

Exploring the Relationship between Top-Down and Bottom-Up Strategies in Listening

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To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v14-i10/23057> DOI:10.6007/IJARBSS/v14-i10/23057

Published Date: 12 October 2024

Abstract

One of the fundamental abilities that someone uses on a daily basis while interacting with another is listening. Despite being considered as a crucial component of language learning, listening comprehension is seldom given much attention. Therefore, this study was conducted based on three research questions; 1) How do learners perceive the use of bottom-up strategies in listening?, 2) How do learners perceive the use of top-down strategies in listening? and 3) Is there a relationship between bottom-up and top-down strategies in listening? This study adopted a quantitative research approach to answer the research questions. A purposive sampling was conducted with a total of 151 learners who enrolled for a diploma listening course from a local university. The findings of this study show that learners perceived bottom-up listening strategies to clarify words or phrases, show limited use of fluency-making tactics despite focusing on intonation and rhythm, and demonstrate positive attitudes toward word-oriented strategies that emphasise individual word recognition. Then, it was found that the importance of identifying the speaker's main point using scanning strategies, value comprehending the overall listening context for GIST, rely heavily on non-verbal strategies while listening, and focus primarily on understanding difficult words when using less-active-listener strategies. It was also found that there was a positive relationship between bottom-up and top-down listening strategies on learners' listening skills. Future research could be explored qualitatively on the effectiveness of combining top-down and bottom-up listening strategies in improving learners' listening skills.

Keywords: Listening Strategies, Bottom-Up Listening Strategy, Top-Down Listening Strategy, Higher Education, English Language

Introduction*Background of Study*

There are four different skills in learning a language which are reading, writing, speaking and listening. It is important to master these skills in order to be proficient in language learning. Mastering each skill is not easy and it is actually a long-term learning process. Most learners realised that learning listening is challenging especially in English language (Zilola, 2022). It was also mentioned that learners struggle to understand online listening comprehension practice even though listening skill is used in daily communication (Lieyana Teo Mohd Zulkifli Teo et al., 2022). Listening skill is one of the basic skills to be used every day as people interact and communicate with each other. Hence, developing strong listening skills is vital for effective communication and overall language proficiency, despite the challenges learners face in mastering this essential aspect of daily interaction.

The two strategies in listening (bottom-up and top-down) are equally important in order to ensure the learners full understanding of the information they listened to. This will avoid misinterpretation and misunderstanding while communicating, not only in classroom learning but also in daily routine. It is also noted that one of the crucial conditions for strengthening listening skills is creating a supportive learning environment (Graham, 2017). This basically means that these two listening strategies need to be applied in the classroom setting, guided by the instructors to ensure a comprehensive skill development among the learners.

Therefore, this study was conducted to investigate learners' perceptions on the use of bottom-up and top-down listening strategies, also to determine a relationship between these two strategies in listening. Diploma students in one of the public universities in Malaysia who enrolled in the listening course were chosen as the participants of this study.

Statement of Problem

Listening comprehension is a fundamental component of language acquisition, particularly in the context of learning a second language. Listening requires the ability to accurately receive and interpret messages during communication, without effective listening skills, messages can easily be misinterpreted or misunderstood (Sarinah Sharif et al., 2024). Within this domain, learners often employ two distinct strategies: bottom-up and top-down processing. Top-down strategies involve using background knowledge, context, and expectations to make sense of spoken language, while bottom-up strategies focus on decoding the actual sounds, words, and grammatical structures of the speech being heard (Bekaryan, 2016).

A study conducted by Ho, Faizahani Ab Rahman and Veloo (2022) was found that the learners think that there is not a need for them to know and understand these two strategies in listening; bottom-up and top-down listening strategies. This is because they did not really use and speak English in their daily life despite the importance of mastering the English language as demanded globally. The participants of this study were the secondary school students of a remote area in Malaysia. However, there is not much research that has been done in the same manner especially in Malaysian contexts.

Although listening skill is mentioned to be important in language learning, it is not given much attention to it. There remains a gap in understanding how learners perceive the use of these

two strategies in listening tasks; bottom-up and top-down which are unexplored. Furthermore, the relationship between these two strategies in the context of listening comprehension is not clearly defined. While it is acknowledged that both strategies play a role in effective listening, the extent to which they influence each other and contribute to overall comprehension remains ambiguous.

Therefore, there is a need to highlight listening skill, specifically in looking at learners' perceptions on bottom-up and top-down listening strategies together with its relationship. By exploring these, it is hoped that this study will provide valuable insights to the instructors and the learners themselves in learning the language and at the same time mastering the skill, proficiently.

Objectives of the Study and Research Questions

This study is done to explore the perceptions of learners on their use of listening strategies. There are three research objectives that can derive from this study which are;

- 1) to investigate learners' perceptions on the use of bottom-up strategies in listening.
- 2) to determine learners' perceptions on the use of top-down strategies in listening.
- 3) to find out a relationship between bottom-up and top-down strategies in listening.

Based on the stated research objectives, this study is specifically done to answer the following questions;

- 1) How do learners perceive the use of bottom-up strategies in listening?
- 2) How do learners perceive the use of top-down strategies in listening?
- 3) Is there a relationship between bottom-up and top-down strategies in listening?

Literature Review

Bottom-Up and Top-Down Listening Strategies

According to Ardini (2015) and Zilola (2022), bottom-up listening strategy refers to someone who decodes the individual sounds and words to build meaning from the ground up. Meanwhile, a top-down strategy refers to using background information, knowledge, context and predictions to understand and interpret auditory information.

Bottom-Up Strategy in Listening

As bottom-up strategy refers to someone who decodes individual sounds, words, and phrases to construct the meaning from the auditory input, a bottom-up strategy is essential for recognising and processing the linguistic elements (Flowerdew & Miller, 2005).

There are a few benefits of bottom-up strategy which are: accuracy and details, vocabulary and grammar development, phonological awareness, and negotiation for meaning. According to Rost (2013), bottom-up strategy helps listeners to accurately perceive and understand speakers' words and sounds. This is crucial for precise understanding or comprehension. Furthermore, receivers or listeners can also improve their vocabulary and grammar skills by implementing this strategy which is essential for effective communication (Graham & Macaro,

2008). Field (2008) stated that bottom-up strategy enhances phonological awareness. Therefore, it helps the listeners or receivers to recognise and differentiate between similar-sounding words and phrases. Rost (2013) also mentioned that this strategy will make listeners to actively engage with the speaker or the content to clarify and understand specific words or phrases. This may include a few ways such as asking for confirmation, repetition or clarification.

However, there are a few limitations to this strategy; cognitive load and lack of contextual understanding. According to Lynch and Mendelsohn (2002), processing someone's sounds and words can be cognitively demanding, especially for non-native receivers or listeners. This may lead to information overload. Moreover, receivers or listeners who focus solely on bottom-up strategy may miss important contextual cues as they struggle to understand the overall message of a conversation or text (Goh, 2000).

Top-Down Strategy in Listening

Usually, top-down listening strategy involves using prior knowledge, context, and expectations to understand or make sense of auditory information. Receivers or listeners will use their knowledge of the world or linguistics cues to predict what they will hear and fill in gaps in comprehension (Vandergrift, 2004). This strategy is useful when listeners or receivers encounter any unfamiliar words, vocabulary or complex sentence structures so they can rely on their understanding of the context to infer meaning.

There are a few benefits of using top-down strategy; contextual understanding, predictive skills and handling ambiguity. Based on the research conducted by Field (2008), this strategy helps receivers or listeners understand the context or meaning of the conversation or text. Thus, it will enhance the overall comprehension. Moreover, Goh (2000) stated that receivers or listeners who use this strategy will be better at predicting what they will hear. Therefore, it can improve their ability to remember and process information. Lastly, this strategy also allows receivers or listeners to manage ambiguity or unclear information by using their background knowledge and expectations (Richards, 2008).

However, this strategy also has potential limitations which are over-reliance on context, and cultural and linguistic biases. According to Lynch and Mendelsohn (2002), those who really rely on this strategy may miss important details or misunderstand some specific information. This is due to incorrect predictions. Moreover, this strategy can be influenced by cultural and linguistic biases as well. Therefore, it may lead to misinterpretation and misunderstanding in cross-cultural communication (Buck, 2002).

Listening Strategies

Listening strategies are approaches or techniques that receivers or listeners use to enhance their understanding or comprehension of spoken languages. According to Rost (2013), listening strategies are defined as “the mental and behavioural processes that receivers or listeners use to construct meaning from auditory input.” Listening strategies can be classified into three categories: cognitive, metacognitive and social or affective strategies. However, this study focuses on one category only which is cognitive. According to Vandegrift and Goh (2012), “cognitive strategies involve the processes listeners use to understand and process the language they hear such as repetition, summarising or using imagery.” There are three

types of cognitive which are bottom-up, top-down and translation. However, researchers only chose two types of cognitive which are bottom-up and top-down listening strategies for the purpose of this study.

Past Studies on Listening Strategies

Many studies have been conducted to investigate the depth of learners' listening comprehension using the top-down and bottom-up strategies. A research by Mado et al. (2024), explored on the strategies that teachers use when teaching listening skills to EFL learners. A qualitative descriptive method was applied in a semi-structured interview among three teachers that taught twelfth-grade high school learners at SMA Negeri I Paleleh, Indonesia. Among the aims of the research were to identify how they used bottom-up and top-down listening processing strategies and to explore the advantages and disadvantages of using the two strategies. Findings showed that the teachers expressed mutual agreement that it is possible to use both bottom-up and top-down strategies in one listening session to encourage a more comprehensive listening experience. The research then found out that this experience would take more classroom time since a comprehensive listening allowed a more proactive discussion and sharing thoughts of the topic between the learners and instructor. Next, a study by Manihuruk and Sidabutar (2022), investigated that whether or not the bottom-up and top-down strategies had a major impact on learners' listening skill. A random sampling of 60 third semester students of HKBP Nommensen Pematangsiantar University, Indonesia was selected and divided into experimental and control groups. This research was conducted quantitatively for experimental research. The experimental group were trained to use the bottom-up and top-down strategies while the control group were taught using the conventional method without using the top-down and bottom-up strategies. After evaluating the pre-test, treatment and post listening test for both groups, the study found that the experimental group showed significant improvement in their listening test scores while the control group displayed average overall scores, which indicated that the top-down and bottom-up strategies play a significant role in improving learners' listening skill compared to conventional methods.

A similar research done by Chen (2020), to determine the effectiveness of bottom-up, top-down and interactive processing towards learners' listening comprehension. This research was conducted using 3-phase lessons involving bottom-up listening, top-down listening, and interactive listening process, involving 20 pre-university ESL learners of low-level language proficiency. The first phase of the lesson plan used the bottom-up processing to test the learners' listening skills that focused more on vocabulary comprehension. The second phase then used top-down processing, where the learners derived information, discovered meaning, and predicted keywords from the text. The last phase, interactive processing, required the learners to create questions and dialogue based on the information retrieved. After the five-month research cycle, findings reported that the learners scored well in the post-test and that they displayed confidence in attempting listening tasks. The study then found that the pre-taught vocabulary and activation of background knowledge in the bottom-up and top-down listening strategies had helped the learners' familiarity with the recorded speaker's accent and reading speed through repeated listening.

The findings from the research above implied the necessity to incorporate bottom-up and top-down strategies to improve learners' listening comprehension. In the current study, apart

from investigating learners' perceptions on the use of bottom-up and top-down strategies, this study also finds out the relationship between bottom-up and top-down strategies in listening comprehension. Incorporating these strategies in listening lessons, particularly for undergraduate ESL learners, it can create a more comprehensive listening experience that might help them beyond classroom lessons, like building self-confidence when conversing in public.

Conceptual Framework

Figure 1 presents the conceptual framework of the study. In language learning, many assume that listening skills are the easiest to acquire (Rahmat et al., 2022). Nevertheless, language instructors will agree that when it comes to listening for information, language learners face challenges. This study explores the bottom-up and top-down listening strategies by Berry and Murphy (1986) to merge with the sub-strategies presented by Tuyen, An and Hong (2020). Bottom-ups are used through sub-strategies such as (i) negotiation for meaning, (ii) fluency-making, and (iii) word-oriented. Top-down are used through sub-strategies such as (i) scanning, (ii) getting-the-gist, (iii) non-verbal, and (iv) less-active listener.

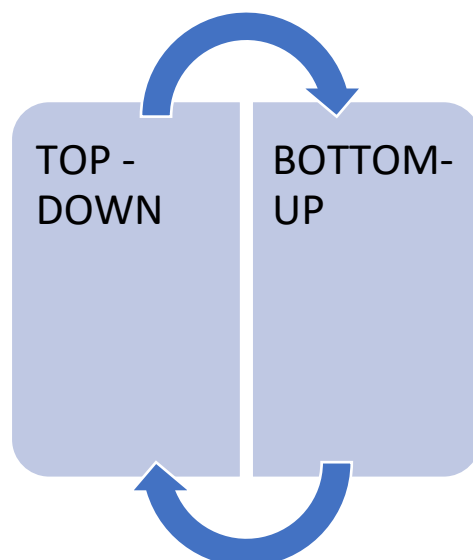


Figure 1- Conceptual Framework of the Study
Relationship between Top-Down and Bottom-Up Strategies in Listening

Methodology

This quantitative study was conducted to explore listening strategies for language learning among undergraduates. A purposive sample of 151 learners who enrolled for a diploma listening course responded to the survey. The instrument used is a 5 Likert-scale survey and rooted from Derry and Murphy (1986) to reveal the variables in table 1 below. The survey has 4 sections. Section A has items on demographic profile. Section B has 15 items on the bottom-up listening strategies as Section C has 14 items elicited on the top-down listening strategies. All in all, the questionnaire which was adapted and adopted has a total of 29 questions as depicted in Table 1 below:

Table 1

Distribution of Items in the Survey

SECTION	MAIN CATEGORY Derry & Murphy (1986)	SUB-CATEGORY Tuyen et.al (2020)	ITEM	TOT	
B	BOTTOM-UP	Negotiation for meaning	5	15	.79
		Fluency-Maintaining	6		
		Word-Oriented	4		
C	TOP-DOWN	Scanning	4	14	.81
		Getting-the-gist	4		
		Non-Verbal	3		
		Less-Active Listener	3		
				29	.88

Table 1 also reported the reliability of the survey. The analysis shows a Cronbach alpha was done individually for each variable. SPSS analysis revealed a Cronbach alpha of .79 for Section B - bottom-up, a Cronbach alpha for Section C of .81., thus, revealing a good reliability of the instrument chosen (Nunnally & Bernstein, 1994). Further analysis using SPSS was done to present findings to answer the research questions for this study with both descriptive (mean and standard deviation) and inferential (correlation) statistics to address the research questions for this particular study.

Findings*Demographic*

Based on Table 2, it was reported that a total of 39% male respondents and the remaining 61% comprises female respondents.

Table 2

Gender

1	Male	39%
2	Female	61%

As for Discipline, this study has categorised 3 main disciplines namely Science and Technology, Social Science, and Business and Management. The highest number of respondents are from Business and Management (55%), followed by Science and Technology (28%) and Social Science (17%). These numbers are tabulated in Table 3.

Table 3

Discipline

1	Science and Technology	28%
2	Social Science and Humanities	17%
3	Business and Management	55%

This study also was set to identify the learners' perceived English proficiency. As illustrated in Table 4, half of the learners perceive they have an average level of English proficiency. While another half of the learners regard themselves as having above average level of English proficiency. However, a minority of 1% of the learners from the half categorise themselves as having weak proficiency in the language.

Table 4
English Proficiency

1	weak	1%
2	average	50%
3	Above average	39%
4	Good	10%

As part of the demographic questions, the questionnaire identified the respondents' preferred listening activities.

Table 5
Listening Activity preferred

1	Short stories	42%
2	Short information (listening test)	46%
3	Face-to-face oral presentation	12%

Table 5 illustrates the main three listening activities and the most preferred activity is listening to short information (listening test) with 46%, short stories with 42% and the least preferred listening activity is face-to-face oral presentation with 12%.

Table 6
Difficulties of listening elements

1	Content	11%
2	Language used (accent, slang, dialect)	58%
3	Vocabulary	31%

It was also found from the demographic section that respondents find it most difficult to understand listening audio with 58% agreeing on the language used (accent, slang, and/ or dialect). The second element that makes listening harder is vocabulary used with 31% of them agreeing to this and the content of listening activities are identified as the least difficult element in understanding a listening text with 11% of them agreeing to this.

Findings for Bottom-Up

This section presents data to answer research question 1- How do learners perceive the use of bottom-up strategies in listening? In the context of this study, bottom-up strategies are measured by (i) negotiation for meaning, (ii) fluency-making, and (ii) word-oriented.

Table 7

Mean for (i) Negotiation for Meaning While listening strategies (NFM)

	Mean
NFMQ1I ask for repetition when I can't understand what the speaker has said.	3.0
NFMQ2I make a clarification request when I am not sure what the speaker has said	2.9
NFMQ3I ask the speaker to use easy words when I have difficulties in comprehension.	2.7
NFMQ4I ask the speaker to slow down when I can't understand what the speaker has said	2.7
NFMQ5I make clear to the speaker what I haven't been able to understand	2.8

Based on the table above, learners consider applying bottom-up strategies in listening as actively taking part in the negotiation for meaning when they are having trouble understanding. This is shown by the actions they described; a mean score of 3.0 shows that they often ask for more information when they don't understand what was said. They also ask for more information (mean score of 2.9) and let the speaker know they do not understand (mean score of 2.8). However (both mean scores of 2.7), they are a little less likely to tell the speaker to use easier words or talk more slowly. Learners also work on understanding speech easily by constantly interacting and explaining any questions they have. This makes it easier for them to follow the talk smoothly.

Table 8

Mean for (ii) Fluency-maintaining strategies (FM)

	Mean
FMQ1 I pay attention to the speaker's intonation (the way a speaker's voice goes up or down as they speak).	4.0
FMQ2I pay attention to the speaker's rhythm and intonation.	4.0
FMQ2I send continuation signals to show my understanding in order to avoid communication gaps	3.4
FMQ4I use circumlocution to react to the speaker's utterance when I don't understand his/her intention well	3.5
FMQ5I ask the speaker to give an example when I am not sure what he/she has said.	3.3
FMQ6I pay attention to the speaker's pronunciation	4.1

According to the findings on fluency-maintaining strategies (FM), learners pay considerable attention to the speaker's intonation and rhythm (the way a speaker's voice goes up or down as they speak), with a mean score of 4.0. While for a mean score of 3.4, learners use continuation signals to demonstrate knowledge and eliminate communication gaps. When they do not fully comprehend the speaker's purpose, they utilise circumlocution with a mean score of 3.5. They also ask for examples when they do not understand what was stated (mean score of 3.3). These findings indicate that, although learners pay attention to intonation and rhythm, their use of tactics such as continuation signals, circumlocution, and asking for examples is limited.

Table 9

Mean for (iii) Word-Oriented Strategies (WO)

	Mean
WOQ1I pay attention to the words which the speaker slows down or emphasizes.	3.8
WOQ2I guess the speaker's intention by picking up familiar words.	3.7
WOQ3I try to catch every word that the speaker uses.	4.2
WOQ4I pay attention to the first word to judge whether it is an interrogative sentence or not	3.9

Based on the above table, learners have mostly good thoughts about using bottom-up techniques in listening, which focus on words. They pay attention when the speaker speeds up or emphasises words, (mean score of 3.8). They got a mean score of 3.7 for guessing out what the speaker meant by picking up familiar words. They work hard to understand every word the speaker says (mean score of 4.2), which shows that they pay close attention to the details. They also look at the first word to see if it's an interrogative phrase, which gets them a mean score of 3.9. Most of the time, learners use word-oriented methods to figure out what the speaker is saying.

Findings for Top-Down

This section presents data to answer research question 2 - How do learners perceive the use of top-down strategies in listening? In this study, top-down strategies are measured by:

- (i) Scanning Strategies (SC)
- (ii) Getting-the-gist Strategies (GIST)
- (iii) Non-verbal Strategies while Listening (NV)
- (iv) Less-active-listener Strategies (LESS)

Table 10

Mean for (i) Scanning Strategies (SC)

	Mean
SCQ1 I pay attention to the subject and verb of the sentence when I listen.	4.0
SCQ2 I especially pay attention to the interrogative when I listen to WH-questions.	4.0
SCQ3 I pay attention to the first part of the sentence and guess the speaker's intention.	3.9
SCQ4 I try to catch the speaker's main point.	4.4

Table 10 displays the mean scores for scanning strategies (SC) used in top-down listening, including four items that evaluate learners' SC during listening. Majority of them demonstrated positive responses in this section. For instance, most learners (M=4.4) agreed that they aimed to identify the speaker's main point while listening. Additionally, items 1 and 2, both have a mean score of 4.0, showing that learners focused on the subject and verb of the sentence when listening and they paid close attention to the interrogative when listening to WH-questions. Lastly, for item number 3, the mean score is also showing a positive response (M=3.9), reflecting that the learners paid attention to the first part of the sentence

to guess the speaker's intention. Overall, the findings suggest that identifying the speaker's main point is a crucial scanning strategy in listening.

Table 11

Mean for (ii) Getting the Gist Strategies (GIST)

	Mean
GISTQ1 I don't mind if I can't understand every single detail.	2.3
GISTQ2 I anticipate what the speaker is going to say based on the context.	3.8
GISTQ3 I guess the speaker's intention based on what he/she has said so far	3.7
GISTQ4 I try to respond to the speaker even when I don't understand him/her perfectly	3.5

Table 11 presents the mean scores for getting the gist strategies (GIST) in listening activities. Four questions were designed to identify these strategies among learners. The data reveal that the highest mean value (M=3.8) is for item number 2, indicating that learners agreed that they tried to anticipate the speaker's words based on the context. Item number 3 has a slightly lower mean value as compared to item number 2 (M=3.7). This suggests that the learners also tried to guess the speaker's intention based on what he/ she has said so far. The lowest mean score recorded is 2.3 and it is for the first item, where the learners disagreed with not being concerned about understanding every single detail of the listening contexts. Overall, the results indicate that the learners highly value comprehending the entire listening contexts.

Table 12

Mean for (iii) Non-verbal Strategies while Listening (NV)

	Mean
NVQ1 I use gestures when I have difficulties in understanding an oral presentation	3.2
NVQ2 I pay attention to the speaker's eye-contact, facial expression and gestures in oral presentation	3.5
NVQ3 I pay attention to the speaker's intonation	3.9

Table 12 shows the mean scores for non-verbal strategies used by the learners while listening (NV) to an oral presentation. This section includes three questions that assess both the non-verbal strategies learners focused on and those they used to understand the oral presentation. The highest mean score (M=3.9) is for the last item, where the learners agreed that they paid attention to the speaker's intonation. Additionally, the learners also observed other non-verbal cues such as the speaker's eye-contact, facial expression and gestures (M=3.5). Lastly, for the first item, "I use gestures when I have difficulties in understanding an oral presentation", recorded the mean score of 3.2. Overall, the data indicate that the learners do rely on non-verbal strategies while listening.

Table 13

Mean for (iv) Less-active-listener Strategies (LESS)

	Mean
LESSQ1 I try to translate into native language little by little to understand what the speaker has said	3.6
LESSQ2 I try to look for meaning of difficult words as I listen	3.9
LESSQ3 I only focus on familiar expressions	3.3

Table 13 provides data on less-active-listener strategies (LESS). In top-down strategies of listening, listeners also apply LESS, which is evident from the three items listed above. For this section, item number 2 has the highest mean score ($M=3.9$), indicating that most learners tried to discern the meaning of difficult words while listening. Item number 1 also suggests that the learners agreed they attempted to translate into their native language little by little to understand what the speaker has said as it recorded the mean value of 3.6. Finally, the lowest mean value ($M=3.3$) is for the final item, "I only focus on familiar expressions". All in all, the findings for this section reveal that the learners mostly focus on understanding difficult words as they listen.

Findings for Relationship between Bottom-Up and Top-Down Strategies in Listening

This section presents data to answer research question 3 - Is there a relationship between bottom-up and top-down strategies in listening? To determine if there is a significant association in the mean scores between bottom-up and top-down strategies in listening, data is analysed using SPSS for correlations. Results are presented separately in the table below.

Correlations

		BOTTOM_UP	TOP_DOWN
BOTTOM_UP	Pearson Correlation	1	.638**
	Sig. (2-tailed)		.000
	N	151	151
TOP_DOWN	Pearson Correlation	.638**	1
	Sig. (2-tailed)	.000	
	N	151	151

** . Correlation is significant at the 0.01 level (2-tailed).

Table above shows there is an association between bottom-up and top-down strategies in listening. Correlation analysis shows that there is a high significant association between bottom-up and top-down strategies in listening ($r=.638^{**}$) and ($p=.000$). According to Jackson (2015), coefficient is significant at the .05 level and positive correlation is measured on a 0.1 to 1.0 scale. Weak positive correlation would be in the range of 0.1 to 0.3, moderate positive correlation from 0.3 to 0.5, and strong positive correlation from 0.5 to 1.0. This means that there is also a strong positive relationship between bottom-up and top-down strategies in listening.

Conclusion

Summary of Findings and Discussions

In this study where bottom-up strategies were measured by negotiation for meaning, fluency-making, and word-oriented, it can be concluded that for negotiation of meaning, learners consider applying bottom-up methods as they listen. This was done through active participation in the negotiation of meaning when having understanding issues. Rost (2013) supported this as this strategy of actively engaging with the speaker or the content will help listeners to clarify and understand specific words or phrases. Meanwhile, for fluency-making, the overall findings portray that learners' use of tactics (continuation signals, circumlocution, and asking for examples) is limited even after their focus is highly on intonation and rhythm. Lastly, for word-oriented strategies, learners are showing positive attributes about using bottom-up techniques in listening, which focus on words.

For top-down strategies in listening where it was measured by scanning, it was found that the learners claim that identifying the speaker's main point is a crucial strategy in listening. For getting-the-gist (GIST) in listening activities, the results of this study indicate that comprehending the entire listening context is highly valued by the learners. Next is on non-verbal strategies while listening (NV), the learners greatly hook-on non-verbal strategies while listening and finally for less-active-listener strategies (LESS), the findings reveal that the learners mostly focus on understanding difficult words as they listen.

The findings of this study also showed that there is a high significant association between these two strategies in listening; bottom-up and top-down. This is in line with the study done by Manihuruk and Sidabutar (2022), whereby it was found that there was a significant effect of using top-down and bottom-up strategies on learners' listening skills. Since top-down and bottom-up listening strategies have a strong positive relationship, they need to be applied by learners in tandem to make listening activities effective, especially to those learning a language.

Contribution

This study is greatly significant to people in higher learning education, specifically instructors and learners as this study directly related to teaching and learning listening of the language. Theoretically, these two listening strategies; bottom-up and top-down play complementary roles in higher education by fostering both detailed comprehension and contextual understanding. Bottom-up listening strategy ensures accurate comprehension of academic discourse, while top-down listening strategy encourages critical thinking and the ability to synthesise information. Instructors can integrate both strategies to support students' linguistic precision and critical thinking, enhancing overall academic performance and classroom engagement as these two strategies have positive relationship. Together, they help students bridge the gap between new and existing knowledge, making learning more dynamic and contextually relevant.

Pedagogical Implications and Suggestions for Future Research

Learners are able to properly interpret spoken language and comprehend the speaker's purpose when they achieve a balance between different teaching strategies. Future research could focus on analysing qualitative data to investigate the effectiveness of integrating both top-down and bottom-up strategies in enhancing listening skill among the learners.

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