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The Effect of Task-Based Embedded Instruction on Listening Comprehension and Metacognitive Strategy Awareness in Listening of Iranian EFL Learners

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Abstract

This study sought to empirically investigate the effects of task-based instruction on the listening comprehension and metacognitive strategy awareness of intermediate English as a Foreign Language (EFL) students in Iran. A sample of 60 male EFL learners was selected based on their performance on a proficiency test. Following a pre-test assessing their listening skills and the completion of a metacognitive awareness questionnaire, participants were assigned to either an experimental group, which received task-based instruction, or a control group that underwent traditional listening instruction. The experimental group was engaged in task-based teaching through three designated tasks: Input-driven tasks, Pedagogical-driven tasks, and Performance-based tasks, whereas the control group experienced conventional instruction methods. After the instructional intervention, all participants undertook a listening post-test alongside a metacognitive awareness questionnaire. A thorough analysis of the data, conducted using independent sample t-tests, indicated a significant positive effect of task-based instructional methods on both the listening comprehension and metacognitive strategy awareness of intermediate EFL learners in Iran.

Keywords: listening comprehension, metacognitive strategy awareness, task-based teaching

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1. Introduction

Listening is a fundamental language skill that young learners acquire, typically preceding the development of speaking, reading, and writing abilities. Most children can cultivate their listening skills organically, without the necessity for formal instruction (Siegel, 2015). In contrast, second language (L2) listening poses a complex and considerable challenge, imposing significant cognitive demands on language learners (Satori, 2022).

Listening is an active, intentional process that involves understanding spoken language (Brown, 2001). It is a receptive skill, similar to reading, requiring individuals to absorb and interpret the information presented. Therefore, it is not uncommon for people to regard listening as a passive skill (Siegel, 2014). However, this conventional viewpoint overlooks the fact that listening requires active engagement. Listeners must connect what they perceive with their existing knowledge base. As learners integrate the information they hear with their own thoughts and experiences, listening can be viewed as an act of constructing meaning within the mind (Zhang & Shen, 2023).

In recent years, there has been a shift in listening pedagogies from repetitive exercises or traditional question-and-answer formats to more communicative methodologies, such as Communicative Language Teaching (CLT) and Task-Based Language Teaching (TBLT) (Chou, 2016). These approaches prioritize interactive listening and verbal communication through a structured sequence of tasks that include pre-task, during-task, and post-task phases, all aimed at achieving tangible learning outcomes for students. Within the context of L2 or foreign language (FL) instruction, it is widely recognized that the application of learning strategies can significantly aid and enhance the educational process (Cohen, 2014). TBLT promotes syllabi centered on the learning process and enriches learners' authentic language utilization through communicative tasks (Norris, 2011). Recent research identifies three key attributes of TBLT pertinent to educational practice: alignment with a learner-centric educational philosophy (Ellis, 2003), comprising elements such as goals, procedures, and specific outcomes (Murphy, 2003), and endorsing content-based meaningful activities over linguistic structures (Gass et al., 2011). Task-based instruction (TBI) has been strongly endorsed as an alternative to traditional language teaching methods in language classrooms,

emphasizing functional communicative language application (Ellis, 2006). Ellis (2009) posits that TBI can serve as both an input provider and an output prompter. Similarly, Shehadeh et al. (2018) contend that tasks engage language learners in understanding, producing, and manipulating language while prioritizing meaning over form.

Another crucial aspect is the significance of metacognitive strategies in L2 listening. It is widely accepted that explicit instruction in general learning strategies can enhance listening skills, defined as "approaches or methods used to tackle a problem or task, operational modes for achieving a specific goal, planned strategies for managing and manipulating particular information" (Brown, 2007, p. 104). In the same vein, Richards and Schmidt (2002) delineate metacognitive strategy as a classification of learning strategy that encompasses the act of "contemplating the cognitive processes, overseeing learning as it unfolds, and assessing learning post completion" (p. 329). Metacognitive strategies include activities such as planning, note-taking, self-monitoring, selective attention, parsing, and so forth (Wang, 2015).

The definition and evaluation of metacognitive awareness relating to listening strategies have been thoroughly examined, taking into account five core components: problem-solving, planning-evaluation, mental translation, person knowledge, and directed attention (Vandergrift et al., 2006). Metacognitive strategies are described as "superior executive abilities that may encompass planning, monitoring, or assessing the effectiveness of an activity" (O'Malley & Chamot, 1990, p. 44), enabling learners to control, direct, regulate, and guide their learning processes (Chou, 2016). Nonetheless, it is essential to emphasize the development of instructional models focused on metacognition that foster an appropriate understanding of metacognitive knowledge and enhance the effective application of metacognitive strategies.

2. Literature Review

2.1. TBLT and Listening Comprehension

TBLT represents a novel approach to language instruction that offers abundant opportunities for the acquisition of second and foreign languages. It has garnered increasing interest due to its emphasis on meaningful tasks that prompt learners to utilize their cognitive and linguistic resources to engage in real-life activities, as highlighted by Ellis (2003). The focus on tasks'

life-like qualities makes TBLT an effective method for teaching, assessing, and researching learning processes (Ahmadian, 2016).

While there exist multiple interpretations of TBLT, a common understanding defines a 'task' as an activity oriented toward specific outcomes, motivating learners to establish connections between their learning and practical application outside the classroom (Norris, 2011). Tasks are distinct from exercises in that they prioritize communicative meaning and content over linguistic form and meaning, facilitating the internalization of linguistic skills for future use (Ellis, 2009). Previous studies on task-based approaches have explored the impact of language complexity, accuracy, and fluency on attentional resources during task performance (e.g., Ellis, 2000), as well as how different task types influence second language acquisition (SLA).

The evolution of TBI has shifted focus from performance aspects like accuracy and fluency to exploring various task types and their effects on language learning processes (e.g., Ellis, 2009; Foster & Skehan, 1999). This transition has led TBLT to prioritize learner-centered approaches over traditional teacher-centered methods, emphasizing the learner's central role in all aspects of language teaching, from planning to evaluation (Shehadeh, 2018).

In the exploration of task-based listening research, it is crucial to initially delineate the various types of listening tasks. These can be broadly classified into one-way and two-way listening tasks. One-way listening tasks necessitate minimal teacher intervention and limited interaction with speakers, primarily aimed at comprehending discourse for specific communicative purposes (Goh & Vandergrift, 2021). The results of such listening activities should closely resemble authentic listening situations, including tasks like note-taking or filling in missing information. Although one-way listening tasks are more commonly encountered, it is imperative to recognize the significance of interactive listening, which entails reciprocal interactions that emulate real-world communication, wherein both listening and speaking roles are fluid and subject to time constraints. Interactive listening is defined by contextual elements that relate to the goals and intentions of communication, thereby facilitating effective and appropriate meaning delivery and exchange (Rost, 2013). However, within the educational context of interactive listening, the focus is often skewed toward speaking competence rather

than actual listening skills (Field, 2008). Rost (2013) argues that not all forms of interaction or collaborative tasks are guaranteed to improve listening abilities. Consequently, it is necessary to investigate the relationship between one-way and two-way listening tasks and their influence on listening performance.

A conventional task-based listening lesson is typically structured into three primary stages: the pre-listening task (pre-task), the listening activity (during-task), and the post-listening task (post-task). Nevertheless, Norris (2011), in synthesizing insights from various sources related to TBLT (e.g., Chaudron et al., 2005; Ellis, 2006), asserts that a task-based lesson generally comprises, though not exclusively, four fundamental phases: task input, pedagogical task work, target task performance, and task follow-up. The task input phase familiarizes learners with authentic communication tasks utilizing visual and/or auditory stimuli to foster motivation, activate prior knowledge, and create connections between the target language and its contexts. Following this, during the pedagogical task work phase, tasks are dissected into manageable steps, elaborated upon, and modified by the instructor to enhance learners' cognitive awareness of new language structures and their practical application for specific communicative functions (Ellis, 2006; Norris, 2011). Input enhancement strategies, such as intensive listening or textual emphasis, may be prioritized during this stage. Norris highlights the necessity for educators to ensure that learners understand the framework, scaffolding, and objectives of the task to guide their progress effectively. It is imperative that teachers oversee both the processes involved in the task and the learners' language use, providing feedback as needed. In the target task performance phase, learners participate in the practical application of language for genuine communication. In listening task contexts, comprehension can be developed through communicative engagements such as role-plays, debates, or oral presentations. Learners utilize their linguistic and thematic knowledge, along with their cognitive and strategic skills, to successfully complete the task (Bachman & Palmer, 1996). Ultimately, the task follow-up stage entails a reflection on the tasks, reinforcing performance in relation to any shortcomings in language, content, or understanding of the tasks, with the objective of refining the task (Norris, 2011).

2.2. Metacognitive Listening Instruction

Metacognitive listening instruction (MCI) was introduced by Vandergrift (2007) and Goh (2008) as an evolution of Strategy-Based Instruction (SBI). This metacognitive framework prioritizes the development of learner independence, self-assessment, self-management, and self-regulation. The importance of this instructional method stems from its ability to provide structured support to learners, facilitating sustained improvement in listening skills through innovative, process-oriented tasks both in and out of the classroom. Consequently, a holistic approach to teaching listening is employed.

Learning strategies can be categorized into two main types: metacognitive and cognitive strategies. As highlighted by Oxford (2011, p. 44), metacognitive strategies serve a role akin to that of a "construction manager," overseeing the direction, organization of resources, planning, coordination, scrutiny, and evaluation of one's progress in acquiring an L2. Vandergrift et al. (2006), who developed the Metacognitive Awareness Listening Questionnaire (MALQ) to measure L2 learners' metacognitive awareness and their perceived use of listening strategies, identify five categories of metacognitive strategies: (1) planning-evaluation, (2) directed attention, (3) person knowledge, (4) mental translation, and (5) problem-solving. The application of metacognitive strategies requires considerable cognitive involvement to comprehend the target language and complete associated tasks. Importantly, there has been a shift from merely identifying the most effective strategy for listening comprehension (e.g., Osada, 2001) to emphasizing strategy-oriented instruction (SBI) within listening pedagogy (e.g., Graham & Macaro, 2008; Rahimirad & Shams, 2014). Field (2008) proposes two methods for strategy training implementation. One common approach, prevalent in SBI studies, involves cultivating awareness through teacher guidance and illustrating strategy selection using brief authentic excerpts. An alternative method is integrating strategy introduction and practice within a broader listening task, known as "embedded instruction" in O'Malley and Chamot's (1990, p.153) terminology. Essentially, metacognitive instruction is interwoven into task-based lessons to foster learners' metacognitive awareness of listening (Goh, 2023). By integrating a task-based educational framework into English listening classes, the task sequences, ranging from predicting topics, strategic planning, processing linguistic input, utilizing strategies, and monitoring to providing feedback and self-assessment, present a framework coherent with metacognitive processing in strategy acquisition.

It is crucial to highlight that, despite the abundance of literature on TBLT in listening, limited research has delved into employing task-based embedded instruction to enhance awareness of metacognitive strategies for listening comprehension. Moreover, as Oxford (1990, p. 561) points out, "Students lacking metacognitive strategy awareness are essentially learners devoid of guidance or opportunities for reflecting on their progress, achievements, and future learning trajectories." Given the gap mentioned above, the following research questions were proposed:

RQ1: Does TBI have any statistically significant effect on the listening comprehension ability of Iranian intermediate EFL learners?

RQ2: Does TBI have any statistically significant effect on the metacognitive strategy awareness of Iranian intermediate EFL learners?

3. Method

3.1. Participants

To carry out this investigation, a total of 100 male EFL learners aged between 14 and 25, enrolled at Pardis and Shokouh Language Institutes in Hamadan, Iran, were chosen using convenience sampling. To ensure sample homogeneity, the Oxford Placement Test (OPT) was administered. This test identified 60 participants from the initial 100, whose scores deviated one standard deviation above and below the mean (Mean ± SD), while excluding 40 individuals with exceptionally high or low scores. The remaining 60 candidates were divided into two groups for distinct instructional approaches, randomly assigned to either the experimental group (task-based instruction) or the control group.

3.2. Instruments

3.2.1. OPT

The OPT is a widely recognized assessment tool for determining the language proficiency level of ESL or EFL learners. The test sample in this study is split into two sections: Part A consisting of 40 items and Part B consisting of 20 items. Part A includes 25 pictorial multiple-choice questions, 15 multiple-choice cloze text questions, and 20 grammatical multiple-choice items.

Part B comprises 10 cloze text multiple-choice questions and 10 vocabulary multiple-choice questions, with the entire test lasting for 50 minutes.

3.2.2. Listening Pre-Test and Post-Test

For both pre- and post-listening comprehension assessments, the listening section of the TOEFL Junior Standard test was utilized. To ensure the reliability of these assessments, Cronbach's alpha internal consistency test was employed, yielding $\alpha = .74$ for the pretest and $\alpha = .72$ for the post-test.

3.2.3. Metacognitive Awareness Listening Questionnaire

The MALQ was developed to assess the metacognitive strategies utilized by L2 learners in listening, as well as their perceptions as L2 listeners (Vandergrift et al., 2006). This instrument consists of 21 items divided into five domains of metacognitive awareness that pertain to L2 listening: problem-solving, planning and evaluation, mental translation, directed attention, and self-knowledge. In a study conducted by Rahimi and Katal (2013) within an Iranian context, the authors reported a Cronbach alpha coefficient of 0.76 for this questionnaire, suggesting a robust level of internal consistency.

3.3. Procedures

To conduct this investigation, the following procedures were implemented, which can be categorized into three primary phases: (i) pre-test, (ii) experimentation, and (iii) post-test. Prior to the instructional phase, an OPT was administered to a sample of 100 learners to ensure there were no significant differences among the participants. Students were informed about the study's conduct across various groups. After conducting the homogeneity assessment, the data were analyzed, leading to the selection of 60 learners whose scores fell within one standard deviation above and below the mean to participate in the study. The participants were then evenly distributed into an experimental group receiving task-based instruction and a control group.

Following the administration of the listening pretest and the MALQ, the participants' listening comprehension and metacognitive awareness regarding the use of listening strategies were evaluated prior to the instructional intervention. After the pretests, the instructional

materials were provided to both the experimental and control groups. The learners were briefed on the instructional procedures before the sessions commenced. The instruction comprised seven sessions, each lasting 45 minutes, conducted three times per week over approximately three weeks. Both groups received identical materials, duration of instruction, and number of sessions; however, distinct methodologies were employed in three classes.

For the participants in the experimental group, task-based embedded instruction was carried out through three distinct tasks: 1. Input-driven tasks, 2. Pedagogical-driven tasks, and 3. Performance-based tasks. Specifically, students who underwent task-based instruction were first acquainted with the subject matter of the passage or dialogue, followed by the presentation of images or brief videos, accompanied by discussion questions relevant to the topic, serving as pre-tasks. This initial phase acted as the task input component, aimed at activating students' prior knowledge. Participants were prompted to connect pertinent target vocabulary with contextual elements and their previous learning experiences by sharing ideas, expressing opinions, and providing examples to both the class and the instructor.

After the pre-task phase, participants engaged in a one-way pedagogical listening task. This type of task encompasses various forms, including restoration, sorting, comparison, matching, jigsaw tasks, narrative completion, embellishment, evaluation, and reconstruction. Given that the participants possessed only an intermediate level of English proficiency, careful selection of tasks was necessary. Among the nine task types mentioned, those perceived to impose less cognitive load (Vandergrift & Goh, 2012) — specifically sorting, comparison, matching, and evaluation tasks — were deemed most appropriate for the participants.

For example, participants first engaged in sorting activities, using information from a text to order, classify, or rank items. Next, they discerned similarities and differences among multiple brief listening passages during comparison exercises. In matching assignments, they listened to a series of short texts and paired each with the most fitting topic provided. During evaluation tasks, participants assessed the accuracy, consistency, or discrepancies in the information conveyed through the audio. The listening segment was played twice: the first instance instructed participants to grasp the main ideas, note key terms, and establish connections between the context and the target language. In the second instance, participants

focused on details, adjusted interpretations, revised their responses, and reflected on their understanding. The third phase incorporated an interactive listening task, such as creative dictation, role-play simulation, discussions, role-play interviews, or debates. For instance, participants worked in pairs and were allotted 15 minutes to prepare a brief dialogue for presentation to the class.

Conversely, the control group was exposed to a different approach. Participants were instructed using the traditional method still prevalent in certain educational institutions in Iran. This involved playing the listening material once, followed by random requests for students to listen and repeat. Subsequent to practicing the material, participants responded to follow-up queries. This routine persisted for seven one-hour sessions across all groups. Following the intervention, all participants completed a listening post-test and the MALQ.

4. Results

4.1. Descriptive Statistics

The descriptive statistics pertaining to the participants' pre-test and post-test scores in the listening test for both the experimental and control groups are detailed in Table 1.

Table 1

Descriptive Statistics for the Experimental and Control Groups

	N	Mini.	Maxi.	Mean	Std. Dev.	Skewness		Kurtosis	
	Statis.	Statis.	Statis.	Statisti.	Statistic	Statis.	Std. Error	Statistic	Std. Error
Exp (listening pre-test)	30	10.00	17.00	13.9333	2.18037	-.294	.427	-1.009	.833
Exp (listening post-test)	30	14.00	20.00	17.4000	1.79271	-.229	.427	-.853	.833
Control (listening pre-test)	30	10.00	17.00	13.8333	2.19848	-.170	.427	-1.113	.833

Control (listening post-test)	30	11.00	17.00	14.0333	1.99107	-.105	.427	-1.078	.833
Valid N (listwise)	30								

Furthermore, Table 2 presents the descriptive statistics for the participants' pre-test and post-test scores concerning metacognitive awareness within the same groups.

Table 2

Descriptive Statistics for the Groups

	N	Mini.	Maxi.	Mean	Std. Dev.	Skewness		Kurtosis	
	Statistic	Statistic	Statis.	Statis.	Statis.	Statis.	Std. Error	Statis.	Std. Error
Exp(metacognitive pre)	30	30.00	58.00	44.0000	8.36660	.000	.427	-1.127	.833
Exp(metacognitive post)	30	36.00	80.00	52.6667	12.33815	.642	.427	-.486	.833
Control(metacognitive pre)	30	30.00	58.00	43.9333	8.39923	.015	.427	-1.146	.833
Control(metacognitive post)	30	30.00	58.00	43.9667	8.44652	.027	.427	-1.144	.833
Valid N (listwise)	30								

4.2. Normality of Distribution of Test Scores

It is essential for the distribution of scores related to the dependent variables to exhibit normality for each independent variable. To evaluate this assumption, both the Kolmogorov-Smirnov and Shapiro-Wilk tests were conducted. The findings from these tests indicate that the normality assumption for the test scores is upheld, as the results were non-significant ($P > .05$).

4.3. Homogeneity of Error Variances

In order to assess the homogeneity of variances, Levene's statistic was employed. This statistic examines the assumption that the error variance of the dependent variable remains consistent across groups. The outcomes of Levene's test were not significant for the listening pre-test (F = .02, Sig = .887, P > .05), the listening post-test (F = .29, Sig = .587, P > .05), the metacognitive pre-test (F = .003, Sig = .953, P > .05), and the metacognitive post-test (F = 3.965, Sig = .051, P > .05). Therefore, it can be inferred from these results that no significant differences exist between the variances of the groups.

4.4. Addressing H01 and RQ1

In relation to the first research hypothesis, which posits that task-based embedded instruction does not significantly influence listening comprehension ability, the descriptive statistics indicated a variance between the pre-test (M=13.93, SD=2.18) and post-test scores (M=17.40, SD=1.79) within the experimental group regarding listening capabilities. To assess the significance of this difference, a paired-samples t-test was conducted, and the results are detailed in Table 3.

Table 3

Paired Samples T-Test Between the Pre-test and Post-test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Task-based	-2.90	1.68	.308	-3.53	-2.26	-9.406	29	.000

The findings illustrated in Table 3 demonstrate that, with a 95% confidence level, a significant disparity exists in the mean scores of participants between the pre-test and post-test within the experimental group (t= -9.406, P<0.05). Additionally, as shown in Table 3, a noteworthy change was identified in the post-test scores for listening ability compared to the pre-test scores, leading to the rejection of the first research hypothesis. Furthermore, to evaluate

the existence of a significant difference between the experimental and control groups in the post-test (between-group difference), an independent samples t-test was performed. The results presented in Table 4 indicate that a significant difference was observed between the two groups in the post-test (t=6.164, P<0.05), confirming that the experimental group outperformed the control group in the post-test following the intervention.

Table 4

Independent Samples T-Test Between the Two Groups in the Post-test

	Between Group Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Task-based	2.567	1.224	.251	1.733	3.403	6.164	58	.000

4.5. Addressing H02 and RQ2

In relation to the second research hypothesis, which posits that task-based embedded instruction does not have a significant effect on metacognitive strategy awareness in listening among Iranian Intermediate EFL learners, the descriptive statistics indicated a discernible difference between the pre-test (M=44.00, SD=8.36) and post-test scores (M=52.66, SD=12.33) within the experimental group concerning learners' metacognitive awareness. To ascertain the meaningfulness of this difference, a paired-samples T-Test was conducted. The findings from this analysis are summarized in Table 5.

Table 5

Paired Samples T-Test Between the Pre-test and Post-test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Task-based	-5.76	3.62	.662	-7.121	-4.413	-8.710	29	.000

The results illustrated in Table 5 reveal, with 95% confidence, that a statistically significant difference exists in the mean scores of participants between the pre-test and post-test in the experimental group (t= -8.710, P<0.05). This indicates a notable increase in the post-test scores regarding the learners' metacognitive awareness compared to the pre-test scores, leading to the rejection of the second research hypothesis. Furthermore, to investigate whether a significant difference existed between the experimental and control groups in the post-test (between-group difference), an independent samples t-test was conducted. As demonstrated in Table 6, a significant difference was found between the two groups in the post-test (t=6.808, P<0.05), confirming that the experimental group outperformed the control group significantly following the instructional treatment.

Table 6

Independent Samples T-Test Between the Two Groups in the Post-test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Corpus-based metalinguistic explanations	5.93	4.24	.872	4.189	7.678	6.808	29	.000

5. Discussion

With regard to the first research question, the finding aligns with the conclusions drawn by various researchers (e.g., Buck, 2001; Chou, 2016; Newton & Nation, 2020) who determined that the integration of task-based embedded instruction can serve as a robust technique in listening instruction to enhance learners' comprehension. One potential rationale could be attributed to the fact that task-based embedded instruction appears to provide participants with an opportunity to effectively link phonemic sounds to their meanings, thereby evaluating their listening skills in real time. Over time, as the treatment sessions progressed, participants developed the capacity to automatize their phonological skills and students were able to concentrate on missing elements, facilitating their comprehension of the text and enabling them

to grasp its main points. Consequently, through repeated practice, their cognitive processing abilities were enhanced.

Field (2008) supports the argument that the TBLT approach enhances learners' procedural knowledge regarding strategy implementation—essentially, their practical understanding of "how"—more so than their declarative knowledge, which concerns a factual understanding of "what." Learners were guided to apply strategies for planning and establishing objectives pertinent to the task, utilize relevant information presented in tables or forms, connect applicable schemata to the task, and direct listeners' attention to specific aspects prior to engaging in the task. The listening exercises designed for the experimental group alleviated the cognitive load typically associated with the simultaneous application of multiple strategies during listening activities by enabling participants to practice the strategies beforehand, which likely facilitated more efficient strategy retrieval.

With respect to the second research question, the results align with those reported by scholars such as Vandergrift and Tafaghodtari (2010), Goh and Taib (2006), and Vandergrift (2007). This alignment suggests that task-based embedded instruction significantly affects the metacognitive strategy awareness related to the listening comprehension skills of Iranian EFL learners. This effect can be explained by the fact that through task-based embedded instruction, the students developed the capacity to actively monitor, regulate, and organize the auditory information they receive. As a result, this promoted the process of noticing among language learners, a concept extensively recognized within the field of SLA research, which is crucial for both uptake and the long-term acquisition of language (Schmidt, 1990). Drawing from Schmitt and Frota's (1986) perspective on noticing the gap, learners are encouraged to meticulously observe the differences between their interlanguage and the target language forms, thereby attending to subtle nuances in the input to effectively integrate it into their evolving interlanguage.

6. Conclusion

The outcomes of the analysis and interpretation of data indicated that the utilization of task-based embedded instruction had a noteworthy influence on individuals' listening comprehension proficiency and awareness of metacognitive strategies related to listening

comprehension. Wang (2016) emphasizes that metacognitive strategy awareness assists language learners in strategically planning, monitoring, and evaluating learning materials consciously. When students are equipped with the skills to plan, monitor, and evaluate their performance in a listening task, they are able to effectively control their own learning, leading to increased autonomy and competence, as highlighted by Vandergrift and Goh (2012) who point out that task-based embedded instruction equips language learners with the necessary knowledge and skills for the meaningful application of learning, enabling them to comprehend authentic texts beyond the classroom.

Based on the findings, it can be deduced that task-based embedded instruction offers language learners an opportunity to concentrate on the process rather than the end product. Participants in the experimental group received guidance on real-life listening scenarios, learning how to apply various strategies to effectively engage with the diverse types of listening situations that arise in real-world settings. Zhang and Shen (2023) elucidate that metacognitive strategy awareness aids students by enhancing their ability to retain incoming information, although an extended period of practice is required to enhance students' listening comprehension abilities when dealing with longer passages.

The current research carries implications for EFL instructors, textbook authors, and curriculum designers in Iran. Educators must recognize that integrating task-based embedded instruction fosters students' self-regulation and accountability for their own learning. Hence, it is imperative for educators, particularly those in Iran, to move from traditional product-oriented teaching methods in listening to process-oriented approaches that emphasize strategic listening, which holds greater promise for students' advancement.

Understanding the reasons behind varying levels of willingness among language learners to employ listening strategies in educational settings is crucial. In light of this, educators should explore the influencing factors that determine learners' readiness to utilize a range of listening strategies, while simultaneously working to eliminate barriers that impede students' willingness.

Textbook authors and curriculum developers should integrate diverse task formats into forthcoming educational materials to enhance students' listening comprehension skills and

augment their metacognitive strategy awareness. Furthermore, in light of the alignment between task-based embedded instruction and heightened listening comprehension, it is recommended that listening assessments incorporate more of these types of assessment tools to ensure the validity of listening tests.

While the present study has yielded findings that are significant for both theoretical and practical applications in pedagogy, the generalizability of these results to heterogeneous populations with differing degrees of English listening proficiency may be limited. It is essential to emphasize that the choice of task categories utilized in the study, including sorting, comparison, matching, and evaluation for one-way listening, as well as role-play simulation for two-way listening, constrains the interpretative framework. Subsequent research might expand the application of TBLT in listening instruction by integrating alternative task types to assess the effectiveness of teaching practices for EFL learners across various proficiency levels.

Conflict of interest

The author(s) certify/certifies that they have no affiliations with or involvement in any organization or entity with any financial interest (such as honoraria; educational grants; participation in speakers' bureaus; membership, employment, consultancies, stock ownership, or other equity interest; and expert testimony or patent-licensing arrangements), or non-financial interest (such as personal or professional relationships, affiliations, knowledge or beliefs) in the subject matter or materials discussed in the present research paper.

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