metacognitive Listening Comprehension Strategies Sub-scales

		Levene's Test for Equality of Variances		t-test for Equality of Means				
	Sub-scales/DV	F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Err. Diff.
PE	Equal variances assumed	.086	.769	1.120	318	.264	.14016	.12517
	Equal variances not assumed			1.113	294.586	.267	.14016	.12595
DA	Equal variances assumed	2.785	.096	1.498	318	.135	.19054	.12722
	Equal variances not assumed			1.483	289.822	.139	.19054	.12846
PK	Equal variances assumed	.011	.915	.384	318	.701	.05228	.13613
	Equal variances not assumed			.384	302.141	.701	.05228	.13616
MT	Equal variances assumed	10.260	.001	2.367	318	.019	.36422	.15388
	Equal variances not assumed			2.324	276.608	.021	.36422	.15675
PS	Equal variances assumed	.047	.828	-.321	318	.748	-.04038	.12578
	Equal variances not assumed			-.321	301.837	.749	-.04038	.12584
Overall	Equal variances assumed	.374	.541	1.205	318	.229	.11763	.09765
	Equal variances not assumed			1.192	288.376	.234	.11763	.09870

Levene's test score of 0.769 for planning and evaluation is more than 0.05, indicating equal variances, so the t-value cannot reveal the statistically reliable difference between the means of female learners and male learners. The results, $t = 1.12$, $df = 318$, $\alpha = 0.05$, $p = 0.264 \geq 0.05$, show no statistically significant difference between female and male participants using the planning and evaluation sub-scale. Similarly, Levene's tests for directed attention, problem-solving, and person knowledge are 0.096, 0.828, and 0.915, which are greater than the probability level of α. The results for these sub-scales are $t = 1.498$, -.321, and 0.384, $df = 318$ for each sub-scale, $p = 0.135$, 0.748, and 0.701, respectively. Since, in each case, the p-value is greater than 0.05, the difference between the means of these sub-scales is statistically non-significant. Therefore, H1 will be rejected, and H0 will be retained. Furthermore, Levene's test for mental translation was $p = 0.001 \leq 0.05$, which means equal variances were not assumed. Since the't' value for this sub-scale was 2.324, $df = 276.608$, and $p = 0.21 \leq 0.05$, the difference was statistically significant. Therefore, H0 will be rejected only for MT.

The findings in Table 4 also show the differences in the overall mean of MLCS between female and male ESP learners. This answers research question no. 4, "What is the overall mean difference in MLCS between female and male Saudi ESP students?" The t-test analysis of independent samples demonstrates the F value of 0.374 at a significance level of 0.541, which is more than 0.05 when equal variances are assumed. Since the findings show $t = 1.205$, $p = 0.229 > 0.05$, the difference between the overall mean scores of MLCS of Saudi female and male ESP learners is non-significant. Therefore, H1 will be rejected, and H0 will be retained.

Discussion

The findings revealed that Saudi female and male ESP learners vary in their use of MLCS. Out of 21 strategies, Saudi male ESP learners indicated that their number one strategy was trying to get back on track when they had lost their concentration, and the worst one was translating word for word as they listened. However, Saudi female ESP learners mostly used the text's overall meaning to help them predict the incomprehensible vocabulary in the ESP listening audio. They did not translate much in their heads while listening.

Male ESP learners belong to a higher-moderate category on four sub-scales: PS, PK, PE, and DA, but they were only moderately aware of MT. Female ESP learners only employed three DA, PK, and PS sub-scales at a higher-moderate level, whereas they used MT and PE at a lower level. Overall, both genders used MT and PE sub-scales at a lower-moderate level and PK, PS, and DA at a higher-moderate level.

Although male and female ESP learners are different in using MLCS and the mean scores of male learners' preferences for the sub-scales were slightly higher than the mean scores of females' preferences (except for problem-solving), the findings did not show any statistically significant difference using all sub-scales (except for mental translation) between female and male ESP learners. In the case of the differences in the overall use of MLCS, the difference was statistically non-significant between male and female Saudi learners. It implies that male and female ESP students had a similar capacity to exploit their metacognitive abilities, and there was no distinction based on gender. These findings are in line with Sobhani (2015) and Rahimi and Katal (2010).

The preferences for the five strategies under the problem-solving sub-section demonstrate that participants used their prior knowledge and experience to comprehend ESP oral texts and terms and themes to guess the meaning of unknown or fresh terminologies. They also matched their understanding of the topic with their previous knowledge and pondered on their previous oral inputs to see whether it made sense or not. While doing so, they corrected their interpretation if they discovered it to be erroneous. Such a level of awareness of problem-solving strategies could result from having experience of reading academic texts for more than nine years as well as practicing English satisfactorily at school. Since most students tend to use background knowledge and unfamiliar words, instructors should help them by providing some familiar material based on the context. Vandergrift and Goh (2012) also pointed out that background information is crucial in listening since previous knowledge denotes the total conceptual knowledge and personal experiences that language learners have gained and are available for comprehension (Vandergrift & Goh, 2012). Many previous studies have discovered that problem-solving strategies are most popular among male and female students (Alhaisoni, 2017; Altuwairesh, 2016; Al-Alwan et al., 2013; Esmaeili et al., 2017; Thivyasreena, 2018).

The directed attention sub-scale is the most preferred cluster of strategies by male learners and the second most preferred by female learners. The participants did not stop trying to make meaning when they had difficulty understanding ESP oral texts. They concentrated on it more than before. Besides, when they had lost attention, they could come back to the track and regain their concentration when their minds digressed. Paying attention and concentrating while listening to texts play a pivotal role in successful comprehension. The findings also suggest that learners were active and attentive while listening to the audio. A possible reason for that could be receiving good strategy instructions on listening to English texts and comprehending them. Studies on metacognition identified that proficient listeners' preferred directed attention (Alhaisoni, 2017; Al-Alwan et al., 2013; Goh, 2000; Chen, 2010; Ratebi and Amirian, 2013).

Along with problem-solving and directed attention, male and female participants displayed significant use of person knowledge, which focused on students' perceptions of difficulty in listening. The responses in this subset suggested that participants were not nervous while listening to the ESP audios. Though they reported that ESP listening comprehension was less problematic, they said making meanings while listening to ESP text was more challenging than writing, reading, or speaking. These findings are in line with -Chin et al., (2017), Khiewsod (2016), and Chang (2013). The mean scores of person knowledge certify that listening (in ESP) is less challenging for them due to their fewer inclinations towards translating the ESP texts into Arabic to understand.

According to the results, the planning and evaluation sub-scale is the penultimate one in the list of five. Though males were a little bit better than females in planning and evaluation, the overall mean showed that males lacked the planning for listening beforehand with their inability to recall comparable texts they might have heard in the past. Female participants, however, set their objectives and self-questioned the level of their comprehension during listening to the ESP texts. After listening, a self-evaluation was also conducted to better prepare for the future. They learned outlining, organizing, and summarizing ideas taught explicitly in the class. Some other studies

(Alhaisoni, 2017; Al-Alwan et al., 2013; Esmaeili et al., 2017; Rahimi & Katal, 2010) reported planning and evaluation as significant, but their data included the whole population. Altuwairesh (2016), whose subjects were all females, said nothing about planning & evaluation as a sub-scale.

Both male and female ESP learners classified the mental translation sub-scale under 'lower-moderately used'. It was the least preferable sub-scale out of five groups for both male and female ESP learners. Employing the strategies from this sub-set signifies that participants translated (English into Arabic) neither word for word/keywords nor the oral texts in their heads as they listened to them. In this study, female learners used it less than male learners did, as there was a significant difference between them using this strategy and the whole cluster. Goh and Hu (2013) claimed that most language learners use the process of mental translation generally, but a lower mean is considered better for mental translation, as Vandergrift (2003) said a proficient listener would use translation strategies less or vice-versa.

The low mean scores of mental translation for both genders have also been shown earlier by Alhaisoni (2017) and Altuwairesh (2016). These results contrast with Khiewsod's (2016), where mental translation was the most commonly used sub-scale. This preference for MT strategies could be attributed to their studying listening and speaking at the same time, their involvement with competent English speakers, and their motivation for good grades to get admission to a good branch of studies. These listeners would have wanted to develop proficiency and become competent in English. They also had ample opportunities to sharpen their language skills with trained teachers and internationally recognized books.

Conclusion

This study investigated the least and most preferable MLCS chosen by Saudi male and female ESP learners in the Preparatory Year Deanship (PYD) at Prince Sattam bin Abdulaziz University (PSAU), Saudi Arabia. The results indicated that most of the strategies composing the top part are from DA and PS. In other words, Saudi male and female ESP learners preferred PS and DA to PE, PK, and MT strategies. Looking closely at individual strategies, we find that learners were higher-moderately aware of strategies under the PS, DA, and PK sub-scales and lower-moderately aware of PE and MT strategies.

Based on mean scores, Saudi male learners were marginally better than female learners using DA, PE, and PK. However, this difference was not statistically significant. Furthermore, females were more aware of the PS sub-scale. The mean of MT was lower for female learners, which meant that they were more competent listeners than males.

The mean difference between Saudi female and male ESP learners using clusters of MLCS was so marginal that the difference found between Saudi male and female ESP learners using overall and group-wise MLCS was statistically non-significant except for MT. Saudi male and female ESP learners significantly differed in their use of the MT cluster.

Thus, it can be safely said that the participants in this study were somewhat capable of using MLCS, which further implied that they were pretty good listeners. Both genders showed no significant difference in using the sub-sets, which means they employed the strategies almost equally. They were more or less similar in using the MLCS and were not different in using them during listening to ESP texts.

Recommendations and Limitations

In spite of the positive results of the study, Saudi ESP learners' preferences for the individual and group-wise MLCS were on the border of their awareness level. The mean difference between the MLCS was a little. Therefore, they require proper instructions about using all metacognitive strategies during ESP listening texts, particularly in planning and evaluation, as prior preparation before listening is essential. They should learn how to recall a similar audio text that they may have heard in the past and reflect on how to do things differently in the future.

Saudi ESP learners need to be trained in strategy no. 19 under PS to predict the meaning of new terms by recalling past knowledge and confirming their predictions. They should also be instructed in strategy no. 10 to prepare themselves mentally for the upcoming listening task and strategy no. 1 for the successful comparison of similar audio texts under PE. Females should be trained in No. 4 under MT so that they do not make their heads heavy with translation while they listen. It is also worth noticing that male learners need instructions on not using their mother tongue to translate keywords in their heads as they listen.

The MLCS instruction has proved helpful in tracking and stimulating metacognitive processes. After knowing students' practices and beliefs about listening, teachers and curriculum designers should help create better learning opportunities. Instructors should make them aware of the importance of metacognition and the MLCS, and curriculum designers should include more attention-drawing tasks to motivate learners (Zhang & Goh, 2006). To fulfill this purpose, they should train and guide students through metacognition, and this is possible by familiarizing them with the need for MLCsS.

This study was limited to a university and a moderate sample size. The participants were Arabs only. Therefore, generalizations should be made contextually and carefully. Further explorations are recommended in similar contexts to explore the choices of metacognitive listening comprehension strategies. Research correlating metacognitive instruction and strategies should also be done.

Acknowledgment

This publication was supported by the Deanship of Scientific Research at Prince Sattam bin Abdulaziz University, KSA.

References

Abdelrahman, R. M. (2020). Metacognitive awareness and academic motivation and their impact on academic achievement of Ajman University students. *Heliyon, 6*(9), 1–8. https://doi.org/10.1016/j.heliyon.2020.e04192

Abdelshiheed, M., Zhou, G., Maniktala, M., Barnes, T., & Chi, M. (2020). Metacognition and motivation: The role of time-awareness in preparation for future learning. *In Proceedings of the 42nd Annual Conference of the Cognitive Science Society (COGSCI'20)2020* (945-951). https://cogsci.mindmodeling.org/2020/papers/0167/0167.pdf

Adler, R. B., Rosenfeld, L. B., & Proctor, R. F. (2021). *Interplay: The process of interpersonal communication*. New York: Oxford University Press

Akin, E. (2016). Examining the relation between metacognitive understanding of what is listened to and metacognitive awareness levels of secondary school students. *Educational Research and Reviews, 11*(7), 390-401. https://doi.org/10.5897/ERR2015.2616

Al-Alwan, A., Asassfeh, S., & Al-Shboul, Y. (2013). EFL learners' listening comprehension and awareness of metacognitive strategies: How are they related? *Canadian Center of Science and Education, 6* (9), 31-39. http://dx.doi.org/10.5539/ies.v6n9p31

Alhaisoni, E. (2017). Metacognitive listening strategies used by Saudi EFL medical students. *English Language Teaching, 10*(2), 114-122. https://doi.org/10.5539/elt.v10n2p114

Altuwairesh, N. (2016). EFL Saudi undergraduate students' use of metacognitive listening strategies. *Arab World English Journal*, *7*(1), 78-93. https://doi.org/10.2139/ssrn.2803998

Arnold, J. (2000). Seeing through listening comprehension exam anxiety. *TESOL Quarterly*, *34*(4), 777-786. https://doi.org/10.2307/3587791

Aziz, N. A., Rahim, S. A., Harun, E. H. B., Adzmi, N. A., Ahmat, H., Bidin, S., & Shaharudin, M. R. (2011). The reading strategies awareness among English as a second language (ESL) learners in Malaysia's university. *Theory and Practice in Language Studies*, *1*(7), 778-784. http://dx.doi.org/10.4304/tpls.1.7.778-784

Bacon, S. M. (1992). The relationship between gender, comprehension, processing strategies, and cognitive and affective response in foreign language listening. Modern Language Journal, 76(2), 41–56. https://doi.org/10.1111/j.1540-4781.1992.tb01096.x

Bao, D., & Guan, C. (2019). Listening strategies. *The TESOL Encyclopedia of English language teaching*, *2*, 1-6. http://dx.doi.org/10.1002/9781118784235.eelt0588

Bidabadi, F., & Yamat, H. (2011).The relationship between listening strategies used by Iranian EFL freshman university students and their listening proficiency levels. *English Language Teaching*, *4*(1), 26-32. https://doi:10.5539/elt.v4n1p26

Chang, C.-W. (2013). Metacognitive awareness in English listening: A study of Taiwanese non-English majors. *Journal of National Formosa University, 31*(3), 75-90. http://libap.nhu.edu.tw:8081/Ejournal/AA01310306.pdf

Cheng, A. (2016). EAP at the tertiary level in China: Challenges and possibilities. In D. Hartas (Ed.), *Educational research and inquiry: Qualitative and quantitative approaches* (pp. 185-200). London: Continuum

Chen, K. T. C., & Hung, P. (2015). Exploring perceptual learning style preferences of university ESP students in Taiwan. *Journal of Teaching English for Specific and Academic Purposes, 3*(1), 69-76. http://espeap.junis.ni.ac.rs/index.php/espeap/article/view/217

Chen, Z. (2010, May 21). *University EFL learners' awareness of metacognitive listening comprehension strategies in Taiwan* [Paper Presentation]. Cross-University International Conference on English Teaching, Taipei, Taiwan, 2010. http://ir.lib.cyut.edu.tw:8080/bitstream/310901800/7760/1/MLCS.pdf

-Chin, C. L., Unin, N., & Johari, A. (2017). Metacognitive awareness strategies for listening comprehension. *AJELP: Asian Journal of English Language and Pedagogy*, *5*, 11-19. https://doi.org/10.37134/ajelp.vol5.2.2017

Erizandy, D. E. (2020). Students' metacognitive awareness on listening comprehension at senior high school students. *Language-Edu, 9*(1). http://www.riset.unisma.ac.id/index.php/LANG/article/view/5368/pdf

Esmaeili, Z., Taki, S., & Rahimian, Y. (2017). EFL learners' metacognitive strategy use in academic listening tasks. *Journal of Applied Linguistics and Language Research, 4*(3), 254-268. http://www.jallr.com/index.php/JALLR/article/view/568/pdf568

Evans, V., Dooley, J., & Tran, T. M. (2011). *Career paths: Medical student's book (international).* Express Publishing UK Ltd.

Fayyaz, W., & Kamal, A. (2014). Role of gender, age, and geographical locality in metacognitive listening skills of English as a foreign language. *Pakistan Journal of Psychological Research, 29* (2), 265-276. https://www.pjprnip.edu.pk/index.php/pjpr/article/view/298/245

Field, J. (2009). *Listening in the language classroom.* Cambridge, UK: Cambridge University Press. https://doi.org/10.1017/CBO9780511575945

Flavell, J. H. (1976). Metacognitive aspects of problem-solving. In L. B. Resnick (Ed.), *The nature of intelligence* (pp. 231–235*)*. Hillsdale, NJ: Erlbaum.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist, 34*, 906 - 911.

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. http://dx.doi.org/10.5539/elt.v9n6p123

Goh, C. (2000). A cognitive perspective on language learners' listening comprehension problems. *System, 28*(1), 55-75. http://dx.doi.org/10.1016/S0346-251X(99)00060-3

Goh, C. C. M. (2014). Second language listening comprehension: Process and pedagogy. In Brinton, D.M., Celce-Murcia, M., & Snow, M.A. (Eds.), *Teaching English as a second or foreign language* (pp. 72-89). Boston, MA: Heinle Cengage Learning.

Goh, C. C. M., & Hu, G. (2013). Exploring the relationship between metacognitive awareness and listening performance with questionnaire data. *Language Awareness, 23*(3), 255-274. http://dx.doi.org/10.1080/09658416.2013.769558

Graham, S. (2006). Listening Comprehension: The learners' perspective. *System, 34*(2), 165-182. http://dx.doi.org/10.1016/j.system.2005.11.001

Hollett, V., & Sydes, J. (2009). *Tech talk intermediate student's book*. Oxford: Oxford University Press. https://doi.org/10.37134/ajelp.vol5.2.2017

Hutchinson, T., & Waters, A. (1987). *English for specific purposes*. Cambridge university press.

Khiewsod, M. P. (2016). *Metacognitive listening strategies used by high school students in Bangkok* [Doctoral dissertation, Thammasat University]. http://ethesisarchive.library.tu.ac.th/thesis/2016/TU_2016_5821042636_6921_4683.pdf

Khoshaim, H. B. (2017). High school graduates' readiness for tertiary education in Saudi Arabia. *International Journal of Instruction, 10*(3), 179-194. . https://doi.org/10.12973/iji.2017.10312a

Memnun, D. S., & Akkaya, R. (2009). The levels of metacognitive awareness of primary teacher trainees. *Procedia social and behavioral sciences, 1*(1), 1919-1923. https://doi.org/10.1016/j.sbspro.2009.01.337

Mendelsohn, D. J. (1994). *Learning to listen: A strategy-based approach for the second-language learner*. San Diego, CA: Dominie Press.

Mendelsohn, D. (2006). Learning how to listen using listening strategies. In E. Usó-Juan & A. Martínez-Flor (Eds.), *Current trends in the development and teaching of the four language skills* (pp.75-90). The Hague, NL: Mouton de Gruyter. http://golshanlc.com/wp-content/uploads/2019/09/Current-Trends-in-the-Teaching-of-Four-Skills.pdf#page=92

Moafi, M. J. (2020). *A student-centered approach to ESP (English for specific purposes). Students needs analysis in Iran*. GRIN Verlag. https://www.grin.com/document/593790

Mohamed, A. H. H. (2012). The relationship between metacognition and self-regulation in young children. *Procedia-Social and Behavioral Sciences, 69*, 477-486. https://doi.org/10.1016/j.sbspro.2012.11.436

Mohseny, A., & Raeisi, N. (2009). The relationship between language proficiency of EFL students and their strategy use in listening comprehension. *Iranian Journal of TEFLL*, *1*(4), 111-132. https://www.sid.ir/en/journal/ViewPaper.aspx?id=201470

Mokhtari, K., & Reichard, C. (2002). Assessing students' metacognitive awareness of reading strategies. *Journal of Educational Psychology*, *94*(2), 249–259. https://doi.org/10.1037/0022-0663.94.2.249

Mahmud, M., & Nur, S. (2018). Exploring students' learning strategies and gender differences in English language teaching. *International Journal of Language Education*, 51-64. https://doi.org/10.26858/ijole.v2i1.4346

Nasim, S. M., & Mujeeba, S. (2021). Learning styles of Saudi ESP students. *Rupkatha Journal on Interdisciplinary Studies in Humanities, 13* (4), 1-19. https://doi.org/10.21659/rupkatha.v13n4.55

Namaziandost, E., Neisi, L., Mahdavirad, F., & Nasri, M. (2019). The relationship between listening comprehension problems and strategy usage among advance EFL learners. *Cogent Psychology*, *6*(1), 1691338. https://doi.org/10.1080/23311908.2019.1691338

Niemivirta, M. (1997). *Gender differences in motivational-cognitive patterns of self-regulated learning*. https://files.eric.ed.gov/fulltext/ED410478.pdf

O'Malley, J., & Chamot, A. (2012). *Learning strategies in second language acquisition.* Cambridge: Cambridge University Press. https://doi:10.1017/CBO9781139524490

Osa-Omoregie, O. D., & Musa, R. J. (2017). A study of the English listening comprehension strategies used by female and male senior secondary school students in Edo State. *Journal of Education and Practice*, *8*(32), 20-25. https://www.iiste.org/Journals/index.php/JEP/article/view/39718/40836

Oxford, R. L. (2013). *Language learning strategies: What every teacher should know*. [South Melbourne, Vic.] : Heinle Cengage Learning.

Öztürk, E.O. (2021). An investigation on metacognitive listening strategy use and listening anxiety in EFL classrooms. *Anadolu Journal of Educational Sciences International, 11* (2), 737-751. https://doi.org/10.18039/ajesi.876609

Panda, S. (2017). Metacognitive awareness of college students: Perspective of age and gender. *Scholarly Research Journal for Interdisciplinary Studies*, *4*(37), 8402-8412. https://oaji.net/articles/2017/1174-1521976518.pdf

Rahimi, M., & Katal, M. (2010, May). *Iranian university students' metacognitive listening strategies awareness in learning English*. (Paper presented at the third national conference on education, 2010). Tehran, Iran,

Rahimi, M., & Katal, M. (2012). Metacognitive listening strategies awareness in learning English as a foreign language: A comparison between the university and high-school students. *Procedia-Social and Behavioral Sciences*, *31*, 82-89. http://dx.doi.org/10.1016/j.sbspro.2011.12.020

Ratebi, Z., & Amirian, Z. (2013). Use of metacognitive strategies in listening comprehension by Iranian university students majoring in English: A comparison between high and low-proficient listeners. *Journal of Studies in Education, 3* (1), 140-154. https://doi.org/10.5296/jse.v3i1.2969

Read, T., & Barcena, E. (2015). Metacognition as scaffolding for the development of listening comprehension in a social MALL App. RIED. *Revista Iberoamericana de Educación a Distancia, 19*(1), 103- 120. https://www.redalyc.org/journal/3314/331443195006/html/

Renukadevi, D. (2014). The role of listening in language acquisition; the challenges & strategies in teaching listening. *International journal of education and information studies*, *4*(1), 59-63. http://www.ripublication.com/ijeisv1n1/ijeisv4n1_13.pdf

Rezvan, S., Ahmadi, S. A., & Abedi, M. R. (2006). The effects of metacognitive training on the academic achievement and happiness of Esfahan university conditional students. *Counselling Psychology Quarterly*, *19*(4), 415-428. https://doi.org/10.1080/09515070601106471

Rost, M. (2001). Listening. In R. Carter & D. Nunan (Eds.), *The Cambridge guide to teaching English to speakers of other languages* (pp. 7-13). Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511667206.002

Rost, M. (2002). *Teaching and researching listening*. Harlow, England: Pearson Education Limited.

Salmani-Nodoushan, M. A. (2020). English for specific purposes: Traditions, trends, directions. *Studies in English Language and Education*, *7*(1), 247-268. http://dx.doi.org/10.24815/siele.v7i1.16342

Selamat, S. & Sidhu, G. K. (2011). Student perceptions of metacognitive strategy use in lecture listening comprehension. *Language Education in Asia*, *2*(2), 185–195. http://dx.doi.org/10.5746/LEiA/11/V2/I2/A02/Selamat_Sidhu

Shariyevna, K., & Israilova, A. (2020). The importance of listening in foreign language learning. *The American Journal of Social Science and Education Innovations*, *2*, 643-646. https://www.eprajournals.com/jpanel/upload/642pm_70.EPRA%20JOURNALS%203688.pdf

Sobhani, Z. (2015). An investigation into the relationship between gender and cognitive listening comprehension strategies. *JIEB*, *3*(1), 47- 50. http://www.psp-globe.com/JIEB20_3_2015.pdf

Sparks, R., & Ganschow, L. (2001). Aptitude for learning a foreign language. *Annual Review of Applied Linguistics*, *21*, 90-111. http://dx.doi.org/10.1017/S026719050100006X

TafarojiYeganeh, M. (2013). Metacognitive listening strategies awareness in monolingual versus bilingual EFL learners. *Procedia-Social and Behavioral Sciences*, *70* (2013), 1787–1793. https://doi.org/10.1016/j.sbspro.2013.01.254

Terzić, B. B. (2015). Metacognitive awareness of reading strategies among ESP students regarding their prior education. *Journal of Teaching English for Specific and Academic Purposes*, *3*(2), 257-268. http://espeap.junis.ni.ac.rs/index.php/espeap/article/view/246/163

Thivyasreena, Muthuvelu Pillai (2018) *Metacognitive awareness of listening strategies among Malaysian ESL learners* / Thivyasreena, Muthuvelu Pillai [Master's thesis, University of Malaya]. http://studentsrepo.um.edu.my/8610/15/thivyasreena.pdf

Ullrich, L. (2018, April, 24). Speak up via WhatsApp: Understanding the life worlds of Syrian refugees and host communities in Lebanon. *UNDP report*, *29*. https://data2.unhcr.org/en/documents/details/67580.

Vandergrift, L. (1997). The comprehension strategies of second language (French) listeners: A descriptive study. *Foreign Language Annals*, *30*(3), 387-409. https://doi.org/10.1111/j.1944-9720.1997.tb02362.x

Vandergrift, L. (2002). 'It was nice to see that our predictions were right': Developing metacognition in L2 listening comprehension. *Canadian Modern Language Review*, *58*(4), 555-575. http://dx.doi.org/10.3138/cmlr.58.4.555

Vandergrift, L. (2003). Orchestrating strategy use: Toward a model of the skilled second language listener. *Language Learning, 53* (3), 463-496. http://dx.doi.org/10.1111/1467-9922.00232

Vandergrift, L., Goh, C., Mareschal, C., & Tafaghodtari, M. H. (2006). The metacognitive awareness listening questionnaire (MALQ): Development and validation. *Language Learning*, *56*(3), 431-462. https://doi.org/10.1111/j.1467-9922.2006.00373.x

Vandergrift, L., & Goh, C. M. (2012). *Teaching and learning second language listening: Metacognition in action*. New York: Routledge.

Vogely, A. J. (1998). Listening comprehension anxiety: Students' reported sources and solutions. *Foreign language annals*, *31*(1), 67-80. https://doi.org/10.1111/j.1944-9720.1998.tb01333.x

Vrugt, A., & Oort, F.J. (2008). Metacognition, achievement goals, study strategies, and academic achievement: pathways to achievement. *Metacognition Learning*, *3*(2), 123–146. https://doi.org/10.1007/s11409-008-9022-4

Widdowson, H. G. (1983). *Learning purpose and language use*. Oxford etc: Oxford University Press.

Wingate, Ursula. *Academic Literacy and Student Diversity: The Case for Inclusive Practice*, Bristol, Blue Ridge Summit: Multilingual Matters, 2015. https://doi.org/10.21832/9781783093496

Yildiz, N., & Albay, M. (2015). The role of listening skills in developing communicative competence: A case study in the language classroom. *International Journal of Social Sciences & Educational Studies*, *2*(2), 4-11.

Yu, X., & Liu, C. (2018). Curriculum reform of college English teaching in China: From English for general purposes to English for specific purposes. *ESP Today*, *6*(2), 140-160. https://doi.org/10.18485/esptoday.2018.6.2.1

Zarrabi, F. (2020). Investigating the relationship between learning style and metacognitive listening awareness. *International Journal of Listening*, *34* (1), 21-33. https://doi.org/10.1080/10904018.2016.1276458

Zhang, D., & Goh, C. (2006). Strategy knowledge and perceived strategy use: Singaporean students' awareness of listening and speaking strategies. *Language Awareness*, *15*(3), 199–219. https://doi.org/10.2167/la342.0