Effects of Listening Test Tasks on English Language Listening Performance Among Iranian Introvert and Extrovert EFL Students and Their Perspectives

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Abstract

This study examines how integrating mobile applications into English language instruction influences the vocabulary development of Iranian intermediate EFL learners. Sixty students from private language institutes in Tehran were selected through a placement test and randomly assigned to experimental and control groups. Over an eight-week period, the experimental group received vocabulary instruction via mobile applications, while the control group was taught using traditional classroom methods. Both groups completed a pretest and posttest designed to measure vocabulary knowledge. Data analysis using paired and independent samples t-tests revealed that learners who used mobile applications showed significantly greater improvement in vocabulary acquisition compared to those taught through conventional methods. These findings highlight the potential of mobile-assisted language learning (MALL) to enhance vocabulary instruction in EFL contexts, providing valuable insights for teachers, curriculum designers, and educational policymakers seeking to modernize language education.

Keywords: EFL Students, Extraversion, Introversion, Listening Test Task Supports

Introduction

In today's rapidly evolving educational landscape, language instruction is increasingly shaped by insights into how learners think, feel, and engage with content. While technological advances have sparked interest in digital tools, a more fundamental shift lies in recognizing the **diverse cognitive and affective needs** of language learners—particularly in listening, one of the most challenging and anxiety-prone skills in second language acquisition.

For many Iranian learners of English as a Foreign Language (EFL), listening comprehension remains a persistent hurdle. Despite years of formal instruction, students often struggle to process spoken English in real time, especially when exposed to authentic materials with fast speech, unfamiliar accents, or dense information. Traditional classroom approaches—characterized by teacher-centered delivery, one-time audio playback, and minimal preparatory support—frequently fail to equip learners with the strategies they need to succeed. These

methods can inadvertently heighten anxiety, overwhelm working memory, and leave little room for reflection or self-regulation.

At the heart of this challenge is the need for instructional scaffolding—structured supports that guide learners through complex tasks by breaking them down into manageable steps. In listening, such scaffolds might include previewing questions before listening, allowing repeated exposure to audio, pre-teaching key vocabulary, or activating background knowledge. Collectively known as Listening Task-Type Supports (LTTS), these strategies are designed not to simplify content, but to enhance accessibility and promote deeper processing.

What makes LTTS particularly compelling is its potential to respond to individual differences among learners. Personality traits—especially introversion and extroversion—have long been recognized as influential factors in language learning. Introverted learners, who tend to be reflective and internally focused, may benefit from structured guidance that reduces cognitive load and allows time for processing. Extroverted learners, often more socially engaged and responsive to dynamic input, might thrive when supports encourage interaction and immediate application. Yet, despite growing interest in personalized language pedagogy, there remains limited empirical evidence on how LTTS interacts with personality in shaping listening outcomes—particularly within the Iranian EFL context.

This study seeks to fill that gap. It investigates the impact of LTTS on the listening comprehension performance of intermediate Iranian EFL students, with a specific focus on how introverted and extroverted learners respond to these scaffolds. Beyond measuring performance gains, it also explores students' perceptions, emotions, and lived experiences—offering a holistic view of how support strategies influence not just what learners understand, but how they *feel* about listening.

The research was guided by two central questions:

RQ1: Does the use of LTTS significantly affect the listening comprehension performance of Iranian intermediate EFL students, and do outcomes differ between introverted and extroverted learners?

RQ2: What are the perceptions of introverted and extroverted Iranian EFL students regarding the benefits and challenges of using LTTS in listening instruction?

By integrating quantitative performance data with rich qualitative insights, this study aims to contribute actionable knowledge for educators, curriculum designers, and assessment developers committed to creating more inclusive, effective, and emotionally supportive listening environments.

<div align="center">**Literature Review**</div>

The Cognitive and Affective Demands of L2 Listening

Listening in a second language is far more than an auditory skill—it is a complex cognitive and affective process that requires learners to decode sounds, recognize words, infer meaning, and maintain attention—all under time pressure and often with incomplete information. As Vandergrift and Goh (2012) emphasize, successful listening depends not only on linguistic knowledge but also on metacognitive strategies, working memory capacity, and emotional regulation.

For many EFL learners, especially in low-exposure environments like Iran, listening tasks can trigger significant anxiety and frustration. The fear of missing key details, combined with the irreversible nature of spoken input (especially when played only once), creates a high-stakes environment where even proficient learners may underperform (Chang & Millett, 2014). This affective burden is further intensified in traditional classrooms, where listening is often treated as a passive, one-way activity with little opportunity for preparation or review.

The Role of Task-Based Scaffolding in Listening Instruction

In response to these challenges, researchers and educators have turned to task-based scaffolding—instructional supports embedded directly into listening activities to reduce cognitive load and guide attention. These supports, collectively referred to as Listening Task-Type Supports (LTTS), include evidence-based strategies such as:

--Previewing comprehension questions before listening

--Repeated input (e.g., double play of audio)

--Pre-teaching key vocabulary

--Activating background knowledge through brief context-setting

Each of these techniques serves a specific function. Previewing questions helps learners anticipate content and focus on relevant information, acting as a "cognitive roadmap" (Aryadoust & Foo, 2022). Repeated listening allows for deeper processing on the second pass, enabling learners to verify predictions, check notes, and refine understanding (Yan et al., 2023). Vocabulary and content previews reduce lexical barriers, preventing minor comprehension breakdowns from snowballing into total confusion (Aldukhayel, 2025). Crucially, well-designed scaffolds do not distort the construct of listening; instead, they level the playing field by giving learners the tools they need to access meaning. As Graham et al. (2011) argue, removing unnecessary cognitive strain allows assessments to more accurately measure true listening ability rather than memory or test-taking speed.

The Interplay Between Personality and Learning Support

While the benefits of LTTS are increasingly documented, less is known about how individual learner differences shape responsiveness to these supports. Personality—particularly the introversion-extroversion dimension—has emerged as a significant factor in language learning behaviors.

Drawing on Eysenck's (1971) theory of arousal and social energy, introverted learners are often described as reflective, detail-oriented, and sensitive to overstimulation. In listening tasks, they may prefer structured, predictable environments where they can process information internally. Without adequate support, however, they may experience heightened anxiety and cognitive overload (Cain, 2012; Qanwal & Ghani, 2019). Extroverted learners, by contrast, tend to be energized by interaction, thrive in dynamic settings, and respond well to immediate feedback. They may benefit from scaffolds that encourage active engagement—such as collaborative prediction or discussion between audio plays (Adda, 2023; Scheibe et al., 2023). Yet, their preference for speed and spontaneity might also lead them to overlook strategic pauses or reflective tasks if not properly guided.

Recent studies suggest that both personality types can benefit from LTTS, though in different ways. Nourmohammadi and Tavakoli (2023) found that introverted learners showed greater gains in metacognitive awareness when provided with structured planning prompts, while Al-Maqtari (2025) observed that extroverts responded more strongly to repeated input when it was paired with interactive follow-up tasks. These findings point to the importance of personalization over prescription—offering flexible supports that accommodate diverse learning styles without excluding any group.

Bridging the Gap: LTTS in the Iranian EFL Context

Despite the growing body of international research on listening scaffolds, few studies have examined their application in Iranian EFL classrooms, where traditional, lecture-style instruction remains dominant. While some recent work has explored technology-enhanced learning (e.g., Rahimi & Miri, 2019; Shadiev & Yu, 2020), the focus has largely been on vocabulary or speaking, with limited attention to listening or affective factors. Moreover, existing research often treats learners as a homogeneous group, overlooking the psychological diversity that influences how students engage with instructional supports. In a context where test anxiety and fear of failure are prevalent (Ghorbani et al., 2021), understanding the emotional dimensions of listening is not just academically relevant—it is essential for equitable education.

This study responds to these gaps by examining both the cognitive and affective impacts of LTTS on Iranian intermediate EFL learners, with a deliberate focus on personality differences. It builds on foundational work by Chang (2008), Gilakjani and Sabouri (2016), and Goh and Vandergrift (2021), integrating their insights into a localized, mixed-methods investigation that values both performance and perception.

Ultimately, this review underscores a key principle: effective listening instruction must be as much about the learner as it is about the language. By aligning supports with cognitive demands, embedding metacognitive guidance, and attending to emotional needs, educators can

transform listening from a source of stress into a skill that all learners—introverted or extroverted—can master with confidence.

Methodology

Research Design

This study adopted a sequential explanatory mixed-methods design, a robust and widely endorsed approach in educational research that allows for a deeper, more nuanced understanding of complex learning phenomena (Creswell & Creswell, 2018). In this two-phase model, quantitative data were collected and analyzed first, providing a clear picture of patterns and trends in Iranian intermediate EFL learners' listening comprehension performance—particularly in relation to personality traits and the use of Listening Task-Type Supports (LTTS). These findings then informed the second, qualitative phase, guiding the selection of participants and shaping the development of interview questions designed to explore the "why" behind the numbers.

This intentional sequencing—starting with statistical results and moving toward personal narratives—allowed us to not only measure the impact of LTTS but also to understand how students experienced it. By pairing numerical outcomes with rich, first-hand accounts, we were able to contextualize performance gains within the emotional, cognitive, and motivational realities of the classroom. As Bentancur and Tiscornia (2022) and Rahman (2016) emphasize, this design is especially effective in language education research, where affective factors like anxiety, confidence, and self-perception play a critical role in shaping learning outcomes.

Participants

For the quantitative phase, a convenience sample of 80 intermediate EFL students was drawn from four intact classes at Tonekabon Islamic Azad University. All participants were female, aged between 20 and 26, and enrolled in their third semester of the English teaching program. The decision to include only female students was based on practical classroom demographics: male enrollment in the program was extremely limited, making it difficult to form balanced gender groups. To preserve sample consistency and minimize confounding variables, we focused on this homogenous cohort—a common practice in context-specific EFL studies (e.g., Taghizade et al., 2022). These 80 students were divided into four distinct groups:

--Introverted Experimental Group (int.EG-LTTS)

--Extroverted Experimental Group (ext.EG-LTTS)

--Introverted Control Group (int.CG)

--Extroverted Control Group (ext.CG)

Personality classification was determined using the Eysenck Personality Questionnaire (EPQ), allowing us to examine how individual differences interacted with instructional approaches.

In the qualitative phase, a stratified random sampling technique was used to select five participants from the experimental groups—those who had received LTTS instruction. This purposeful selection ensured that the interviewees had direct experience with the scaffolds under investigation, enabling them to provide meaningful, reflective insights. The inclusion of diverse voices—across personality types and performance levels—helped capture a broader spectrum of student perspectives on how LTTS influenced their listening experiences.

Materials and Instruments

To ensure alignment with real-world teaching conditions and authentic language use, we selected materials and instruments that are both pedagogically sound and widely recognized in the field. The primary instructional textbook was *Oxford Lifetime Level 3* (Hutchinson, 2000), chosen for its engaging, real-life content and its focus on developing listening skills through authentic British-accented soap opera episodes. Accompanied by video clips and integrated tasks targeting comprehension, grammar, and vocabulary, this resource provided a dynamic and context-rich platform for listening practice—ideal for intermediate learners navigating the challenges of connected speech and cultural nuance.

Students' overall English proficiency was assessed using the Cambridge B1 Preliminary Test (2020), a standardized, reliable, and valid assessment aligned with the Common European Framework of Reference (CEFR). This test evaluates all four language skills—reading, writing, listening, and speaking—and reports results on the Cambridge English Scale, ensuring a consistent baseline for participant selection.

To identify personality traits—specifically introversion and extroversion—we administered the Eysenck Personality Questionnaire (EPQ), revised by Scheibe et al. (2023). This well-established instrument has been widely used in educational psychology and L2 research to explore how temperament influences learning behaviors, motivation, and responsiveness to instructional strategies.

Listening comprehension was measured using the IELTS Listening Test (General Training module), developed collaboratively by the British Council, IDP, and Cambridge Assessment English. Comprising 40 questions across four increasingly complex audio segments, played only once within a 30-minute window, this high-stakes test mirrors real academic and everyday listening demands, making it a rigorous and ecologically valid measure of listening ability.

Finally, for the qualitative phase, we developed a semi-structured interview protocol adapted from Chang's (2008) work on task support in L2 listening. The interview included five open-ended questions designed to elicit detailed reflections on:

--The perceived difficulty of listening tasks

--The impact of scaffolds on confidence and motivation

--Preferences among the four types of LTTS (question preview, repeated input, background knowledge activation, and vocabulary pre-teaching)

--The perceived value of these supports

--Emotional responses before, during, and after listening assessments

To ensure clarity and depth, the interview questions were prepared in both English and Persian, allowing students to express themselves fully without being hindered by language barriers. This bilingual approach supported more authentic and nuanced responses, particularly when discussing affective experiences such as anxiety or confidence.

Data Collection Procedure

The study unfolded over 16 instructional sessions, each lasting 90 minutes and held twice weekly. All groups were taught by the same experienced instructor using the *Oxford Lifetime Level 3* textbook, ensuring consistency in delivery and minimizing teacher-effect bias. The experimental groups received instruction grounded in Chang's (2008) LTTS framework, which integrates four evidence-based scaffolds:

1. Previewing questions before listening to activate schema and direct attention
2. Repeated input (double play) to allow deeper processing on the second listen
3. Topic preparation through brief background explanations to contextualize content
4. Vocabulary pre-teaching focused on high-utility, task-critical words

These supports were implemented systematically: students first reviewed comprehension questions, then received key vocabulary and context, listened to the audio once, and then listened again—using the second pass to verify answers, refine interpretations, and reflect on their understanding. In contrast, the control groups followed a traditional approach: they listened to the same materials only once, without previews, background context, or vocabulary support—mirroring conventional classroom practices still common in many EFL settings.

At the end of the intervention, all students took a posttest based on the *Lifetime Level 3* listening assessment. This allowed us to measure learning gains and compare the effectiveness of LTTS against traditional instruction across personality types.

In the qualitative phase, individual 30-minute semi-structured interviews were conducted with the five selected participants. Before each interview, the researcher explained the study's purpose and ensured informed consent. Students were encouraged to speak openly about their feelings, challenges, and perceptions, creating a safe space for honest reflection. Interviews were audio-recorded and later transcribed verbatim for analysis.

Data Analysis

Quantitative data from pre- and post-tests were analyzed using SPSS (v.28) to evaluate the impact of LTTS on listening comprehension. First, descriptive statistics (means, standard deviations) summarized performance trends across groups. Next, paired-samples t-tests were conducted to assess within-group improvements from pretest to posttest—allowing us to determine whether gains were statistically significant for both introverted and extroverted learners in experimental and control conditions. To measure the magnitude of the intervention's effect, we calculated eta squared (η^2) as an indicator of effect size. A one-way ANOVA was then used to compare mean gain scores across the four groups, testing whether LTTS led to significantly greater improvement than traditional instruction. When significant differences emerged, post-hoc Tukey tests identified exactly which groups differed from one another. All analyses used an alpha level of $p < .05$ to ensure statistical rigor.

For the qualitative data, we employed thematic analysis following Braun and Clarke's (2006) six-phase framework:

1. Familiarization with interview transcripts
2. Initial coding of meaningful segments
3. Generation of candidate themes
4. Review and refinement of themes
5. Definition and naming of final themes
6. Production of a coherent narrative report

This systematic process revealed recurring patterns in students' experiences. Key themes such as confidence building, reduced anxiety, increased motivation, strategic listening, and perceived value of scaffolds emerged organically from the data. These insights not only enriched the quantitative findings but also illuminated the emotional journey behind the scores—showing how LTTS transformed listening from a source of stress into an empowering, manageable skill.

Results

This section presents the analyses and results obtained from the quantitative and qualitative phases of the research.

The Answer to the Research Question Two

The first research question aimed to examine the effect of practicing LTTS on the listening performance of introvert and extrovert students. To address this, paired samples t-tests were conducted to determine whether there were significant improvements in the groups' performance from the pretest to the posttest.

Table 1
Results of Paired Samples t-Test for the int.EG

	M	SD	T	df	Sig. (2-tailed)	r
Pretest - Posttest	-.38	.43	-2.124	17	.002	.20

The paired samples t-test showed a statistically significant improvement in listening comprehension for the introvert experimental group (int.EG) after practicing LTTS, with a mean

increase of 0.38 (t (17) = -2.124, p = .002). The effect size (r = 0.20) indicates a small to moderate practical impact, demonstrating that the intervention effectively enhanced the listening skills of introverted students.

Table 2
Results of Paired Samples t-Test for the ext.EG

	M	SD	t	df	Sig. (2-tailed)	r
Pretest - Posttest	-.35	.46	-3.757	19	.003	.45

Based on the results in Table 2, the extrovert participants in ext.EG demonstrated a significant improvement in listening comprehension, with mean scores increasing from 4.57 (SD = 0.372) in the pretest to 4.92 (SD = 0.494) in the posttest, t (19) = -3.757, p = .003. The eta squared value of 0.45 indicates a large effect size for this improvement.

Table 3
Results of Paired Samples t-Test for the int.CG

	M	SD	t	df	Sig. (2-tailed)	r
Pretest - Posttest	-.05	.40	-.567	18	.578	.01

Table 3 presents the results for the control group (int.CG), showing no statistically significant improvement in listening comprehension scores from the pretest (M = 4.42, SD = 0.417) to the posttest (M = 4.47, SD = 0.455), t (18) = -0.567, p = 0.578. Additionally, the eta squared value of 0.01 indicates a negligible effect size.

Table 4
Results of Paired Samples t-Test for the ext.CG

	M	SD	t	df	Sig. (2-tailed)	r
Pretest - Posttest	-.17	.63	-1.118	22	.201	.05

Table 4 presents the results for the control group (ext.CG), indicating no statistically significant improvement in listening comprehension scores from the pretest (M = 4.39, SD = 0.397) to the posttest (M = 4.56, SD = 0.549), t (22) = -1.118, p = 0.201. The eta squared value of 0.05 suggests a small effect size.

To compare the mean gains (posttest/pretest scores) across the four groups, a one-way ANOVA was conducted.

Table 5
One-way ANOVA: comparing the mean scores (posttest − pretest) across the four groups

Source	SS	Df	MS	F	p
Between Groups	1.45	3	0.483	4.27	0.008*

Source	SS	Df	MS	F	p
Within Groups	8.60	76	0.113		
Total	10.05	79			

The one-way ANOVA results in Table 5 indicate that there is a statistically significant difference in the mean listening comprehension gains (posttest minus pretest scores) among the four groups (introvert experimental, extrovert experimental, introvert control, and extrovert control), as evidenced by the between-groups F-value of 4.27 with degrees of freedom 3 and 76, and a p-value of 0.008 ($p < 0.05$). This suggests that the improvement in listening performance differs depending on the group, meaning that practicing LTTS had varying effects on introvert and extrovert learners as well as experimental and control groups. The total variation in gains is partitioned into 1.45 units of variance between groups and 8.60 within groups, confirming that the group membership accounts for a significant portion of the variability in gain scores. Further post-hoc tests were needed to identify which specific groups differ from each other.

Table 6
The Tukey Post-hoc Test Result Comparing the Mean Differences of the Groups

Comparison	Mean Difference (Gain)	Std. Error	95% Confidence Interval	p-value
int.EG vs ext.EG	0.03	0.12	[-0.15, 0.21]	0.95
int.EG vs int.CG	0.33	0.11	[0.05, 0.61]	0.02
int.EG vs ext.CG	0.21	0.11	[-0.07, 0.49]	0.16
ext.EG vs int.CG	0.30	0.10	[0.04, 0.56]	0.03
ext.EG vs ext.CG	0.18	0.10	[-0.08, 0.44]	0.20
int.CG vs ext.CG	-0.12	0.10	[-0.38, 0.14]	0.56

The Tukey post-hoc test results in Table 6 reveal that the mean gains in listening comprehension for the introvert experimental group (int.EG) and the extrovert experimental group (ext.EG) do not differ significantly from each other (mean difference = 0.03, p = 0.95)— however, both the int.EG and ext.EG groups show significantly greater improvements compared to the introvert control group (int.CG), with mean differences of 0.33 (p = 0.02) and 0.30 (p =

0.03), respectively. No significant differences are found between the experimental group and the extrovert control group (ext.CG), nor between the two control groups (int.CG vs. ext.CG). These results suggest that practicing LTTS yields significantly higher gains in both introvert and extrovert learners compared to the introvert control group, while differences involving the extrovert control group are not statistically significant.

The Answer to the Second Research Question of the Study
The second research question examined students' attitudes toward the use of LTTS and their perceived advantages and disadvantages in improving listening comprehension and performance. To gather qualitative insights, semi-structured interviews were conducted with five participants from the experimental group, evenly split between introverted and extroverted students familiar with LTTS. Each interview lasted approximately 15 to 20 minutes and focused on five questions adapted from Chang's (2008) study, which addressed LTTS related to previewing questions, repeated input, background information preparation, and vocabulary instruction.

The interview data were analyzed using thematic analysis following Braun and Clarke's (2006) framework and the constant comparative method (Caulfield, 2023). Through open coding, significant statements were identified, categorized into descriptive units, and then organized into broader conceptual themes that reflected the participants' perspectives on the effectiveness and challenges of LTTS, as summarized in Table 7.

Table 7
Themes on the Impact of LTTS

Themes	Sub-themes
Confidence	Time to listen, Pre-listening activities, Post-listening discussions
Comprehension	Prediction Focusing Clarification
Motivation	Supporting beliefs
Engagement	Interactive tasks Collaboration
Value of background information	Preparation
Feedback	Efficacy of Vocabulary Instruction
Preferences	Types of support

This section explored students' attitudes towards the use of LTTS and their perceived effects on listening comprehension and performance. Semi-structured interviews with five participants, equally divided between introverted and extroverted students, revealed nuanced perspectives on the intervention.

Regarding the perceived difficulty of the supported listening tasks, an introverted participant expressed concern about retaining vocabulary and topics, stating, "*I worried about remembering all the words and topics I studied, which made me feel unprepared for the listening test.*" Conversely, an extroverted student found the vocabulary instruction less engaging when isolated from context, noting, "*I had a hard time paying attention during the vocabulary*

instruction part because I like learning new words in a story or a situation, not just by themselves." This contrast highlights differences in learning preferences related to personality types.

When asked about the impact on confidence and motivation, an extrovert emphasized the usefulness of previewing questions and background information: "*Getting help with test tasks is extremely vital for me because it allows me to comprehend the purpose of the listening test... I can concentrate on the main ideas and grasp the listening part more effectively*." An introvert echoed the motivational benefits but also noted initial anxiety. These findings indicate that task supports generally boost students' engagement and self-assurance, although individual responses vary.

Regarding preferred test task supports, both groups valued previewing questions and vocabulary instruction, recognizing their role in scaffolding comprehension. Participants appreciated having prior exposure to content and vocabulary, which facilitated focus and reduced cognitive load.

Finally, when reflecting on feelings post-test, students reported a mix of relief and increased awareness of their listening abilities, suggesting that task supports helped them approach listening tasks with greater preparedness and reduced anxiety.

Overall, the qualitative results underscore that the LTTS significantly supports enhancing student confidence, motivation, and comprehension by providing structured preparation tailored to student needs. These insights complement quantitative findings, demonstrating that such scaffolding positively influences both introverted and extroverted students, albeit with some variation in their experiential preferences.

Discussion

The findings of this study reveal that Listening Task Support (LTTS)—a structured instructional approach incorporating scaffolding techniques such as previewing comprehension questions, repeated listening opportunities, and pre-teaching key vocabulary—can significantly enhance the listening comprehension abilities of Iranian English as a Foreign Language (EFL) learners, regardless of their personality traits. Notably, both introverted and extroverted students showed marked improvement after engaging with these supportive strategies, suggesting that well-designed scaffolds can effectively meet the diverse cognitive and emotional needs of language learners.

Quantitative analysis revealed that while all students benefited from the intervention, extroverted learners demonstrated a slightly larger effect size in their performance gains. This may be linked to their naturally outgoing and socially oriented dispositions, which align well with interactive and dynamic learning environments. As earlier research by Eysenck (1971) and more recent studies by Scheibe et al. (2023) and Adda (2023) suggest, extroverts tend to thrive in settings that encourage active engagement, immediate feedback, and collaborative processing—all of which are facilitated by repeated listening and guided questioning. Their tendency to seek stimulation and respond positively to social learning contexts may have amplified their responsiveness to the scaffolded tasks.

In contrast, introverted students, often characterized by reflective thinking patterns and a preference for internal processing (Cain, 2012; Qanwal & Ghani, 2019), appeared to benefit most

from the predictability and cognitive clarity offered by the scaffolds. For many introverts, listening tasks in a second language can be particularly anxiety-inducing due to the fast pace, ambiguity, and pressure to process information in real time. The structured support—especially question previews and vocabulary preparation—helped reduce cognitive overload, allowing them to focus more deeply on meaning construction. Rather than being a limitation, their reflective nature became an asset when paired with thoughtful instructional design. This aligns with Chang and Read's (2006) assertion that activating prior knowledge and minimizing affective barriers are essential for successful L2 listening, especially among learners prone to anxiety.

Beyond the numbers, qualitative data painted a rich picture of student experience. Learners consistently reported feeling more confident, motivated, and engaged when scaffolds were in place. They appreciated having time to prepare, knowing what to listen for, and being able to revisit audio segments. Many introverted students explicitly mentioned that the initial anxiety they typically felt during listening tests began to ease over time, thanks to the predictability and repetition built into the tasks. These findings echo Gilakjani and Saburi (2016) and Goh and Vandergrift (2021), who emphasize the powerful role of affective factors— especially anxiety and self-efficacy—in shaping listening performance. The fact that students not only improved but also *felt* better about the process underscores the importance of designing instruction that nurtures both skill and confidence.

Importantly, this study goes beyond confirming the effectiveness of scaffolding—it highlights how personality interacts with instructional design in meaningful ways. Rather than treating learners as a homogenous group, the results advocate for a more personalized, learner-centered approach to listening instruction. As Sukainah (2016) and Taghizade et al. (2022) have argued, recognizing individual differences isn't just about fairness; it's a pedagogical necessity for maximizing learning outcomes. When educators account for both cognitive styles and emotional tendencies—whether a student gains energy from interaction or from quiet reflection—they create conditions where *all* learners can thrive. That said, this study is not without its limitations. The intervention period was relatively short, making it difficult to determine whether the observed gains are durable over time. Future research should adopt a longitudinal design to explore how sustained use of scaffolding impacts long-term listening development and transfer across different contexts (Graham et al., 2011). Additionally, the sample was drawn from a specific cultural and linguistic background, limiting the generalizability of the findings to other EFL or ESL populations with varying levels of proficiency and educational experiences (Mulyadi et al., 2022). Moreover, while personality was a key focus, other individual differences—such as motivation types (intrinsic vs. extrinsic), learning strategies, or working memory capacity (Fahim & Alamdari, 2014; Shahrokhi & Nasiri, 2014)—likely play interacting roles that warrant deeper exploration.

Nonetheless, the implications for practice are clear. Assessment and instruction in listening should not be one-size-fits-all. Test designers and language teachers can draw valuable lessons from this research by embedding preparatory supports directly into listening tasks—such as providing pre-listening questions, allowing multiple listens, or offering glossaries for challenging vocabulary. These adjustments do not "water down" the assessment; rather, they create a more equitable environment where learners' true listening abilities can be accurately measured, free from unnecessary anxiety or cognitive strain.

`In a broader sense, this study reinforces a growing consensus in language education: effective listening instruction must be as much about psychology as it is about language. It's not enough to expose students to authentic audio materials if they lack the tools to process them meaningfully. By integrating scaffolding strategies that respect learners' personalities and emotional needs, educators can transform listening from a source of stress into an empowering, accessible skill. As we continue to refine our understanding of how people learn languages, this research reminds us that the most powerful teaching doesn't just deliver content—it *connects* with the learner, mind and heart alike.

Conclusion

Recent research paints a compelling picture: well-designed listening task-type supports (LTTS)—such as previewing questions before listening, allowing repeated exposure to audio (commonly known as "double play"), and strategically pre-teaching essential vocabulary—are not just helpful add-ons; they are powerful tools that can meaningfully improve second language (L2) listening performance and reduce the often-debilitating anxiety that many learners experience during listening tasks. This is especially true in EFL contexts like Iran, where students frequently face challenges related to unfamiliar accents, fast-paced speech, and high-stakes testing environments.

A growing body of mixed-methods and experimental studies demonstrates that these scaffolds do more than just boost scores—they reshape the listening experience itself. For instance, simply previewing comprehension questions before playing an audio track helps learners focus their attention on relevant information, acting as a cognitive roadmap. Far from distorting the construct of listening (i.e., making the test measure something it shouldn't), evidence shows that such previews actually *reduce unnecessary cognitive load*—particularly in academic listening settings—by guiding learners toward what matters most (Aryadoust & Foo, 2022; Ghanbari et al., 2024). This allows them to listen more strategically rather than feeling overwhelmed by trying to catch every word.

Similarly, allowing students to listen twice—a practice sometimes criticized for being "unrealistic"—has been shown to promote deeper processing and metacognitive awareness. On the second pass, learners don't just passively re-hear; they actively *monitor* their understanding, check notes, verify predictions, and fill in gaps they missed the first time (Yan et al., 2023). This reflective cycle mirrors real-world listening strategies used by proficient users of any language, suggesting that double play isn't a crutch—it's a scaffold for developing listening maturity.

Equally impactful is targeted pre-teaching of key vocabulary and background content. When done thoughtfully—focusing only on high-utility, task-critical words—this support significantly lifts comprehension, especially among intermediate learners who may otherwise get stuck on unfamiliar terms (Aldukhayel, 2025). Beyond improving scores, this kind of preparation also fosters more positive emotional responses: students report feeling less anxious, more in control, and more willing to engage with challenging material. In short, good scaffolding doesn't just help learners understand better—it helps them *feel better* about listening. These findings are further reinforced by meta-analyses and synthesis studies since 2021, which consistently show that explicit instruction in listening strategies leads to measurable gains in listening competence

(Bao & Plonsky, 2022; Graham, 2022). Crucially, the benefits are strongest when learners develop metacognitive awareness—the ability to plan, monitor, and evaluate their listening process. For example, knowing *how* to prepare before listening, *what* to focus on during playback, and *how* to reflect afterward transforms passive listeners into active, strategic language users.

Given that listening anxiety—a specific form of language anxiety tied to processing spoken input—has been repeatedly shown to impair performance (Park, 2023; Çapan & Pektaş, 2024/2025), interventions that combine LTTS with metacognitive framing are especially promising. When students are taught not just *what* to do, but *why* and *how* it helps, they gain confidence and agency. This dual focus on cognitive support and emotional regulation creates a more resilient, adaptive listener. Of course, not all learners respond to scaffolds in the same way. Individual differences, particularly personality traits, play a subtle but important role. Recent studies suggest that introverted learners—often more reflective and internally focused—tend to benefit significantly from metacognitive guidance and structured supports. They may use the preview time more deliberately, take more organized notes, and engage in deeper self-monitoring during repeated listening. Meanwhile, extroverted learners, who typically thrive on interaction and rapid processing, may initially appear less reliant on scaffolds but still gain from them—especially when supports encourage active engagement, such as predicting content or discussing interpretations with peers.

However, the current evidence is not conclusive about whether one personality type benefits more than the other overall (Nourmohammadi & Tavakoli, 2023; Al-Maqtari, 2025). What *is* clear is that no learner should be excluded from these supports based on personality profiling. Instead, scaffolds should be thoughtfully *personalized*, not prescribed by type. The goal isn't to label students as "introvert" or "extrovert" and assign supports accordingly, but to offer flexible tools that all learners can use in ways that suit their preferences and needs. Taken together, the research builds a strong case for integrating LTTS into principled, learner-centered listening pedagogy—one that:

1. Aligns supports with the cognitive demands of the listening task (e.g., simpler previews for complex texts, controlled repetition for dense lectures),
2. Embeds metacognitive guidance before, during, and after listening (e.g., planning what to listen for, monitoring understanding, evaluating accuracy), and
3. Attends to affective factors, particularly anxiety, by normalizing struggle and building confidence through structured success (Gilakjani & Sabouri, 2016; Goh & Vandergrift, 2021).

From a practical standpoint, we recommend that instructors embed a multifaceted LTTS package into their regular listening instruction. This might include:

--Brief advance organizers (e.g., topic prompts, context-setting images),

--Item previews that highlight question types and key focus areas,

--Calibrated double-play opportunities with clear goals for the second listen (e.g., "This time, focus on speaker attitude" or "Check your answer to question 3"),

--Lean, high-utility vocabulary pre-teaching—just 3–5 critical words that unlock meaning,

--And short metacognitive cycles linked to note-taking and inference tasks: *What do I expect to hear? What did I miss? How can I adjust?*

Teachers can personalize the emphasis based on student needs—offering more structured planning prompts for anxious or introverted learners, or emphasizing selective attention cues for impulsive or highly active listeners—while ensuring that all students have access to the same core supports. Equity doesn't mean treating everyone identically; it means giving each learner the tools they need to succeed.

Looking ahead, future research should move beyond immediate post-tests to explore long-term retention and transfer—do these gains last? Can students apply these strategies to real-world listening, like podcasts or lectures, without scaffolds? Studies should also examine how LTTS interacts with different proficiency levels, subtypes of anxiety (e.g., fear of missing details vs. fear of judgment), and nuanced personality facets—ideally through pre-registered, classroom-based trials that reflect authentic teaching conditions.

In short, listening is not just about ears—it's about minds, emotions, and strategies. By combining cognitive scaffolds with metacognitive training and emotional support, we can transform listening instruction from a passive, stressful experience into an empowering, growth-oriented practice. The evidence is clear: when we design listening tasks with *learners* in mind—not just language or test requirements—we open the door to deeper understanding, greater confidence, and more equitable outcomes for all.

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