

STUDENTS' SELF-EFFICACY IN DEVELOPING LISTENING SKILLS IN THE TOEFL PREPARATION PROGRAM

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ABSTRACT

This study investigated the relationship between students' self-efficacy and listening skill development within an intensive TOEFL preparation program, while qualitatively exploring the process underlying students' self-efficacy. Employing a sequential explanatory mixed-method design, the quantitative phase involved 38 participants who completed the Questionnaire on English Self-efficacy (QESE) alongside took pre-test and post-test TOEFL listening assessments, with data analyzed through Pearson Correlation and descriptive statistics. The qualitative phase conducted semi-structured interviews with three purposively selected participants representing high, moderate, and low self-efficacy profiles, with data examined through thematic analysis. Quantitative result revealed a weak and statistically insignificant relationship between self-efficacy and listening improvement ($r = 0.158$; $p > 0.05$), indicating that self-efficacy does not function as direct or independent predictor of listening development in short-term, high-stakes preparation contexts. Qualitative findings indicated that students' self-efficacy was frequently mis-calibrated with actual performance and was shaped by emotional reaction such as anxiety and frustration, as well as by contextual and technical factors including audio quality and classroom conditions. Overall, the study suggests that self-efficacy function as dynamic and context-dependent belief whose influence on TOEFL listening development is mediated by strategic competence, emotional regulation, and supportive learning environments rather than acting as direct predictor of performance.

Keywords: Listening Skills, Mixed-method Research, Self-efficacy, TOEFL Preparation

A. INTRODUCTION

English has emerged as the most preferred language for global communication and collaboration, which is vital in various domains, such as academic achievement, professional prospects, and intercultural communication (Karmaker & Al Hasan, 2025). Consequently, English proficiency is assessed across various levels, ranging from basic to advanced, which is normally evaluated through standardized examinations such as the TOEFL (Europarat, 2010; Lyle & Adrian, 2010). As a standardized measure of English proficiency, the TOEFL is widely recognized as an admission requirement for higher education. The examination

was originally created and validated by the Educational Testing Service (ETS) in New Jersey to ensure reliable assessment standard (Marisa & Zaiyana, 2019). In Indonesia, TOEFL has become an essential requirement for graduation, scholarship enrolment, and other academic activities (Hafida et al, 2023). Therefore, effective test preparation plays a crucial role in assisting English language learners attain their desired proficiency levels. Without proper preparation, achieving targeted outcomes may become more challenging (Alfelia et al, 2024). It not only enhances learners' linguistic competence and cognitive readiness by Yohanes, (2020) but also improve learners' motivation, confidence, and attitude towards English education (Nita & Asyifa, 2022).

The TOEFL (*Test of English Foreign Language*) evaluates four indispensable language skills include listening, reading, speaking, and writing. Among these elements, listening is regarded as a crucial area of assessment (Deborah, 2007). Listening is an active process of comprehending what we hear due to listening is a receptive skill along with reading (Nunan, 2012). As Rost, (2011) emphasizes that listening is crucial part of spoken language processing since it is associated with diverse areas of inquiry and development. The improvement of listening ability plays a substantial role in increasing TOEFL performance. This is particularly important because listening occupies a central component within the TOEFL structure (Sirajuddin & Yahrif, 2023). However, students usually encounter difficulties in the listening section particularly in understanding dialogues, largely due to lack of vocabulary knowledge and unfamiliarity with native speakers (Juliana, 2021). Furthermore, listening is a more concentrated task, so depending on the impact of such an impaired ability to process linguistic input the students might experience anxiety or nervousness when they are listening (Gjinali & Piri, 2023). As a result, many students think about withdrawing from the class when they can't understand their teachers. Language learning achievement is strongly influenced by psychological dimensions, particularly self-efficacy. This construct contributes substantially to learners' motivation, persistence, and overall academic success (Saez et al, 2025; Yan, 2012).

According to self-efficacy theory, individuals assess their capability to accomplish tasks at a particular level of performance. This evaluation determines how confidently they approach specific goals. These judgments are shaped by several internal factors, including personal beliefs, perceived self-regulation, and emotional states (Bandura, 1997). Self-efficacy originates from four primary origins: Achievement Experience, Observational Experience, Social Encouragement, and Physiological Conditions. These categories were proposed by Bandura, (1997). Among them, *Mastery experience* is regarded as the most powerful source because it involves judging one's performance against personal standards rather than merely observing the outcome. It offers the most credible evidence of an individual's capability to succeed (Bandura, 1997; Usher et al, 2019). *Vicarious experiences* can be a significant source of information to increase one's self-efficacy. In a learning context, students usually compare themselves to others in similar situations. It has been demonstrated to affect pupils' self-efficacy, either negatively or positively (Bandura, 1997). *Social persuasion* refers to people's opinions and reactions to one's actual and potential performances. *Physiological states* such as sweating and nervousness represent the least reliable source of self-efficacy information. The awareness experienced when an individual feels anxious regarding performing an upcoming task has a negative impact on their self-efficacy for that task (Bandura, 1997).

Several research works have explored the correlation between the self-efficacy in listening and the listening outcomes among English as a Foreign Language (EFL) students. For example, a study carried out by Yang and Wu, (2025) employing an establish Structural Equation Modelling (SEM) analysis was conducted to investigate the impact of L2 listening mindset and self-efficacy on English as a Foreign Language (EFL) learners, identified a significant direct relationship between the two constructs. The results suggest that, within certain instruction contexts, self-efficacy can facilitate the development of listening skills. Similarly, the study by Isty et al, (2017) it was found that there is a strong positive correlation between students' self-efficacy and their listening comprehension at the eight-semester level in the English study program of FKIP-UR.

However, despite an increasing amount of attention on listening skills in academic contexts they remain under-researched and there exists a significant dearth of work that specifically explores self-efficacy for TOEFL listening development within the context of TOEFL-preparation programs. The most of studies in the past either focused on other language areas or investigated self-efficacy in general language-learning contexts; as a result, scant evidence has been found for how learners' self-efficacy affects performance in terms of high-stakes TOEFL listening sections. This gap is all the more striking inasmuch as listening has often been considered one of the most difficult activities and calls for a certain linguistic competence along with psychological readiness to tackle it (Namaziandost et al, 2019; Rost, 2014).

Furthermore, there are methodological shortcomings in previous studies. Quantitative studies reveal mixed results concerning the relationship between self-efficacy and listening development but provide little insight into how this comes about, whereas qualitative studies seldom examine the cognitive and affective processes that influence language learners' belief in their abilities during TOEFL listening tasks. Examining these two gaps this current research employs a mixed methods sequential explanatory design, in which quantitative findings are prioritized and subsequently supplemented with qualitative data to address the research inquiry:

1. Is there a noteworthy correlation between students' self-efficacy in enhancing listening skills in a TOEFL preparation program at an educational institution?

The hypotheses proposed are:

- (H0) There is no significant correlation between students' self-efficacy and their listening skill improvement in the TOEFL preparation program.
- (H1) There exists a significant correlation between students' self-efficacy and their listening skill enhancement in the TOEFL preparation program.

2. What cognitive, affective, and contextual processes underlie students' self-efficacy during TOEFL listening tasks in the preparation program?

B. METHOD

This research applies a mixed-methods design, specifically a sequential explanatory model. The study employs both quantitative and followed by qualitative. The quantitative phase examines the correlation between self-efficacy and their listening skill improvement in the TOEFL preparation program, while the qualitative phase explores the underlying processes that shape students' self-efficacy during TOEFL listening tasks, providing deeper insight

into the patterns identified quantitative. The population consisted of 38 English and non-English major students enrolled in a TOEFL preparation program at two institutions located in Semarang and Yogyakarta, all of whom had completed at least one full cycle of TOEFL program.

Data collection in the quantitative phase involved the administration of the Questionnaire of English Self-Efficacy (QESE), adapted by Wang et al, (2014) at the end of the TOEFL preparation program. These items were designed to assess four fundamental constructs: mastery experience, vicarious experience, verbal persuasion, and psychological states. The instrument's validity was examined using a product-moment correlation table at a 5% significance level and through expert judgement. The self-efficacy instrument consisted of 20 Likert-scale items with four response categories ranging from "strongly disagree" to "strongly agree". Moreover, for scoring, each respondent's total score was calculated based on all 20 items, yielding a possible range of 20 to 80. Students' self-efficacy levels were then categorized into three levels – high, moderate, and low – using the interval score technique. Additionally, students' TOEFL listening scores from pre-test and post-test were collected from the institutional database to ensure the findings were pedagogically relevant and internationally valid. The degree of listening improvement Was subsequently measured using the Normalized Gain (N-Gain). The formulation for Normalized Gain (N-gain) is as follows:

$$\text{N-Gain} = \frac{\text{Post-Test Score} - \text{Pre-Test Score}}{\text{Maximum Score} - \text{Pre-Test Score}}$$

(Hake, 2002)

Next, before conducting the correlation analysis, this study performed normality (Used Shapiro wilk test since the sample size was fewer than 50) and linearity test to determine the most appropriate statistical method for examining the relationship between self-efficacy and TOEFL listening development. Last, the research investigated the association between students' self-efficacy and their development in listening to the TOEFL using SPSS 22. Pearson Product Correlation was used due to the data being normal, and the assumption of linearity was met.

In the Qualitative phase, this study implements the semi-structures interviews, which consisted of 20 items. This instrument adaptation from Zhang and Ardasheva, (2019) which emphasizes domain-specific self-efficacy, drawing from Bandura, (1997) framework, particularly in listening. Furthermore, this study selected the participant for interview using purposive sampling based on students who represented different levels of self-efficacy based on the quantitative findings (high, moderate, and low). Individual interviews were conducted after the completion of the TOEFL preparation program. Each interview, ranging from 15 to 30 minutes in duration, was recorded with the participants' permission to acquire a thorough insight into the factors influencing the study to students' self-efficacy levels concerning their development of listening abilities. The data collected were transcribed word for word and then subjected to thematic analysis, Braun and Clarke, (2006) to identify recurring patterns and thematic that reflect students' perceptions of their self-efficacy in developing listening skills. To integrate qualitative and quantitative data, methodological triangulation analysis will yield a more thorough comprehension of the association between self-efficacy and TOEFL listening skill development.

C. FINDINGS AND DISCUSSION

Before analyzing the data, this study used Shapiro-Wilk Test which was considered the most suitable method for assessing normality in small samples (Cohen et al., 2018).

Table 1. Normality Test

Kolmogorov-Smirnov ^a			Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.
TotalSE	.114	38	.200*	.956	38	.139
NGain	.191	38	.001	.945	38	.060

*. This is a lower bound of the true significance.

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a. Lilliefors Significance Correction

The result showed that both variables were normally distributed (Self-Efficacy *sig.* 0.139; TOEFL listening N-Gain *sig.* 0.60), since the significance values exceeded 0.05. Therefore, the data met the assumption of normality (see Table 1). After confirming the normal distribution of the data, a linearity test was conducted as another prerequisite to determine the most appropriate statistical analysis (Tabachnick & Fidell, 2005; Warner, 2013).

Table 2. Linearity Test

			Sum of Squares	df	Mean Square	F	Sig.
NGain * TotalSE	Between Groups	(Combined)	5956.667	17	350.392	1.162	.371
		Linearity	301.369	1	301.369	.999	.329
		Deviation from Linearity	5655.297	16	353.456	1.172	.364
	Within Groups		6031.333	20	301.567		
	Total		11988.000	37			

According to Sudarmanto, (2005) if the significance value of the deviation from linearity exceeds alpha level of 0.05, the relationship between variables can be considered linear. In this study, the significant value of Deviation from linearity was 0.364, which is higher than 0.05. This result indicates that indicating the relationship between student's self-efficacy and TOEFL listening N-gain meets the assumption of linearity. Therefore, since the data were normally distributed and the assumption of linearity was met, Pearson Product Correlation was tasked with investigating the correlation between students' self-efficacy and TOEFL listening development (N-Gain from pre-test and post-test).

1. Correlation Between Students' Self-efficacy and TOEFL Listening Development.

Based on Pearson correlation analysis, the significance (*sig. 2-tailed*) of 0.344 indicates the *p-value* in the *two-tailed* correlation hypothesis test. As state as Woodrow, (2014) on the null hypothesis (H0) is accepted if the *p-value* is greater than 0.05, indicating that the correlation is not statistically significant. This means there is insufficient evidence to suggest a meaningful relationship between total self-efficacy and N-Gain or TOEFL listening improvement, leading to the acceptance of the null hypothesis (H0) stating no significant relationship between self-efficacy and listening skill development. The alternative hypotheses (H1) is therefore rejected in line with Bakti et al, (2019) who found a weak and statistically non-significant link between students' listening self-efficacy and comprehension, implying that self-efficacy is not a primary determinant of listening ability.

In contrast, Yang and Wu, (2025) who used an established procedure with the Structural Equation Model (SEM) to explore the influence of L2 listening mindset and self-efficacy among English as a foreign language (EFL), revealed significant direct links between the two constructs, suggesting that in some instructional contexts, self-efficacy may indeed facilitate listening development. These mixed findings suggest that the role of self-efficacy in listening development may vary depending on learners' calibration accuracy, motivational orientations, and instructional context.

Table 3. Pearson Correlation

		TotalSE	NGain
TotalSE	Pearson Correlation	1	.158
	Sig. (2-tailed)		.344
	N	38	38
NGain	Pearson Correlation	.158	1
	Sig. (2-tailed)	.344	
	N	38	38

2. Cognitive, Affective and Contextual Processes Influencing Students' Self-efficacy in TOEFL Listening Tasks

While the quantitative findings addressed the existence of a relationship between self-efficacy and listening development, the qualitative findings illuminate the cognitive, affective, and contextual process through which students' self-efficacy is constructed, challenged, and regulated during TOEFL listening tasks. Participants with Moderate Self-Efficacy (S2) and Low Self-Efficacy (S3) highlight that self-efficacy does not guarantee improvement in listening. One participant noted that some peers with high confidence did not necessarily achieve progress in listening.

“Depend on the person, sometimes there are friends who have high self-confidence, but it turns out that when they listen, it does not match what they say” (S2, MSE, September 22, 2025)

“Sometimes being overly confident is not good either. It is important to have confidence, but don't overdo it.” (S3, LSE, September 20, 2025)

This pattern aligns with the finding Talsma et al, (2019) who examined the harmony between students' academic self-belief and their real achievement through a metacognitive calibration method. The finding highlights that self-efficacy does not always align with performance and that inflated confidence may negatively affect self-regulation and learning outcomes. This indicates that confidence must be supported by actual listening competence and effective strategy to result in effective test performance. The data supports the limited connection between self-efficacy and enhancements in listening skills. Furthermore, participants expressed feelings of self-doubt and negative self-appraisal when their effort did not produce the expected result. One participant stated:

“I felt discouraged because I thought I've studied as hard as I can, but how come they get a good score while I don't? it didn't match my expectation.” (S3, LSE, September 20, 2025)

This experience can be explained through Bandura's, (1997) Social-Cognitive Theory, which posits that self-efficacy is shaped not only by performance accomplishments but also by emotional states such as stress, anxiety, and disappointment. When learners experience negative emotional reactions following unmet expectations, their perceived ability can decrease even when their objective performance indicate otherwise. This interpretation is consistent with Al-Rickaby's, (2022) findings, which emphasize that emotional states can significantly distort learner's judgement of their own language abilities.

Additionally, S1 as High Self-efficacy highlighted that the environmental and technical condition sometimes play a greater impact on results than self-efficacy. The participant explained that classroom condition and audio clarity can directly affect comprehension:

"One time, my teacher was a bit 'noisy,' so the audio wasn't clear... My confidence dropped because I immediately thought, 'I'm definitely getting this wrong'" (S1, HSE, September 29, 2025)

This situation can be understood through the concept of Triadic Reciprocal Determinism, proposed by Bandura which explains that human behavior results from the interplay among individual factors (such as cognition and internal beliefs), conduct, and the surroundings (Bandura, 1986). Empirical work by Milliner and Dimoski (2024) further underscores the importance of instructional factors, showing that explicit cognitive and metacognitive strategy training can enhance listening performance even when self-efficacy levels remain unchanged, thereby highlighting technical competence as more proximal driver of listening gains. Similarly with Honicke and Broadbent, (2016) found that the association between self-efficacy and academic performance is influenced by variables such as learning techniques, drive, and self-control, rather than solely by exertion.

Overall, the synthesis of numerical and descriptive results suggests that there is no substantial correlation between self-efficacy and the enhancement of TOEFL listening abilities, thereby corroborating the null hypothesis. Thus, triangulation confirms that self-efficacy alone is not a reliable predictor of listening improvement, as confidence does not always align with actual achievement. Other variables, such as anxiety, stress, listening exercise, gradual progress monitoring, supportive teacher feedback and contextual condition, may exert a more substantial influence on students' listening performance.

D. CONCLUSION

This study examined the relationship between students' self-efficacy and TOEFL listening development among students enrolled in and intensive preparation program. The findings revealed a weak and non-significant association between the two variables ($r = 0.158$; $p = .344$). It indicated that self-efficacy alone does not function as a direct predictor of listening improvement within this context. The qualitative findings further showed that learners' confidence was frequently mis-calibrated and shaped by emotional factors such as anxiety and frustration, as well as contextual factors including audio clarity and classroom conditions, suggesting that self-efficacy operates as a dynamic, experience-independent belief rather than a stable trait. In summary, these results underscore the complexity of listening development and highlight that standardized gains within a short preparation program are unlikely to be explained by confidence alone.

These findings carry important implications for TOEFL preparation instruction. Teachers are encouraged to move beyond confidence-building activities alone and instead incorporate explicit strategy training - such as note-taking techniques and discourse cue recognition - alongside metacognitive calibration exercises that assist students align their self-assessment with actual performance. Program designers should also attend to the quality of the learning environment, as audio fidelity and classroom conditions were found to meaningfully affect learner confidence and engagement. Furthermore, integrating task-based self-efficacy checks throughout a course, rather than relying on a single global measure, may provide more actionable insight into learners' developing beliefs and performance. On a broader level, these implications suggest that effective TOEFL preparation requires a holistic approach - one that simultaneously addresses learners' cognitive strategies, emotional regulation, and the environmental quality of instruction. Confidence, when properly calibrated and supported by skill development, can serve as a meaningful driver of sustained engagement and long-term listening growth, even if its effects are not immediately reflected in standardized test scores within a condensed timeframe.

Several limitations of this study should be acknowledged. First, although 100 participants were initially planned, only 38 were recruited due to a decline in program enrollment during data collection semester, which may limit the generalizability of the quantitative findings. Second, only three out of six targeted participants agreed to take part in-depth interviews, restricting the depth and breadth of the qualitative data. Third, self-efficacy was measured through self-reported questionnaires, which are susceptible to social desirability bias and inaccurate self-assessment, potentially affecting the reliability of the data. Additionally, the relatively short duration of the preparation program also means that any longitudinal effects of self-efficacy on listening development could not be captured. Future research is recommended to explore task-based efficacy measures, strategy instruction, calibration training, and proficiency-level moderation to deepen understanding of how self-efficacy interact with listening development.

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