Sci. Technol. Arts Res. J., April. –June 2025, 14(2), 167-181
DOI: https://doi.org/10.20372/star.V14.i2.14
ISSN: 2226-7522 (Print) and 2305-3372 (Online)
Science, Technology and Arts Research Journal
Sci. Technol. Arts Res. J., April–June 2025, 14(2), 167-181
Journal Homepage: https://journals.wgu.edu.et
Original Research

Effects of Personalized Learning Approach (PLA) on EFL Learners' Listening Comprehension and Motivations

Mitiku Daba*, Yoseph Mezgebu & Getnet Gidey

Department of English Language and Literature, University of Gondar, Ethiopia

Abstract

This study aimed to investigate how PLA affected the listening comprehension and motivations of grade 11 EFL students, with listening motivation as a mediating variable. The researchers used a quantitative, quasi-experimental approach. Participants with comparable results were chosen from nine sections, and 52 were randomly assigned to each group, one as the experimental group and the other as the control group. While the control group received conventional instructions, the experimental groups used PLA to learn. A motivation questionnaire and a listening test were utilized to gather data. The data was then analyzed using structural equation modeling and the independent sample t-test. The experimental group was shown to have a direct and substantial difference in listening comprehension posttest scores (B=1.696, CR=5.230(>+1.96), P<.0.5). Furthermore, the experimental group's listening motivations posttest scores were significantly impacted by the PLA in comparison to the control group (B = .329, CR = 3.022 (> ± 1.96), p < .05). According to the results, the experimental group's increased listening motivation partially mediated the PLA's positive impact on their listening comprehension posttest scores (β = .369, CR = 2.145 (>±1.96), p < .05).

Article Information

Article History:
Received: 10-04-2025
Revised: 22-05-2025
Accepted: 30-06-2025

Keywords:
Listening; Listening Comprehension; Motivation; Personalized Learning Approach

*Corresponding Author:
Mitiku Daba
E-mail:
dabamitiku30@gmail.com

INTRODUCTION

Listening skills are vital in acquiring the English language, since they improve learners' ability to understand and receive spoken language input. Listening is widely used as a language skill in everyday contexts. Furthermore, research shows that the capacity to use listening as a learning mode effectively distinguishes effective language learners from less effective ones (Hamouda, 2013). Additionally, Weinstein et al. (2022) argue that high-quality listening fulfills essential psychological desires and contributes to the satisfaction of autonomy, relatedness, and intimacy needs. This implies that listening plays a substantial role in learners' mental comfort and motivation.

However, in the Ethiopian context, learners frequently encounter challenges in comprehending listening texts efficiently. Students struggle to understand and comprehend spoken language in schools and higher institutions. The teaching of EFL listening skills in Ethiopia is not as effective as preferred, both at the school level and in higher educational settings (Yenesew, 2019). Consequently, one of the issues may be ascribed to the teaching processes that EFL teachers use in listening sessions.

A study conducted by Banje (2019) highlights the weaknesses in listening comprehension among EFL learners, with particular concern for

developing countries. He asserted that these challenges are exacerbated by factors such as overcrowded classrooms, teachers' heavy workload in covering content within a limited academic year, content-based instruction, and the limited use of listening activities beyond teacher lectures and instructions.

Nevertheless, in English language teaching, listening is an important skill; despite its importance, studies, such as Dajene and Eyob (2020), claim that it is often neglected, the least researched, and the least understood compared to other skills such as writing, reading, and speaking. These studies also revealed that the problem of listening skills in Ethiopia has been exacerbated by the neglect of teaching listening.

The researcher carried out a baseline study at Leka Secondary School, focusing on Grade 11 students. An EFL teacher would explain the title of the listening text, involve students in a discussion on the topic, read aloud or dictate the text, and then instruct students to complete listening comprehension activities. In other words, the personalized learning approach (PLA) was not practiced in the listening skills sessions.

When it comes to motivation, it plays an important role in ELT as it enhances learners' confidence and interaction during the language learning process. It fosters respect among learners and guides them in the right direction (Ryan & Deci, 2000). However, there has been a decline in Ethiopian high school students' academic motivation, which hurts their performance. This might be because there are positive correlations between motivations and language achievements. For instance, studies (Ajmal & Kumar, 2020) indicate a high correlation between learners' listening comprehension skills and motivation.

In Ethiopia, motivating students to engage in listening skills development poses a significant challenge (Quinapallo et al., 2024). Besides, as far as the researchers' teaching experiences go, grade 11 students often perceive listening to texts as difficult to comprehend. This might be due to their low motivation levels regarding listening skills. Therefore, implementing PLA in listening classes is expected to address this gap and facilitate timely and effective interventions.

In this study, listening motivation was employed as a mediating variable in the causal relationship between PLA and students' listening comprehension, in addition to what has already been discussed. Various researchers have used motivation as a mediator, suggesting that motivation mediates relationships between several variables (Hendrawijaya, 2019). Motivation has a mediating role in the interaction between autonomy, vitality, and deep learning as well as the teacher-student relationship on foreign language proficiency (Nunezth & Leon, 2016 & Ma et al., 2020). Nunezth and Leon (2016) also found that motivation plays a mediating role in the relationship between learning engagement and teacher-student relationships. Moreover, self-regulated learning, technological adoption, and learning engagement were all mediated by intrinsic motivation.

Personalized learning approaches are still not well studied, particularly in developing countries like Ethiopia, even though several studies have examined them in various subject areas and sociocultural contexts. Furthermore, little research has been done on how personalized learning strategies affect EFL learners' listening motivation and skills.

According to research by Kuutila (2016), PLA has benefits that include better teacher-student interactions, more responsibility for learning, tailored pace, and higher professional well-being. One drawback, though, was that unmotivated students can find it difficult to study with this approach. Although Kuutila's study did not concentrate on foreign language skills, the current study looked at how PLA affected students' listening comprehension and motivation.

A qualitative investigation into the impact of personalized instruction in online courses was carried out by Alamri et al. (2020). According to the study, learners' intrinsic motivations and psychological well-being are supported by personalized learning. The study emphasized the advantages of a personalized learning strategy

despite having a different design and concentrating on online learning. In contrast, the current study is quasi-experimental and focuses on how PLA affects students' motivation and listening comprehension.

Muhammad (2020) also studied the impact of PLA on the reading skills of learners in Egypt. According to the study, learners' intensive English reading skills increase with personalized learning. Despite having a similar design to Mohammad's study, the current study focuses on how the personalized learning approach affects the motivations and listening comprehension of EFL learners. The effects of the personalized learning approach have been widely studied in the past, but none of them specifically looked at how PLA affected students' listening motivation and comprehension skills, nor did they explore the role that motivation plays as a mediator in listening comprehension.

Research Hypotheses

The following alternative research hypotheses are formulated:

1. H_i. There is a significant effect of PLA on learners' listening comprehension
2. H_i. There is a significant effect of PLA on learners' listening motivation.
3. H_i. There is a significant effect of PLA on learners' listening comprehension through listening motivation.

MATERIALS AND METHODS

The study used a quasi-experimental design with a quantitative approach, where the treatment and comparison groups were not randomly assigned. Both groups underwent a pretest and a posttest. Only the treatment group received the PLA treatment. The pretest examined the similarities between the groups before the treatment, while the posttest measured the impact of PLA on learners' listening comprehension and motivation. The study also examined whether listening motivation mediated the association between the PLA and listening comprehension.

Research Participants and Sampling Techniques

Participants for this study were selected from grade eleven students of Leka Nekemte Secondary School in Nekemte City. The researchers used a simple random sampling technique to select the school among the 9 public secondary schools in the area. These participants were selected because the grade is a transition to higher education, where effective listening comprehension skills are essential in any learning process. Students at this grade level are expected to improve and apply listening skills to understand listening texts and lectures effectively. However, the study design limitations mean the findings may have limited generalizability beyond the specific school context. The researchers selected intact groups using simple random sampling and assigned one group as the experimental group and the other as the control group, using a lottery system.

Data Collection Instruments

The researcher used a listening comprehension test and a listening motivation questionnaire as data collection instruments. These instruments were administered both before and after the PLA interventions, serving as a pretest and posttest, respectively. To examine the participants' listening comprehension, the researcher employed two parallel forms of tests that were adopted from literature sources. The pretreatment test aimed to evaluate the learners' listening comprehension level, while the post-test was used to determine if there was a significant difference in listening comprehension between the control and experimental groups because of the intervention.

The listening comprehension tests were designed to assess students' listening comprehension skills, such as understanding the explicit meaning of the text, making connections between ideas, drawing inferences, making predictions, evaluating information, and providing personal responses.

In addition, a questionnaire was employed as a data collection tool to assess the participants' motivation for listening comprehension skills. This questionnaire was adapted from previous work by Ugla (2021). The questionnaire was administered both before and after the intervention to both intact groups. The purpose was to examine the homogeneity of motivation ratings for listening skills within each group, as well as to determine any significant improvements because of the treatment in the study. The questionnaire contained three main sections: intrinsic motivations, extrinsic motivations, and integrative motivations. In total, there were 31 items, with 11 questions focused on intrinsic motivation, 12 questions on extrinsic motivations, and 8 questions on integrative motivations. The questionnaire items were designed using a 6-point Likert scale, ranging from "definitely true of me" to "definitely not true of me," considering that the range may provide a more nuanced assessment of the participants' motivation levels.

In terms of the reliability of listening comprehension tests, the researchers calculated the Pearson correlation coefficient between different test versions, which showed a high level of consistency ($r = 0.74$). This indicates the tests produced reliable and consistent results, supporting their use for data collection.

Concerning the listening motivation questionnaire, the researchers conducted a more extensive validation process. They assessed the construct validity through SEM analysis, which provided strong evidence of both convergent validity (0.8) and discriminator validity (0.9). This suggests the questionnaire effectively measured the intended motivation constructs.

Reliability of the questionnaire was also evaluated using Cronbach's alpha, yielding a high internal consistency score of 0.92 in the pilot study. The Composite Reliability (CR) score of 0.86 further corroborates the high reliability of the instrument. To ensure the suitability of the data for CFA, the researchers conducted the KMO test, which produced a value of 0.8 in the pilot study. They also performed Bartlett's Test of Sphericity, which was statistically significant, indicating an adequate sample size. In general, the comprehensive validation process provides strong evidence for the validity and reliability of both the listening comprehension test and the questionnaire. This enhances confidence in the quality of data collection and the interpretability of the study's findings.

Procedures

The researchers first obtained consent from the Department of English Language and Literature to carry out the study. They then received approval from the school director. The experimenter teacher received training on the theory and implementation of PLA in listening classes. The training covered two weeks, which dealt with theoretical and practical content, procedures, and delivery methods. In the first week, we covered the theoretical part for 40 minutes over five days = 3 hours, and in the second week, we covered the practical part for 40 minutes over five days = 3 hours. Before the treatment, pretests were administered to measure listening comprehension and listening motivation. The researchers observed the teaching practices in both groups and had discussions with the experimenter teacher. Immediately after the treatment, post-tests for listening motivation and comprehension were administered. The researchers ensured that necessary assumptions, such as sample size, normality, homogeneity of variance, linearity, and model fit, were checked and met. Therefore, the researchers followed such a procedure to collect and analyze data, which enhances the credibility and reliability of the study's findings.

Data Analysis Techniques

To compare the mean difference in listening comprehension score and listening motivation between the control and experimental group, an independent sample t-test was employed. This analysis was conducted using SPSS v.27 software. Additionally, the researchers performed structural equation modeling (SEM) analysis using AMOS v.26 software. This allowed them to examine the

impact of the PLA learners' listening comprehension skills and learners' listening motivation. The SEM analysis also examined whether listening motivation mediated the relationship between the PLA strategy and listening comprehension. For SEM analysis, the researchers utilized bootstrapping with 5,000 samples and a 95% bias-corrected confidence interval, following recommendations from statistical experts like Hayes (2018) and Collier (2020).

Before conducting the hypothesis testing, the researchers confirmed that the necessary assumptions were met, including sample size, normality, homogeneity of variances, linearity, and overall model fit. A comprehensive approach to data analysis and advanced SEM techniques strengthens the accuracy and consistency of the study's findings. The researchers' attention to ensuring the underlying assumptions were satisfied further enhances the credibility of the analytical procedures used.

To assess the students' motivation and listening comprehension, the researchers administered pretests and posttests. They then used independent samples t-tests to compare the results between the experimental and control groups. The analysis revealed significant differences in the posttest scores, with the experimental group performing better than the control group. To further investigate causal relationships, the researchers conducted an SEM analysis. This allowed them to examine the direct and indirect effects of the PLA strategy on listening comprehension, as well as the mediating role of motivations. The SEM analysis was based on a mediation model, which is depicted in Figure 1. This model allowed the researchers to explore how the PLA strategy may have impacted listening comprehension directly, as well as indirectly through its effect on listening motivation.

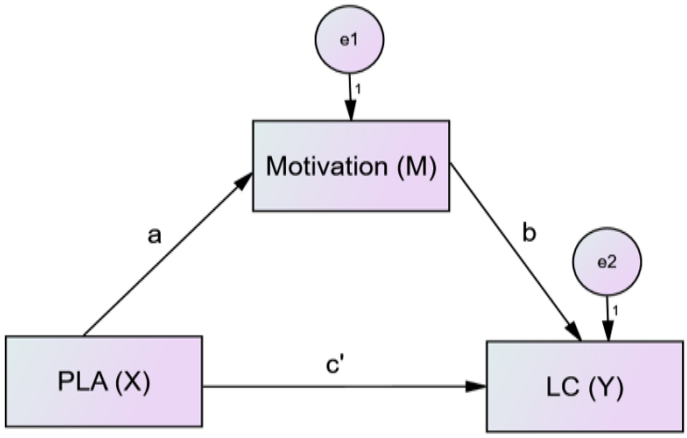

Figure 1. *Statistical Model of the Study*

The pretest scores for listening comprehension showed that the control group had a mean score of 13.500, while the experimental group had a slightly higher mean score of 13.923. This suggests the experimental group performed marginally better on the pretest.

However, the researchers conducted an independent sample t-test to determine the statistical significance of this difference. The t-test results (t=0.996, df=102, p=0.322) indicated that the difference in pretest scores between the experimental and control group was not statistically significant.

To further explore this, the researchers calculated a 95% confidence interval for the mean difference. The confidence interval ranged from -1.266 to 0.419 and included the value of zero. This reinforces the conclusion that the difference in pretest scores was not statistically meaningful.

Table 1

Independent Sample Test: T-Test statistics for the Control and Experimental Groups on the Listening Comprehension and Motivations Pretest Score

Variables	Groups	N	Mean	SD	T	df	95% Confidence Interval		P
							Lower	Upper	
Listening Comprehension	Control	52	13.500	1.86295	0.996	102	-1.266	.419	.322
	Experimental	52	13.923	2.43219					
Listening Motivation	Control	52	4.137	.72551	0.996	102	-0.209	0.363	0.596
	Experimental	52	4.060	.74920					

The researchers emphasize the need for a cautious interpretation of these pretest results. The lack of statistical significance and the overlapping confidence interval challenge the assumption that the control and experimental groups had different listening comprehension abilities before the intervention.

Therefore, the researchers argue that any subsequent differences observed in the posttest scores cannot be solely attributed to the treatment (the PLA strategy). Further investigation and consideration of other factors are necessary to fully understand the groups' listening comprehension levels before the intervention.

This detailed analysis highlights the importance of critically examining the statistical significance of the pretest results, as it sets the foundation for interpreting the effects of the intervention on the posttest outcomes.

Besides, the pretest data presented in Table 1 show that the mean score for listening motivation was 4.137 in the control group and 4.060 in the experimental group. These similar motivation scores suggest that both groups had comparable levels of motivation towards listening before the intervention.

To further examine the statistical significance of this difference, the researchers conducted an independent sample t–test. The t-test results (t=0.996, df=102, p=0.596) indicate that the difference in motivation pretest scores between the control and experimental group was not statistically significant.

The researchers also calculated a 95% confidence interval for the mean difference in motivation pretest scores. This confidence interval ranged from -0.209 to 0.363 and included the value of zero. This reinforces the conclusion that the difference in motivation levels between the two groups was not meaningful.

The results also revealed that the control and experimental groups showed comparable levels of motivation towards listening before the intervention. This suggests that any differences in motivation observed in the posttest can be attributed to the treatment itself, rather than preexisting disparities in listening motivation between the groups.

The pretest results for both listening comprehension and listening motivation indicate that the control and experimental groups were similar in their initial abilities and motivations, setting the stage for a more robust evaluation of the intervention's effects on the posttest outcomes.

The data presented in Table 2 reveal that the control group had a mean listening comprehension posttest score of 13.865, while the experimental group achieved a higher mean score of 15.827. This suggests a notable difference in the listening

comprehension outcomes between the two groups after the intervention.

To determine the statistical significance of this difference, the researcher conducted an independent sample test. The test results (t=4.357, df=102, p=0.001) indicate that the difference in the post-test scores between the control and experimental groups was statistically significant. Furthermore, the 95% confidence interval for the mean difference in posttest scores was from -2.854 to -1.069, and did not include the value of zero. This provides additional support for the conclusion that the experimental group's significantly higher posttest scores were not due to chance.

Hence, the posttest results demonstrate that the experimental group, which received the personalized learning approach intervention, achieved significantly higher listening comprehension scores compared to the control group. These findings offer compelling evidence for the effectiveness of the implemented intervention in enhancing the listening comprehension abilities of the experimental group participants.

Table 2

Independent Sample T Test statistics for the Control and Experimental Groups on the Listening Comprehension and Motivations Post Test score

Variables	Groups	N	Mean	SD	T	df	95% Confidence Interval		P
							Lower	Upper	
Listening Comprehension	Control	52	13.865	1.837	4.357	102	-2.854	-1.069	.001
	Experimental	52	15.827	2.677					
Listening Motivation	Control	52	4.271	.7547	2.914	102	-.649	-.123	.001
	Experimental	52	4.657	.5849					

The researchers emphasize that the statistical analysis, including the t-test results and the confidence interval, corroborate the substantial difference in posttest scores between the control and experimental groups. This shows that the personalized learning approach was successful in improving the listening comprehension of the experimental group compared to the control group.

The data presented in Table 2 shows that the control group had a mean listening motivation posttest score of 4.271, while the experimental group had a higher mean score of 4.657. This suggests a notable difference in motivation towards listening comprehension between the two groups after the intervention

To assess the statistical significance of this difference, the researchers conducted an independent sample test. The t-test results (t=2.914, df=102, p=0.001) indicate that the difference in posttest motivation scores between the control and experimental group was statistically significant.

Furthermore, the 95% confidence interval for the mean difference in posttest motivation scores ranged from -0.649 to -0.123, and did not include the value of zero. This provides additional support for the conclusion that the experimental group's significantly higher motivation scores were not due to chance.

As a result, the posttest results demonstrate that the experimental group, which received the personalized learning approach intervention, exhibited significantly higher levels of motivation towards listening comprehension compared to the control group. These findings suggest that the implemented intervention was effective in

enhancing the listening motivation of the experimental group participants.

To further investigate the nature of this effect, the researchers conducted a structural equation modeling (SEM) analysis using AMOS, as depicted in Figure 2. This analysis aimed to determine whether the impact of the PLA approach on listening comprehension was direct, indirect (mediated by motivation), or both direct and indirect. By following the mediation model, the SEM analysis allowed the researchers to explore the potential mediating role of motivation in the causal relationship between the personalized learning approach and listening comprehension outcomes. The result of this analysis would provide valuable insight into the mechanisms underlying the observed improvements in listening comprehension for the experimental group.

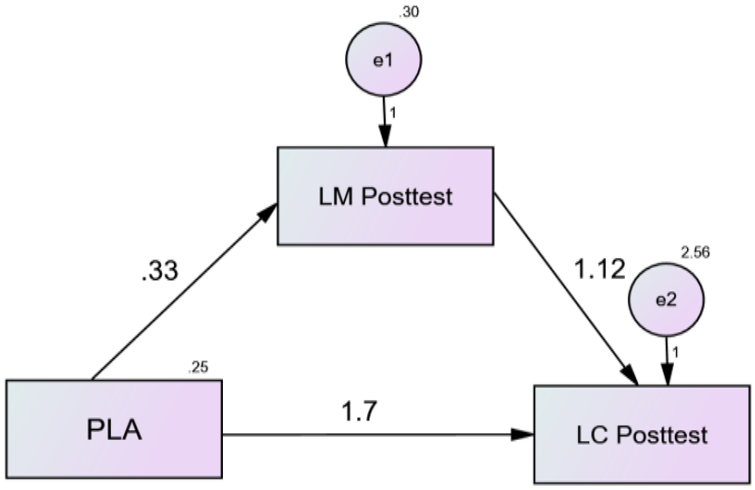

Figure 2. *Unstandardized Adjusted Outputs of AMOS for Listening Comprehension and Motivation Posttest*

Effect of PLA on Listening Comprehension

The results presented in Table 3 demonstrate a statistically significant difference in the mean listening comprehension posttest scores between the control and experimental groups. The regression coefficient value of 1.696 and the critical ratio value of 5.230 (> 1.96) indicate a significant difference. The p-value of 0.001, which is lower than the significance threshold of 0.05, provides strong evidence to support the experimental group's higher mean scores on the listening comprehension posttest compared to the control group. The confidence interval analysis further confirms the significant difference between the groups. The absence of zero between the lower level [1.034] and the upper level [2.356] of the confidence interval reinforces the significant difference, favoring the experimental group. These results suggest that a personalized learning approach to instruction had a direct and significant effect on the listening comprehension posttest scores of the experimental group students. The intervention implemented with the experimental group appears to have significantly enhanced their listening comprehension abilities.

Furthermore, the results indicate that the personalized learning approach instruction accounted for 56.7% ($R^2 = 0.567$) of the variation in the listening comprehension posttest scores of the experimental participants compared to the control group. This implies a significant ($p < 0.05$) role in improving students' listening comprehension skills. In general, the regression analysis and the confidence interval findings provide strong evidence that the personalized learning approach had a direct and significant positive impact on the listening comprehension

posttest scores of the experimental group as compared to the control group.

Effects of PLA on Listening Motivation

The findings in Table 3 reveal a significant difference in the mean scores of listening comprehension between the control and experimental groups on the posttest. The critical ratio of 3.022 (> 1.96), regression weight of .329, and significant p-value of .004 (p < .05) provide strong evidence for this significant difference. The experimental group showed higher levels of motivation in listening comprehension compared to the control group. The confidence interval analysis further supports this significant difference, as there is no overlap between the lower level [.112] and the upper level [.549] of the confidence interval. This provides additional evidence in favor of the significant difference between the groups, favoring the experimental group.

Table 3

Unstandardized Adjusted Regression Weight of Variables in the Structural Model

Causal relationship	B	SE	C.R.	95% Confidence Interval		P	Conclusion
				LL	UL		
Groups ⟶ LC posttest	1.696	.324	5.230	1.034	2.356	.001	
Groups ⟶ LM Posttest	.329	.109	3.022	.112	.549	.004	Partial Mediation
Groups ⟶ LC Posttest ⟶ LM Posttest	.369	.172	2.145	.098	.773	.003	

These results indicate that the personalized learning approach (PLA) instruction had a significant impact on the listening motivation of the experimental group participants, compared to the control group. The intervention implemented with the experimental group contributed to the observed significant difference in their listening motivation. Moreover, the effect of PLA on the experimental participants' listening motivation posttest scores accounts for 38.1 % (R^2 = .381) of the variation. This implies that the intervention played a significant role (p < .05) in enhancing the level of motivation among students about their listening skills. The personalized learning approach instruction had a substantial impact on improving students' listening motivation, as evidenced by the variation explained by the intervention in the experimental group compared to the control group.

Effect of PLA on Listening Comprehension through Motivation

The findings in Table 3 provide evidence of a significant difference in the mean scores between the control and experimental groups on the listening comprehension posttest, mediated by motivations. The crucial ratio of 2.134 (> 1.96), regression weight of .369, and significant p value of .001 (p < .05) indicate a significant difference in the listening comprehension posttest scores. The confidence interval analysis further confirms this significant difference, with no overlap between the lower level [.098] and upper level [.773] of the confidence interval, favoring the experimental group.

Additionally, the personalized learning approach (PLA) instruction implemented with the experimental group affected their listening comprehension posttest scores, with a magnitude of 51.8% (R^2 = .518), through motivation in listening comprehension. This signifies that listening motivation significantly (p < .05) mediated the causal relationship between PLA instruction and students' listening comprehension.

Discussion

Based on the results, the research hypothesis was supported as there was a significant difference observed in the listening comprehension posttest scores between the control and experimental group students, favoring the experimental group participants. This indicates that the PLA instruction had a significant effect on the listening comprehension posttest scores of the experimental group students. In simpler terms, the strategy directly influenced the students' listening comprehension achievement.

Like the result of this study, Perez et al. (2020) conducted a study to assess how students can develop and improve their listening and reading through personalized feedback. The results show that the experimental group with personalized feedback improved their receptive skills more than the control one. Additionally, Abdolrezapour (2021) applied positive psychology to improve EFL learners' listening comprehension ability. The findings also showed that the intervention informed the instructor regarding the specific areas where the learners encountered difficulty, and it allowed for appropriate strategies to help them overcome such problems.

Likewise, personalized learning is theoretically viewed as promoting students' level of understanding and helping them actively participate in their learning. This is because they have a voice in what they are learning based on how they learn best (Enyedy, 2014). This implies that learners have a choice in how they demonstrate what they know and provide evidence for their learning. Thus, in learner learner-centered environment, learners own and co-design their learning. Moreover, Zakaria et al. (2024) reveal that a personalized learning approach modernizes educational settings by fostering intrinsic motivation, improving language skills, and engaging students in academic work. Then the approach supports teacher development and promotes systemic transformation, eventually leading to academic success and well-being.

Contrary to recent research findings, different studies revealed that PLA has no significant effect on students' academic performance (Alamri et al., 2020). For example, I studied how PLA affected students' self-determination and participation in their studies. According to the study, learners' sense of relatedness was not improved by the intervention.

Similarly, Prain et al. (2013) assert that the implementation of PLA varies from experience to practice and is difficult. Others contend that this strategy ignores educational inequality and disadvantage and is based on doubtful ideological foundations (Beach & Dovemarl, 2009; Hartley, 2009). Additionally, according to Campbell et al. (2007), self-motivation and self-regulation are not equally distributed throughout society; as a result, this strategy may put some student cohorts at greater disadvantage. These findings and critiques suggest that the benefits of personalized learning may not be as straightforward or universally applicable as the previous research has indicated. The purpose of the current study is to further investigate the impact of PLA on listening comprehension outcomes. As a result, this study tried to support the literature and empirical findings that the personalized learning approach plays a positive role in enhancing students' level of comprehension. To this end, researchers can have insights to complement the role of the approach in the existing knowledge and provide more clarity concerning the approach in improving students' listening skills.

By examining the precise effects of personalized learning on listening comprehension, the new study aims to expand on earlier research. The researchers intend to advance a more comprehensive understanding of how personalized learning can be most successfully used to improve student learning outcomes, mainly in listening skills development, by analyzing the subtleties and potential drawbacks of this strategy.

In general, the findings provide strong empirical support for the positive impact of the PLA on enhancing students' listening motivation, a key factor in the development of listening comprehension skills. These findings from the research conducted by Alamri et al. (2020)

examined the perceived efficacy of using personalized learning activities based on PL principles.

The study showed the potential of implementing PLA in online courses to support students' psychological need satisfaction, such as autonomy and competence, as well as intrinsic motivations. Students perceived PL intervention as engaging and effective and meeting their learning needs and interests.

Additionally, a personalized learning strategy can effectively boost students' dedication, motivation, and comprehension abilities. PLA enhances students' motivation and involvement in the educational process, leading to better learning results, and a personalized learning method significantly impacts students' willingness to learn as well as their academic achievement (Shemshack & Spector, 2020). This approach raises students' intrinsic motivation, validates their interest in what they are studying, and develops their self-confidence.

Personalized learning is not always supported by literature, though. Fielding (2006) claimed that the personalization agenda may have unfavorable effects, such as manipulatively submitting an individual to high performance standards, where organizational goals take precedence over personal needs. However, Fielding argues that an emphasis on fostering individual personhood might result in desirable person-centered learning.

Other researchers (Campbell et al., 2007) criticize the personalized learning approach as an inadequate substitute for more complex sociocultural theories that better comprehend and meet the needs of many students in classrooms. The critics argue that a strongly perspective-related curriculum that is age-related limits learners' genuine freedom of choice, highlighting the incompatibility between the curriculum and the promised freedom for learners in personalized learning. These divergent viewpoints point to the necessity of more study and discussion about the proper conception and application of personalized learning strategies to optimize their advantages and minimize any potential drawbacks.

The results indicate a significant effect of PLA on the listening comprehension posttest scores of the experimental group participants, mediated by listening motivation, compared to the control group participants. This suggests that the instructional strategy successfully engaged the experimental group students in listening comprehension activities, which in turn enhanced their listening comprehension. The mediating effect of listening motivation implies that the students' level of motivation played a crucial role in the relationship between PLA and listening comprehension, partially explaining the observed results.

In other words, the findings provide strong empirical evidence that the personalized learning approach had a significant impact on students' listening comprehension, which was mediated by their increased motivation in listening comprehension. The intervention was effective in enhancing the experimental group's listening comprehension through the mechanism of improved listening motivation. The research by Ma et al. (2020) revealed whether students' motivational beliefs mediated the association between teacher-student relationships and foreign language performance. The findings revealed that the positive link between teacher-student relationship (TSTs) and foreign language performance is partially mediated by both intrinsic and extrinsic motivation, with the mediation effect of intrinsic motivation being significantly greater than that of extrinsic motivation.

Additionally, the study by Xu (2017) examined the mediating effect of listening metacognitive awareness on the relationship between expectancy, importance, interest, listening anxiety, and listening test scores among Chinese first-year undergraduate students. The results showed that the relationship between expectancy, interest, listening anxiety, and listening test scores was mediated by listening to metacognitive awareness.

The findings from the current study as well as the studies by Ma et al. (2020) and Harputlu and Ceylan (2014) demonstrate the mediating role of various motivational and cognitive factors (such as self-efficacy, extrinsic/intrinsic motivation, and

meta cognitive awareness) in the relationship between instructional approaches and students' language learning outcomes. This underscores the importance of considering this mediating mechanism to fully understand the effects of instructional interventions on language learning.

Specifically, the current study suggests that listening motivations can play a mediating role in the causal relationship between different variables and listening strategies applied in EFL classes. This is consistent with the self-determination theory, which argues that motivation influences the fulfillment of fundamental psychological needs (competence, autonomy, and relatedness), and satisfying these needs has a beneficial impact on personal happiness and motivational capacity.

Motivation is a significant component influencing the success of foreign language learning. Dorneyei (1998) argues that without motivation, even individuals with remarkable abilities cannot achieve long-term goals, and content and instructional methods alone are not sufficient to ensure students' success.

The results of this study and the related studies demonstrate how important cognitive and motivational factors, especially listening motivation, are in mediating the impact of teaching strategies on language learning outcomes. This emphasizes how important it is to take these mediating mechanisms into account when creating and carrying out successful language learning.

CONCLUSIONS

The results of this study demonstrate that using PLA to raise the motivation and listening comprehension of grade 11 EFL students is encouraging. This indicates that PLA improved students' motivation to understand listening materials and their listening comprehension level. Therefore, PLA should be used to improve students' listening comprehension.

Furthermore, based on the results of this study, it can be said that introducing students to PLA makes them more responsible, which enhances their motivation and listening comprehension abilities. Similarly, listening motivation was revealed to act as a mediator in the causal link between PLA and listening comprehension.

Additionally, the results show that the method has a direct significant impact on listening comprehension as well as an indirect impact through listening motivation. Thus, it can be concluded that listening comprehension and PLA are partially mediated by listening motivation.

Ultimately, the results of this study highlight how PLA enhances the motivation and listening comprehension of grade 11 EFL students. Furthermore, the findings suggest that listening motivation is an essential mediator between PLA and students' listening comprehension outcomes.

Recommendations

Based on the findings of this study, the researchers suggest that curriculum designers should provide and integrate techniques that facilitate students to follow the PLA in listening classes. Moreover, they should contribute to providing explicit procedures of PLA in the learners' listening texts so that they can be engaged to develop their listening skills and level of motivation towards listening comprehension.

Accordingly, the results of this study suggest that to promote motivation and listening comprehension abilities, EFL teachers and students should concentrate on including PLA into the texts. This implies that the pedagogy used in grade 11 EFL listening classes should concentrate on helping students get more involved to improve their listening comprehension abilities and level of listening motivation.

Furthermore, the study's conclusions suggest that researchers should do a similar study in different EFL situations using manual instruction and data gathering instruments. Since this study might not represent all the secondary schools at large, future research should be done on more secondary schools. Lastly, a study should be done on the effects of PLA on reading, speaking, writing, vocabulary, and grammar, and the difficulties of applying PLA in a general EFL context.

CRediT authorship contribution statement:

Mitiku Daba: Methodology, Data curation, Writing - Original Draft, **Yoseph Mezgebu:** Formal analysis, Supervision, Writing - Review & Editing, **Getnet Gidey:** Validation, Resources, Conceptualization.

Ethical approval

This study was conducted according to the ethical standards of the University of Gondar. Participation was voluntary, and informed consent was obtained from all participants. Before data collection, confidentiality and anonymity were maintained throughout the research process.

Declaration of competing interest

The contributors affirm that they have no competing interests.

Data availability statements

Upon request, the corresponding author will provide all data.

Acknowledgments

The authors would like to sincerely thank their colleagues for their insightful thoughts and helpful criticism, which helped to raise the caliber and rigor of our study. We also thank the English language instructors, students who took part in this study, and the director of Leka Nekemte Secondary School.

REFERENCES

Alamri, H., Lowell, V., Watson, W., & Watson, S. L. (2020). Using personalized learning as an instructional approach to motivate learners in online higher education: Learner self-determination and intrinsic motivation. *Journal of Research on Technology in Education*, *52*(3), 322-352.https://doi.org/10.1080/15391523.2020.1728449

Ajmal, M., & Kumar, T. (2020). Inculcating Learners' Listening Motivation in English Language Teaching: A Case Study of British Education and Training System. *Arab World English Journal, 11*(4), 409-425. https://dx.doi.org/10.24093/awej/vol11no4.26

Abdolrezapour, P., & Ghanbari, N. (2021). The effect of Positive Psychology Intervention on EFL learners' listening Comprehension. *Journal of Psycholinguistic Research*, *50*(5), 1159–1180. https://doi.org/10.1007/s10936-021-09780-5

Banje, A. C. (2019). Assessing students' meta-cognitive listening. *International Journal of Scientific and Research Publications, 9* (10), 2250-3153.http://dx.doi.org/10.29322/IJSRP9.10.2019.p9496

Beach, D., & Dovemark, M. (2009). Making 'right' choices? An ethnographic account of creativity, performance, and Personalised learning policy, concepts, and practices. *Oxford Review of Education*, *35*(6), 689-704. https://doi.org/10.1080/03054980903122267

Campbell, R. J., Robinson, W., Neelands, J., Hewston, R., & Mazzoli, L. (2007). Personalised learning: Ambiguities in theory and practice. *British journal of educational studies*, *55*(2), 135-154. https://doi.org/10.1111/j.1467-8527.2007.00370.x

Collier, J. (2020). *Applied structural equation modeling using AMOS: Basic to advanced techniques*. Routledge. Deci, E. L., & Ryan, R. M. 2000. The "what" and "why" of goal pursuits: Human needs and self-determination of behavior. *Psychological Inquiry, 11, 227-268. https://doi.org/10.4324/9781003018414*

Dajene, F.B., & Eyob, A.K. (2020). Teachers' and Students' Perceptions towards Teaching. Listening Skills in CLT Classrooms: The Case of First Year Students in Wolaita Sodo University *Int. J. Curr. Res. Aca. Revm 8(*6),13-25. https://doi.org/10.20546/ijcrar.2020.80 6.003

Dorneyei, Z. (1998). Motivation in second and foreign language learning, *Language Teaching, 31,* 117–35. https://doi.org/10.1017/S0261444480001315X

Enyedy, N. (2014). *Personalized instruction: New interest, old rhetoric, limited results, and the need for a new direction for computer-mediated learning.* National Education Policy Center. http://nepc.colorado.edu/publication/personalized-instruction

Fielding, M. (2006). Leadership, personalization, and high-performance schooling: naming the new totalitarianism. *School Leadership and management, 26(4), 347-369.* https://doi.org/10.1080/13632430600886889

Hamouda, A. (2013). An investigation of listening comprehension problems encountered by Saudi students in the EL listening classroom. *International journal of academic research in progressive education and development, 2(2), 113-155.* https://pdfs.semanticscholar.org/b811/984d6e30068a62a970b1f75b2e701e0b159e.pdf

Harputlu, L., & Ceylan, E. (2014). The effects of motivation and metacognitive strategy use on EFL listening proficiency. *Procedia-Social and Behavioral Sciences*, *158*, 124-131. https://doi.org/10.1016/j.sbspro.2014.12.056

Hartley, D. (2009). Personalisation: the nostalgic revival of child-centred education. *Journal of Education Policy*, *24*(4), 423-434. https://doi.org/10.1080/02680930802669318

Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Publications. https://so04.tci-thaijo.org/index.php/jkbu/article/view/276042

Hendrawijaya, A. T. (2019). Mediation Effect of Motivation Mediation Effect of Motivation on Learning Achievement. http://dx.doi.org/10.25037/pancaran.v8i1.214

Kuutila, N. (2016). *Personalized learning in English as a foreign language education* (Master's thesis).Peru http://urn.fi/URN:NBN:fi:jyu -201608193829

Ugla, R. L. (2021). Motivation toward English language learning among students of different fields of study: A case of Iraqi University students. *Arab World English Journal (AWEJ)*, *12*. http://dx.doi.org/10.24093/awej/vol12no1.10

Ma, L., Duan, X., & Liu, J. (2020). Mediating role of motivation on the effects of teacher-student relationships on foreign language achievement. *Porta Linguarum: revista internacional de didáctica de las lenguas extranjeras, (33),* 129-144. http://hdl.handle.net/10481/62811

Muhammad, M. (2020). The Effectiveness of Personalized Learning Model in Developing Intensive English Reading Skills among Preparatory Stage Pupils. *College of* Education *Journal. Port Said, 32* (32), 748-770 https://doi.org/10.21608/jftp.2020.31791.1048

Nunezth, J. L., & Leon, J. (2016). The mediating effect of intrinsic motivation to learn on the relationship between students' autonomy support and vitality, and deep learning. *The Spanish Journal of Psychology*, *19*, E42. http://dx.doi.org/10.1017/sjp.2016.43

Perez, S. J. J., Sánchez, R. R., González, C. J. A., & Cózar, G. R. (2020). The effect of personalized feedback on listening and reading skills in learning EFL. *Computer Assisted Language Learning*, *35*(3), 469–491. https://doi.org/10.1080/09588221.2019.1705354

Prain, V., Cox, P., Deed, C., Dorman, J., Edwards, D., Farrelly, C. & Yager, Z. (2013). Personalised learning: Lessons to be learnt. *British Educational Research Journal, 39*(4), 654-676. https://doi.org/10.1080/01411926.2012.669747

Quinapallo, M. A., Mejia, L. L., & Candela, G. A. (2024). Motivation in the Development of Listening and Speaking Skills in English Learners: A Review. *Estudios y Perspectivas Revista Científica y Académica*, *4*(2), 1509-1527.https://doi.org/10.61384/r.c.a..v4i2.301

Ryan, R. M., &Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*, 68-78. https://ssrn.com/abstract=2778528

Shemshack, A., & Spector, J. (2020). A systematic literature review of personalized learning

terms. Smart Learning Environments, *7* (33). https://doi.org/10.1186/s40561-020-00140-9

Weinstein, N., Itzchakov, G., & Legate, N. (2022). The motivational value of listening during intimate and difficult conversations. *Social and Personality Psychology Compass*, *16*(2), e12651. https://psycnet.apa.org/doi/10.1111/spc3.12651

Xu, J. (2017). The mediating effect of listening metacognitive awareness between test-taking motivation and listening test score: An expectancy-value theory approach. *Frontiers in Psychology*, *8*, 304097. https://doi.org/10.3389/fpsyg.2017.02201

Yenesew, S. Z. (2019). English Language Teaching Practice in the Mirror of Critical Pedagogy: The Case of Higher Education Preparatory Schools in Central Gondar Town, Northwest Ethiopia. *International Journal of Development in Social Sciences and Humanities,* *8*(2), 78-104. https://journals.indexcopernicus.com/api/file/viewByFileId/1293422

Zakaria, N., Lim, G. F., Jalil, N. A., Anuar, N. N. A. N., & Aziz, A. A. (2024). The Implementation of Personalized Learning to Teach English in Malaysian Low-Enrolment Schools. In *SHS Web of Conferences,* 182, 01011). EDP Sciences. https://doi.org/10.1051/shsconf/202418201011