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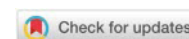
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Cognitive and Metacognitive Strategies in Foreign Language Listening Comprehension at The Studies of Tourism – Students' Preference and University Lecturers' Utility Rating

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Abstract: Being the primary channel of incoming information in spoken communication, listening comprehension is one of the key skills of the second language acquisition to be mastered. Since it is a complex concept implying different types of knowledge, it is assumed nowadays that improving strategic behaviour of students would lead to a more efficient use of listening comprehension. Thus, the aim of the present study is to gain the insight into the strategic behaviour of the freshmen university students through testing cognitive and metacognitive strategy preferences. Moreover, the study included strategy utility rating by university lecturers. The study employed a questionnaire to draw data that were processed by means of mathematical statistics and utility value analysis, whereas the use of Pareto analysis pointed to the set of preferable strategies. The results obtained in the study testify to rather uniform preference ascribed to listening comprehension cognitive and metacognitive strategies by skilled and less skilled first-year university students. On the other hand, the results obtained by university lecturers are consistent with the current literature on the issue. Thus, the set of desirable strategies points to the cognitive strategies of linguistic inferencing, global prediction and academic and world elaboration, i.e. metacognitive strategies of monitoring, directed attention and evaluation as those contributing most to efficient listening comprehension.

Keywords: *second language acquisition, listening comprehension, cognitive strategies, metacognitive strategies, strategic behaviour.*

Introduction

Despite its nature that makes it the primary channel of incoming information in spoken communication, the importance and development of listening comprehension in the second language acquisition had remained neglected for a long period of time before the emergence of a vast body of literature looking into the issue from different perspectives (Magyar, Habók and Molnár 2022; Mulyadi et al., 2022; In'nami and Koizumi, 2021; Fathi, Derakhshan and Torabi, 2020; Razmi, Jabbari and Fazilatfar, 2020). Namely, it was long maintained that the active development of the language skills such as speaking, reading and writing would unavoidably lead to the improvement of listening comprehension (Nunan, 2002; Rost, 2005; Goh, 2008). However, listening comprehension is not just a skill that an individual possesses whose main purpose is enabling the understanding of information contained in incoming speech. It is a phenomenon (Vandergrift, 1999; Rost, 2002, 2005) consisting of two types of competence - linguistic and strategic (Buck, 2001). Linguistic competence is a complex concept that includes several different forms of knowledge, such as the knowledge of phonetics, syntax, semantics, pragmatics and discourse analysis. On the other hand, strategic competence encompasses various cognitive and metacognitive processes necessary to connect the existing language knowledge of an individual with his/her other forms of knowledge. Since the results of previous research indicate interconnectedness between the effective use of language acquisition strategies and listening comprehension, the presentday authors maintain that developing listening comprehension implies conscious work on developing cognitive, metacognitive, affective and social dimensions of language acquisition (Oxford, 1990; O'Melly and Chamot, 1990; Vandergrift, 1999). The development of these dimensions, i.e. strategies, is primarily aimed at improving the process of learning and making students independent learners (Chamot, 2005; Little, 1991; Pešić,

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2017b). At the same time, students' attention should be focused on identifying their desirable strategies, since the use of these should greatly facilitate the process of listening comprehension, as the basic channel of foreign language input, and thus make the acquisition of a foreign language more efficient, which is also emphasised by Chamot (2005).

The results of previous research undertaken with the subjects of different age show that the respondents whose level of language proficiency is low keep processing listening input at a surface level showing inability to activate in-depth comprehension (O'Malley, Chamot and Kupper, 1989, Goh, 2008). This deficiency could be solved by the implementation of strategies both cognitive and metacognitive.

Despite an immense body of research dealing with the use of strategies in listening comprehension, the achieved results differ to the extent that does not allow for too many generalisations on their use. However, there is a common agreement that the use of strategies has a positive effect on language acquisition (Wong and Nunan, 2011; Wenden, 2002; Cohen, 1998), and consequently the positive motivation of students. The positive correlation between metacognitive behaviour, achievement and motivation among student population is also confirmed by research in other fields of education (Balashov, Pasichnyk and Kalamazh, 2021). Furthermore, the correlation between students strategic behaviour and cultural background has been pointed out by several authors (Oxford, 1990; Chamot, 2004; Olivares-Cuhat, 2002), justifying the research of students' strategic behaviour in different cultural contexts.

Having in mind the abovementioned, the study presented in the paper aims to look into the preference of using cognitive and metacognitive strategies in listening comprehension by the skilled and less skilled first-year students of tourism in Serbia and compare the results achieved with the evaluation of strategy utility provided by university lecturers. Triangulated in such a way, the obtained results should indicate a set of preferable strategies that would lead to a more efficient listening comprehension, and consequently second language acquisition.

Strategic behaviour of tertiary-level students in listening comprehension

The attention of both researchers and teachers began to focus more intensively on the strategies in the last decades of the twentieth century, when the idea of using context as a crucial factor contributing to listening comprehension became the prevailing one in foreign language teaching. Namely, it was believed that all lacks in understanding caused by distractions in receiving a message and/or inability to understand lexical items can be compensated by the knowledge of context. Such an attitude resulted in an increased interest in different factors contributing to listening comprehension, such as schematic knowledge (Hu, 2012), knowledge of the topic (Chiang and Dunkel, 1992; Rahimi, 2012; Sulistyo, 2011), and text type and situation (Rahimi 2012; Sulistyo, 2011). As a result of such an intense research, the need arose as to classify the identified strategies. There have been several attempts to classify both language acquisition strategies (Oxford, 1990; O'Malley and Chamot, 1990) and listening comprehension strategies (Rost and Ross, 1991; Vandergrift et al, 2006; Vandergrift and Goh, 2012) so far. Still, each classification included the groups of cognitive and metacognitive strategies that stand out as the most prominent ones. Cognitive strategies are employed in the controlled use of the material that needs to be learned. They are more directly related to the learning task to be accomplished and involve manipulation of the material to be acquired (O'Malley and Chamot, 1990). According to O'Malley and Chamot (1990), they are theoretical processes involved in learning. This is also the most numerous group of strategies. It includes the use of linguistic and learning resources (translation, transfer, deduction/induction), substitution, inferencing, elaboration, prediction, contextualisation, reorganising (summarisation, grouping, note taking, repetition) (Vandergrift and Goh, 2012). Since they imply material processing, cognitive strategies are considered to be on-line strategies, i.e. those used during the very listening process.

Metacognitive strategies concern the planning, regulation and management of the learning process. Thus, not being directly related to the learning material, they are at a level above the cognitive transformation of the information received and its processing. In other words, they include thinking about the learning process, planning the task to be performed, monitoring the task being performed, and evaluating the task performed (Chamot, 2005). The aforementioned testifies to the fact that metacognitive strategies are employed not only during the entire process of listening comprehension, but prior and after listening (off-line) as well. They include planning, focusing attention (directed attention and selective attention), monitoring and evaluation (Vandergrift and Goh, 2012). According to O'Melly et al. (1985), '[...]students without metacognitive approaches are essentially learners without direction and ability to review their progress, accomplishments, and future learning directions'. The importance of metacognitive knowledge and its impact on the overall performance in learning have been pointed out in some other areas of research as well. Thus, Karpov and Skityayeva (2002) indicated that the misuse of metacognitive knowledge could negatively affect students' performance. For this reason, it is important to raise awareness

of metacognitive strategies among university students (Pešić and Radovanović, 2018) and introduce them to different sub-strategies, whose skilful management can lead to a positive outcome in language acquisition and their independence in the learning process (Pešić, 2017b).

Most research focused on listening comprehension looked into strategic behaviour of skilled and less skilled students, i.e. students with a higher or lower level of language proficiency. The obtained results pointed to the fact that skilled students were more open and flexible in the use of strategies, showing strong control of their use (Anderson, 2005; Green and Oxford, 1995; O'Malley and Chamot, 1990; Wharton, 2000; Magogwe and Oliver, 2007; Rao, 2016). The range of the used strategies, both cognitive and metacognitive, varied to a high degree (Khaldieh, 2000; Wu, 2008; Rao, 2016), depending on the task type, the respondents' age and language level (Habók and Magyar, 2018). However, most often used strategies were monitoring, elaboration, inferencing, prediction and evaluation. The group of skilled students showed the ability to anticipate failure in comprehension and prevent it by using different sources of knowledge (Magogwe and Oliver, 2007). When the process of comprehension was interrupted, they managed to regain concentration consciously and with ease. In their process of comprehension, two types of information processing were identified – top-down and bottom-up. The results also testify to the pronounced use of context, i.e. connecting what they heard with the knowledge they already possessed (Ovilia, 2018). The best results on the listening comprehension tests were achieved by the respondents who were able to interactively use different sources of knowledge, to activate different strategies (not in isolation, but rather in a combination), and who approached the task to be solved holistically (not as a string of isolated items) (Goh, 2002; Vandergrift, 2011; Nunan, 1991).

In the process of listening comprehension, less skilled students were more focused on the text and its semantic and syntactic features (O'Malley et al., 1985). Trying to use their prior knowledge of the world, they were often unable to connect the incoming information with the already existing knowledge or experience. Thus, they approached the tasks locally, focusing on the elements present immediately in the text. They reached certain information in the text with a delay, as they would focus on words or parts of the discourse they did not understand, persistently trying to reveal the meaning (Nunan, 1991). When listening, they divided the text into segments, listening word for word, and when it comes to information processing, they were almost exclusively relying on bottom-up processes (O'Malley, Chamot and Kupper 1989; Chamot and Kupper 1989; Goh, 2002). With this group of subjects, the use of cognitive strategies prevailed, with translation as the most commonly used one. Such results further point to the fact that less skilled students neither were in control of their listening comprehension nor did they think about the course of the process and the arising problems, which certainly affected the overall process of language acquisition. The results of several studies (Vandergrift, 2003, 2011; Goh, 2002; Vandergrift and Goh, 2012) showed both groups to have been using the strategy of monitoring comprehension with a similar frequency, but with different efficiency. Cognitive strategies, such as elaboration and reasoning, were used in the same way. The difference in use was reflected in the fact that skilled students used the aforementioned strategies more efficiently, i.e. in combination with other strategies, which led to a more efficient listening comprehension (Vandergrift 1997, 1998, 2003, 2011; Goh and Taib, 2006).

Despite a large number of studies, it is almost impossible to identify a pattern in strategic behaviour which directly depends upon the level of language knowledge. However, the research results proved the existence of a correlation between students' strategic behaviour and success in foreign language acquisition (Oxford et al., 2004).

A notable gap in the recent literature on the issue of listening comprehension strategy use is the lack of university lecturers' attitude on the utility of individual listening comprehension strategies compared to the students' strategic behaviour. Apart from triangulation, the importance of involving university lecturers teaching English for Specific Purposes (ESP) at different faculties in the current study is to reduce the degree of possible subjectivity, which influences the decision on university course curriculum and syllabus, since it is lecturers who directly decide on a course design and the choice of teaching materials to be used. Besides, such results are expected to make a sound contribution to those attained for students' strategic behaviour indicating the type of sub-strategies that should be implemented into a foreign language course curriculum.

Materials and Methods

The aim of the undertaken diagnostic study is to (1) identify the preferences of using cognitive and metacognitive listening comprehension strategies of skilled and less skilled language users at the first year of university studies of tourism and (2) get insight into ESP university lecturers' perception of the utility of individual listening comprehension strategies.

In order to reach the aim, the following research questions were set:

1. Are there any differences between cognitive strategy preferences in listening comprehension of the skilled and less skilled language users?
2. Are there any differences between metacognitive strategy preferences in listening comprehension of the skilled and less skilled language users?
3. How do ESP university lecturers rate the utility of cognitive and metacognitive strategies for the process of listening comprehension?, and
4. Which strategies make the set of most useful ones for effective listening comprehension?

The present study includes two groups of subjects - the first one being 70 students of the first year of academic studies and the second one comprising 8 university lecturers teaching ESP at six tertiary-level institutions in Serbia, the members of both groups of subjects being those who voluntarily agreed to take part in the study. The choice of the freshmen is quite understandable, having in mind that course syllabi should be fine-tuned according to the ability of the learners. Thus, it is of utmost importance to identify their strengths and weaknesses as independent learners at the very beginning of the teaching process. On the other hand, university lecturers are decision-makers when it comes to syllabi and curricula of a university course as well as teaching materials to be used during instruction delivery. In such a way, their role in evaluating the importance and utility of language learning strategies is utterly justifiable.

In the first phase of the study, the students were tested on their language knowledge, which enabled their grouping into skilled and less skilled language users. To this aim, Oxford Placement Test (Allan, 2004) was employed. The Oxford Placement Test results revealed the language knowledge of 14 subjects to be at B2 level of Common European Framework (Council of Europe, 2020), whereas 56 subjects proved to be at A level. Thus, the former were categorised as the skilled language users (SLU), and the latter as the less skilled ones (LSLU).

In the second phase of the study, the questionnaire on cognitive and metacognitive strategy use was distributed to both groups of subjects, i.e. students and university lecturers in order to identify the preference of strategy use, i.e. get scores on the utility of the strategies for the process of listening comprehension, respectively. The questionnaire used for gathering data is based on Oxford (1990), Vandergrift et al. (2006) and Vandergrift and Goh (2012), and contains 17 statements employing 5-point Likert scale. Each of the statements describes possible strategic behaviour of the listeners in the process of listening comprehension, and should be rated on the scale 1 to 5, with 1 = never or almost never true of me to 5 = always or almost always true of me. In order to avoid any possible misunderstandings, the questionnaire statements were translated into Serbian. The Cronbach's alpha was 0.83, i.e. 0.87 for the observed student, i.e. instructor population, respectively. The data collected with reference to the research questions 1 and 2 were processed by use of mathematical statistics to get the averages. To measure the level of strategy preference, the following scale is employed (Oxford, 1990): 1.0 – 2.4 – low preference of strategy use (Likert scale rating 1 and 2), 2.5 – 3.4 – medium preference of strategy use (Likert scale rating 3), 3.5 – 5.0 – high preference of strategy use (Likert scale rating 4 and 5).

To answer the research question 3, the obtained data by the questionnaire undertaken with the lecturers were analysed by use of utility value analysis. This is a method employed to evaluate alternatives using utility as the crucial criterion. Furthermore, it is used in contexts characterised by a subjective notion of value. According to Vulanović et al. (2003), utility value is the subjective value of an entity which represents its ability to meet certain needs. In the context of the current study, it is the ability of one group of strategies, i.e. one sub-category, to enable spoken message comprehension. This issue comes to fore when deciding whether to include a strategy or a set of strategies in a foreign language syllabus that would include conscious work on developing listening comprehension. When analysing utility values, it is common to rank the parameters from 1 to 3, i.e. the most important, less important and least important, respectively. However, the present study employed a more sensitive 25-point scale, which resulted in data that are more sophisticated.

The set of strategies contributing most to the spoken message understanding was attained by the use of Pareto analysis, which enabled providing the answer to the research question 4. In relation to strategy use, Pareto analysis would help analyse the employed strategies in terms of their efficiency, i.e. their individual contribution to the overall understanding. It would mean that 20% of the used strategies would make the largest contribution to the process of comprehension. Thus, their identification and implementation into FL instruction would save time, to both instructors and students, and bring about the largest benefit for their users.

Results

Students' preferences of cognitive strategy use

Table 1 shows the averages of cognitive strategy use preferences by the skilled language users and less skilled language users, as well as the cognitive strategy utility, as described by the university lecturers. According to the data presented, the group of the skilled language users showed high preference of cognitive strategy use with the exception of note taking and prediction. Moreover, the results obtained for the Statements 1 and 2 testified to this group of subjects employing both bottom-up and top-down language processing. On the other hand, the group of less skilled language users used five out of ten cognitive strategies to a high degree and the remaining five to a medium degree. At the same time, they also proved to use both bottom-up and top-down processes in language processing.

Table 1

Cognitive strategies - students' preferences, lecturers' estimation of the strategy utility and the strategy rank (R)

| S. No. | | | SLU | R | LSLU | R | Lecturer estimation | R |
|--------|--|---|------|----|------|----|---------------------|----|
| 1 | Prediction (Global/Top-down mental processing) | I use the general meaning of the text to help me understand. | 4.5 | 1 | 3.93 | 4 | 0.1525 | 1 |
| 2 | Prediction (Local/Bottom-up mental processing) | I use the details of the conversation to help me understand. | 3.85 | 4 | 3.55 | 5 | 0.06 | 8 |
| 3 | Reorganising (Grouping) | I think about the difference between the main idea and the details. | 3.79 | 5 | 3.18 | 9 | 0.055 | 9 |
| 4 | Inferencing (Extralinguistic) | Visualisation helps me understand what I hear. | 3.5 | 8 | 3.39 | 6 | 0.1175 | 6 |
| 5 | Elaboration (Academic) | If the topic is already learned, I pay more attention to listening. | 3.79 | 6 | 4.09 | 3 | 0.1225 | 4 |
| 6 | Elaboration (World/Person) | While listening, I always relate what I hear to what I already know. | 4.30 | 2 | 4.14 | 2 | 0.125 | 2 |
| 7 | Inferencing (Linguistic) | I can understand what the speakers say in-between the lines. | 3.77 | 7 | 3.23 | 7 | 0.1225 | 5 |
| 8 | Note Taking | Note taking helps me understand. | 3.4 | 9 | 3.20 | 8 | 0.035 | 10 |
| 9 | Inferencing (Linguistic) | I use the context to guess the meaning of the words I did not understand. | 4.16 | 3 | 4.32 | 1 | 0.145 | 3 |
| 10 | Prediction | I always make guesses about what is to happen. | 3.37 | 10 | 2.96 | 10 | 0.065 | 7 |

Statements based on [Oxford \(1990\)](#), [Vandergrift et al. \(2006\)](#) and [Vandergrift and Goh \(2012\)](#)

Students' preferences of metacognitive strategy use

On the overall, the preference of metacognitive strategy use was rated high by the skilled language users and moderate by the group of less skilled ones. Problem identification and evaluation proved to be the least used strategies with the average below 3.0.

Table 2
Metacognitive strategies - students' preferences, lecturers' estimation of the strategy utility and the strategy rank (R)

| S. No. | Strategy Type | Statement | Students | | | | Lecturer estimation | |
|--------|------------------------|---|----------|---|------|---|---------------------|---|
| | | | SLU | R | LSLU | R | | R |
| 1 | Directed Attention | I focus my attention to what I find important and discard less important information. | 3.69 | 4 | 3.39 | 4 | 0.185 | 2 |
| 2 | Evaluation | While listening, I think if my predictions have been confirmed. | 3.36 | 5 | 2.96 | 5 | 0.1525 | 3 |
| 3 | Monitoring | I actively think whether I understand the text. If I do not understand something, I continue | 3.94 | 2 | 3.68 | 2 | 0.09 | 7 |
| 4 | Monitoring | listening hoping that I would get the meaning later. | 4.25 | 1 | 4.43 | 1 | 0.2075 | 1 |
| 5 | Problem Identification | If I do not understand something, I think about that part and continue listening with no concentration. | 3.12 | 6 | 2.93 | 6 | 0.0975 | 6 |
| 6 | Directed Attention | If my thoughts wonder, I try to refocus my attention. | 3.70 | 3 | 3.64 | 3 | 0.135 | 4 |
| 7 | Problem Identification | If I do not understand something, I give up listening. | 2.78 | 7 | 2.38 | 7 | 0.1325 | 5 |

Statements based on [Oxford \(1990\)](#), [Vandergrift et al. \(2006\)](#) and [Vandergrift and Goh \(2012\)](#)

Strategy utility rating

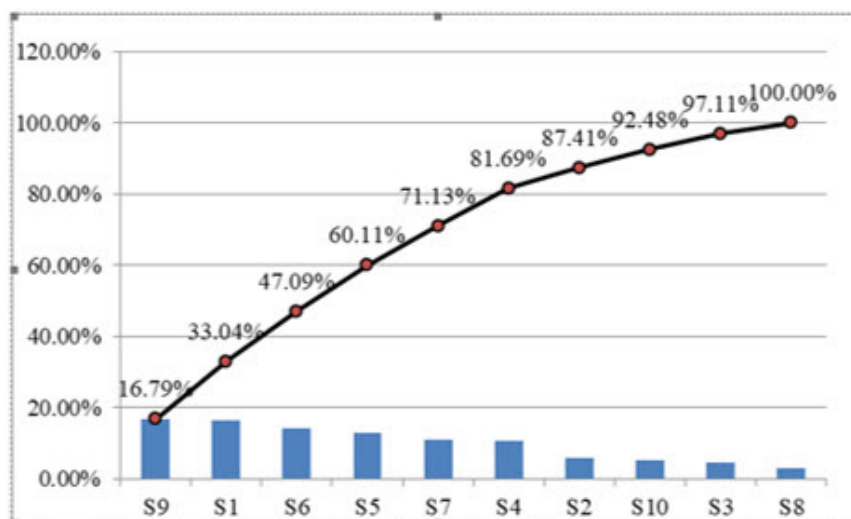
The university lecturers found prediction, elaboration and inferencing to be three most beneficial cognitive listening strategies. Note taking was found to be the least important one. The rating gained for the three most beneficial strategies coincided with the ratings obtained for strategy preferences of the skilled language users. The greatest discrepancy in the strategy rating between skilled language users and lecturers was noted with the strategies of local prediction (Statement 2) and grouping (Statement 3). Besides this, the rank of the remaining Statements is rather uniform.

The best-ranked strategy by the group of less skilled language users is linguistic inferencing (Statement 9 – 4.32). On the other hand, the least preferred strategy is prediction (Statement 10) (2.96), which is in line with the answers provided by skilled language learners, but significantly differs when compared to the utility rate provided by the lecturers. The ranking of the other two segments of prediction (global and local) also significantly differed. The overlapping in the obtained results of less skilled language users and lecturers is notable at the rank of elaboration, as one of the highly rated strategies, and inferencing and reorganising, which gained low rates.

The lecturers' ratings regarding the utility of metacognitive strategies showed monitoring, directed attention and evaluation to be the most useful. On the other hand, the least rated strategies were those describing students' behaviour leading to the loss of either concentration or motivation. When compared to the students' ratings, apart from two strategies with the overlapping ranks – monitoring and problem identification, the attitudes of students and lecturers vary.

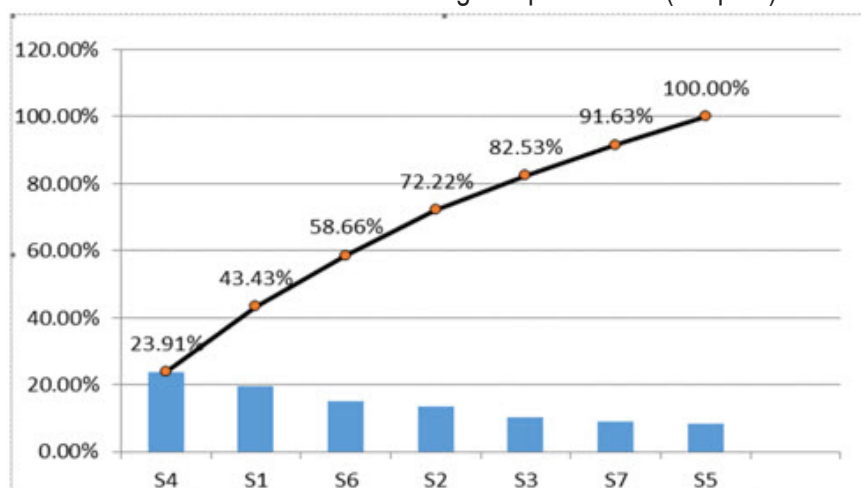
Most beneficial strategies

Taking into consideration the obtained answers provided by both groups of students and university lecturers, Pareto analysis pointed to the group of four cognitive strategies contributing most to efficient listening comprehension. Those were linguistic inferencing (Statements 9 and 7), global prediction (Statement 1), personal/world elaboration (Statement 6), and academic elaboration (Statement 5). They account for 71.13% of listening comprehension (Graph 1).



Graph 1. The overall influence of cognitive strategies on listening comprehension

As for the group of metacognitive strategy use, the Pareto analysis results pointed to the set of four statements, i.e. three strategies that the subjects found the most beneficial to message decoding. These were monitoring (Statement 4), directed attention (Statements 1 and 6) and evaluation (Statement 2), since they account for 72.22% of effective listening comprehension (Graph 2).



Graph 2. The overall influence of metacognitive strategies on listening comprehension

Discussion

The main aim of the present study was to look into the first-year tertiary-level students' cognitive and metacognitive strategy using habits in listening comprehension. The attitude of university lecturers as decision-makers at the tertiary level of education is of utmost importance for a course design. Thus, the study took into consideration their opinion on cognitive and metacognitive strategy utility.

Language knowledge test results pointed to a rather low level of the subjects' language knowledge. Namely, after acquiring English as a foreign language for twelve years, a large number of students is still at A level, whereas they are supposed to finish the chosen secondary school with B2 level English knowledge. This may be attributed to insufficiently developed individual learning styles and either the lack of strategy use or their ineffective employment. However, regardless of the main source contributing to such conditions, they could be described as rather disadvantageous, having in mind the importance of the English language for the future profession of tourism students, which will imply intense encounters with foreigners.

The results pointing to the cognitive behaviour of the group of skilled language users showed these strategies to be used with high degree of preference. Such a result would further imply that this group of

subjects is actively involved in mental processing of language. The group of skilled language users also proved to be more prone to using cognitive strategies compared to the group of less skilled ones who can be described as moderate cognitive strategy users. The finding could be said to be expected as some previous research has confirmed the strong positive relationship between cognitive strategies and English proficiency (Wu, 2008).

Though both groups of subjects use bottom-up and top-down mental processing in incoming speech comprehension, the group of skilled language users relied to a higher degree on top-down processing. It means that the use of the background knowledge, i.e. prior knowledge of the world and/or context in message interpretation are predominant, whereas the linguistic features of the text are used, but to a lesser degree. These findings are in line with Graham (2017) and Chamot (2004). It would be interesting to note that the use of bottom-up and top-down processing is more balanced with the group of less skilled language learners. Such a result testifies to the fact that when faced with listening task, less skilled language users become overwhelmed with senses. A constant inflow of input information, i.e. incoming sounds prevents them from activating top-down processes. Namely, by focusing their attention to surface details, they become blocked from reaching in-depth understanding. Having in mind the necessity of using listening comprehension and speaking skills in everyday business communication of tourism professionals, the need for conscious work on developing listening comprehension becomes even more urgent.

As far as metacognitive strategies are concerned, the skilled language users showed the preference to use them with high frequency. It means that this group exhibited high involvement in controlling their listening comprehension process by focusing their attention, monitoring and identifying problems they encounter while listening. According to the attained results, the group of less skilled language users could be described as moderate metacognitive strategy users. Namely, the rates given to the tested metacognitive strategies coincide with the ratings obtained by the skilled language users, but the averages are lower. The findings are contradictory to those obtained by Khalil (2005) and Goh (2002), who report that the increase of language level positively influences the variety of the strategies used. The frequency of the least used metacognitive strategy (problem identification) by the less skilled language users pointed to the low-level frequency. The remaining strategies were ascribed a medium or high degree of preference. Such results point to the fact that both groups of subjects put great importance to managing their listening comprehension process. However, the less skilled language users showed a poor ability of identifying problems in listening comprehension, which can be attributed to the fact that they are aware of this strategy, but it remains beyond their ability to use it regularly while listening. Another metacognitive strategy rated below 3.0 is evaluating the listening comprehension process. As highly rated strategies mostly concerned monitoring and focusing attention, it could be concluded that the incoming information in the process of listening comprehension was processed at the surface level by the group of less skilled language users. In general, this confirmed the results achieved so far, testifying to the fact that strategy use depends to a certain degree on the user's language level. In general, for both cognitive and metacognitive strategies, it can be said that the range of the chosen strategies does not differ, but the frequency of use influences the noted distinction.

The obtained results show that the university lecturers maintain global prediction, personal or world elaboration and inferencing to be three most useful cognitive strategies, whereas reorganising and note taking are described as the least useful ones. The choice of the most useful strategies confirms the results obtained in the previous research (Vandergrift, 2003). However, the fact that two least rated strategies would burden students in the process of listening comprehension with additional cognitive load, might be the reason they remained at the bottom of the utility list. As regards the utility of metacognitive strategies, monitoring, directed attention and evaluation is also the choice confirming the previous findings (Vandergrift et al., 2006). Rating constant monitoring, i.e. active thinking of whether comprehension takes place, as the least useful metacognitive strategy is in line with some previous findings which report on this strategy being the least used one in the process of listening comprehension (Yang, 2009).

The set of most beneficial strategies attained by all subjects, the students and lecturers, comprises the cognitive strategies of linguistic inferencing, global prediction and academic and world elaboration, which is in line with Vandergrift (2003). It means that the use of context and prior knowledge as well as general meaning of the text are found to be most beneficial to incoming speech decoding. As for metacognitive strategies, monitoring, directed attention and evaluation came to the fore, which confirms Vandergrift et al. (2006). Furthermore, such results are partially consistent with the results reported by Al-Qahtani (2013), who found that inferencing, elaboration and translation as cognitive strategies, i.e. directed attention and monitoring as metacognitive ones, were most utilised strategies among university student population.

Conclusions

The present study was aimed at looking into the cognitive and metacognitive strategic behaviour of freshmen university students as well as university lecturers' attitude towards strategy utility in the context of listening comprehension in second language acquisition. It is important to gain the insight into the learning habits of first year students as it would enable ESP lecturer to fine-tune the instruction to the needs and abilities of the group. On the other hand, the university lecturers were included into the study in order to decrease the level of subjectivity of a single lecturer as decision maker when it comes to listening strategy choice. Hence, one of the expected results of the study was to identify the set of preferable strategies as defined by students and lecturers which, implemented into the classroom instruction, would lead to improving listening comprehension and in such a way contribute to more efficient acquisition of a foreign language.

Past research has demonstrated that skilled language learners are also skilled strategy users. However, the attained results of the current study have shown that there is no significant difference in strategy type preference between skilled and less skilled ESP learners at the beginning of their studies. What makes a difference is the average they use to describe the degree of preference. Thus, the rating of the observed strategies differs. The ESP lecturers' utility rating points to prediction, elaboration and inferencing to be top three cognitive listening comprehension strategies, which coincides with skilled language users. As far as the utility of metacognitive strategies is concerned, monitoring, directed attention and evaluation proved to be most beneficial.

The identification of the set of preferable strategies of skilled and less skilled students pointed to deficiencies in strategic behaviour of the observed student population. Consideration of the set of preferable strategies and those bearing the highest level of utility provided the identification of the strategies that should be included into foreign language instruction – linguistic inferencing, global prediction and academic and world elaboration as cognitive strategies, i.e. monitoring, directed attention and evaluation as metacognitive ones, respectively. Moreover, they are expected to contribute to a more efficient course delivery (having in mind the improved comprehension while listening which would further lead to a more efficient language acquisition) and, additionally, they would most beneficially contribute to building student autonomy and independence, which proved to be essential for studies at a university level (Little 1991, Chamot 2005; Pešić 2017b).

However, there still pertains the impossibility to generalise the attained results for the groups of skilled and less skilled language users. The reason might be due to the fact that in order to generalise conclusions, it is of vital importance to take a holistic approach to strategy use analysis. However, the individual differences of students play significant role when it comes to strategy choice, which makes it impossible to neglect them. One of the possible solutions may be a try to bring together the results of research into strategic behaviour of native speakers to those of non-native ones. Such comparative research might bring about some new insights into a desirable strategic behaviour in the process of listening comprehension.

Another point to be made refers to the employment of a questionnaire as a research tool. Namely, besides being a measuring tool, it can also be used for raising students' awareness of strategic behaviour by introducing them to different types of strategies that can be used in the process of learning, i.e. language learning and listening comprehension development in the context of the current study.

Despite its value, the study has certain limitations. First, it is the sample size. Apart from taking into consideration different-year students, it would be interesting to include a larger number of university lecturers, including those teaching at philology universities. Second, the orientation of studies can also be taken as one of the deficiencies. Namely, besides considering the behaviour of the students at social academic studies, it would be interesting to look into strategic behaviour of those studying sciences. Moreover, qualitative research methodology would add additional value to the study by providing deeper data on strategy use. Further research would be necessary to bring about information on strategy use during the course of listening.

Conflict of interests

The author declares no conflict of interest.

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