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Examining the Relationship Between IELTS Preparation and English Language Proficiency Skills of International Students

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ABSTRACT

IELTS is a widely accepted English language proficiency test, required for academic and professional purposes. In this study, we examined the relationship between IELTS and the English proficiency skills of international students. We developed a proximal mediation model based on Bandura's triadic reciprocal determinism theory and tested it using covariance-based structural equation modeling. Data were collected through a survey of 275 international students preparing for IELTS to meet their academic requirements. The students reported that IELTS assessments significantly improved their English skills. They reported positive views of IELTS as an exam to enhance their language proficiency. Learning motivation for self-regulated learning and perceived self-efficacy for academic achievement served as two mediating factors that positively influenced the relationship between students' perceptions of IELTS and their English skills. Finally, the study analyzed the moderating effects of students' time management skills and found significant positive moderating effects.

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INTRODUCTION

Proficiency in the English language functions as the fundamental predictor of academic success for international students (Wang et al., 2023). The number of international students pursuing higher education from postsecondary institutions has increased dramatically in recent years. According to UNESCO (2018), 4.8 million students are enrolled in postsecondary educational institutions outside their home countries. In these institutions, English-medium instruction (EMI) has become a cornerstone of educational phenomenon at higher levels, notably in international settings (Thumvichit & Laoriandee, 2024). Therefore, higher educational institutions (HEIs) generally have English language proficiency requirements for international admissions to ensure that students can meet their academic criteria successfully. Consequently, international students must possess strong English proficiency when studying in English-speaking countries (Bo et al., 2023). Universities often operate under the assumption that strong English skills enable students to excel in their academic programs and foster effective interaction with peers and faculty from diverse backgrounds (Benzie, 2010). Therefore, language proficiency is considered a prerequisite for enrollment in international universities, and students are expected to provide a certificate of English proficiency.

Universities conduct various tests to assess the English proficiency level of their students. The International English Language Testing System (IELTS) is among the most standardized English language tests administered in more than 140 countries. Additionally, it is regarded as a benchmark language proficiency test for students who intend to continue their graduate work at international universities (Muluk et al., 2022). The British Council, Cambridge Assessment English, and IDP Australia designed the IELTS as an English language test to measure the English language proficiency of students (Pearson, 2019). Ma and Chong (2022) asserted that the IELTS is a high-stakes test designed for academic, professional, and workplace purposes that assesses essential linguistic skills, including reading, listening, speaking, and writing, as defined by established gatekeeping organizations. Moreover, Green (2006) emphasized that IELTS is a high-stakes gatekeeping test that universities use to evaluate students' language abilities, and its outcomes often have significant implications for students' academic and professional trajectories.

Prior studies have investigated students' perceptions of high-stakes English tests, which profoundly affect their academic future (Dong & Liu, 2022; Li et al., 2012; Zhang, 2021). For example, Zhang (2021) conducted research on Chinese students to examine the effect of students' perception of NMET high-stakes tests on their extracurricular English learning activities, revealing that students' perception of NMET high-stakes tests has a significant impact on test takers' extracurricular English learning activities, helping them achieve their academic goals. Similarly, Dong and Liu (2022) examined the relationships among students' perceptions, learning motivation, and learning time allotment, revealing that students' perceptions of English high-stakes tests significantly influence their learning motivation in different ways and that these perceptions also affect their learning time allotment. Moreover, studies have investigated students' perceptions of IELTS to observe changes in their learning behaviors (Hosseini, 2013; Zahari et al., 2016). These studies revealed that students showed positive perceptions after completing an IELTS test, as it improved their academic achievement and English learning ability. Moreover, students must learn to perceive things accurately, as this influences their learning behaviors and ultimately determines their success or failure (Hafrizal et al., 2021). Hazari (2014) stated that students learn more effectively and respond significantly better in a learning environment if they exhibit positive perceptions and attitudes. Thus, these studies shed light on students' perceptions of IELTS English high-stakes tests that enhance the English language proficiency of international students.

However, previous studies have revealed insightful findings about students' perceptions of English high-stakes tests and their significant effects on English language learning (Li et al., 2012; Zhang, 2021). Nevertheless, to date, there remains a conspicuous gap in understanding how students' perceptions of IELTS affect their English language skills. Consequently, to fill the prevailing knowledge gap, this study examines the influence of students' perceptions of IELTS on their English language skills (listening, speaking, reading, and writing). Furthermore, this study investigated the students' perceptions of IELTS because they experienced the social and educational consequences of the test. These consequences have a significant impact on their academic achievements and future job prospects (Hayes & Read, 2004). Moreover, examining the mediating effects of learning motivation on self-regulated learning and perceived self-efficacy for academic achievement, as well as the moderating effects of students' time management skills, on the relationship between students' perceptions of IELTS and English language skills, would provide further depth to the literature. This research aims to provide a deeper understanding of the educational and social implications of IELTS, particularly their influence on students' academic success and career prospects.

LITERATURE REVIEW

IELTS

IELTS is an assessment used worldwide to assess the English language proficiency of test takers. It is owned by the British Council, the International Development Programs of Australian Universities and Colleges (IDP), and the Cambridge English Language Assessment (Pearson, 2019). It was founded in 1989, and after some amendments, it evolved into a high-stakes and high-impact English assessment test that evaluates test takers' proficiency in listening, speaking, reading, and writing (Davies, 2018). The IELTS is frequently chosen by international students over the TOEFL and Duolingo because of its worldwide recognition, exam structure, and importance in immigration. IELTS is essential for immigration to nations such as the UK, Canada, and Australia and is approved by more than 11,000 institutions, in contrast to TOEFL and Duolingo (British Council, 2023). Compared with the recorded replies in other language tests, the IELTS's in-person speaking exam is more genuine and successful in evaluating genuine communication abilities (Read, 2022).

Additionally, IELTS provides a more transparent and equitable evaluation of all four language abilities, with high score reliability (Poza & Shannon, 2020). The test's credibility as a high-stakes assessment instrument is further reinforced by its dependability, openness in scoring, and extensive validation procedures, which compare favorably with those of other language tests (Hayes & Read, 2004). Moreover, IELTS significantly affects test takers' future success and career opportunities for international students. In addition to evaluating language competency, it affects learners' motivation and learning confidence, which are essential factors in this study (Rahimi, 2023). Therefore, an emphasis on IELTS is warranted due to its applicability to the international student body and its solid theoretical foundation in frameworks for language acquisition (Dörnyei, 2018).

Students' Perceptions of the High-Stakes Test

Mangal (2016) asserted that perception is a highly personalized psychological process that enables an organism to organize and interpret intricate patterns of sensory stimulation, thereby giving it the ability to initiate a behavioral response. Students' perceptions are an essential factor that helps them formulate behavior in the learning environment. As Akande et al. (2009) stated, students' perception is a psychological process that occurs when they receive external stimulation and respond to understanding particular objects. According to Pradanti and Muqtada (2023), students with positive and well-formed perceptions tend to exhibit enhanced learning behaviors and greater motivation, underscoring the critical role of perception in driving academic success. Thus, the previous literature revealed that student perceptions predict academic success in English-language learning. For example, Zhang (2021) employed test-takers' perceptions to examine the relationship between their perceptions and extracurricular English learning activities. It significantly affects students' perceptions of extracurricular English learning activities. Similarly, Dong and Liu (2022) examined the relationships among test takers' perceptions of high-stakes test validity, learning

motivation, and time allocation. Their study demonstrated that students with positive perceptions of test validity displayed higher motivation levels and allocated more time to learning, highlighting the role of perception in driving effective study behaviors. Students' perceptions also contribute to shaping their attitudes toward specific learning activities. According to Ahmad and Aziz (2009), perceptions represent students' viewpoints on the learning process, which can inform teachers and peers about strategies to enhance the overall learning environment.

Rerung (2018) reported that students with positive perceptions of English learning activities were more motivated and showed heightened interest in language acquisition. This motivation directly affects their engagement and proficiency development. Abdulwahed Ahmed Ismail (2011) explored students' perceptions in the context of English language programs, such as TESOL, linguistics, and academic writing. The study revealed that students with strong perceptions of the importance of academic writing were more committed to developing extensive and intensive writing skills, which aligned with their academic and professional aspirations. These findings underscore the importance of perception in facilitating targeted skill development to achieve educational and career objectives. Building on insights from the prior literature, this study examines the impact of students' perceptions of the IELTS high-stakes test on their English language skills. Positive perceptions of such tests may enhance students' motivation, learning strategies, and skill acquisition in listening, speaking, reading, and writing. By investigating this relationship, this study aims to gain a deeper understanding of how perceptions influence learning outcomes in high-stakes test contexts.

Role of Learning Motivation for SRL and Perceived Self-efficacy for Academic Achievement

In this study, learning motivation for SRL and perceived self-efficacy are crucial mediators that affect the connection between students' perceptions of IELTS and their English proficiency. Learning motivation is a core dimension of self-regulated learning (Zimmerman & Pons, 1986). Motivation is an internal psychological phenomenon that stimulates and directs the learning behavior of individuals (Woolfolk, 2019). Therefore, learning motivation is a significant predictor of academic achievement because it energizes students and directs their behaviors to the learning process (Steinmayr et al., 2019). Previous studies have investigated the mediational effects of learning motivation. For example, Ma and Chong (2022) examined the mediating effects of learning motivation on the relationship between student-teacher relationships and English foreign language performance. They revealed that learning motivation, particularly intrinsic motivation, has a significant mediating effect and positively mediates the relationship between student–teacher relationships and foreign language performance. Consequently, students can enhance their language learning performance by promoting learning motivation. Similarly, another study examined the attitudes of English-language students toward technology-based self-directed learning and their acceptance of technology. This study also

measured the mediational effects of learning motivation. Learning motivation has significant mediational effects on students' attitudes toward technology-based self-directed learning, technological acceptance, and technological self-efficacy (Pan, 2020). Thus, studies have confirmed that learning motivation significantly acts as a mediator; therefore, this study conducted a mediational analysis of learning motivation for self-regulated learning to improve the relationship between students' perceptions of IELTS and English language skills.

Similarly, self-efficacy describes students' confidence in their ability to succeed. How students feel, think, and motivate themselves is influenced by their views about their levels of self-efficacy. Students with different levels of self-efficacy may demonstrate notable behavioral differences. Consequently, students with a solid or high sense of self-efficacy profoundly believe in their abilities and view obstacles as challenges to overcome rather than threats to avoid (Bandura, 1977). Moreover, self-efficacy significantly correlates with academic achievement and positively enhances academic performance (Meral et al., 2012). Prior studies have also investigated the mediational effects of self-efficacy. For example, Zhang (2021) reported that test-takers' perceptions of high-stakes exams and extracurricular English learning activities were significantly mediated by perceived self-efficacy. Similarly, Krok and Gerymski (2019) found that self-efficacy mediates the relationship between life satisfaction and meaning, underscoring its broader psychological impact. Based on these results, this study examines how learning motivation for SRL and perceived self-efficacy for academic achievement mediate the relationship between students' perception of IELTS and their proficiency in the English language, contributing to a more comprehensive understanding of students' academic outcomes and linguistic abilities. This study thoroughly examines the psychological elements that affect students' performance on IELTS exams by combining these mediator constructs with practical implications for educators and policymakers.

Students' Time Management Skills

Time management skills are a significant factor that influences undergraduate students' academic success and failure, particularly when they enter university (Wilson et al., 2021). Improving practical time management skills or behaviors enables students to analyze their academic tasks and create task completion schedules. Consequently, they grasp better planning skills that assist the students in completing their tasks for academic achievement. Thus, time management skills significantly correlate with high academic performance (Admas & Blair, 2019). Numerous studies have discussed the significant relationship between time management skills and students' academic performance at a relatively high level (Rashid et al., 2020). However, one study revealed the moderating effects of time management skills on the relationships between the quality of work life and the personal effectiveness of junior high school teachers. Time management skills have a negligible impact on the quality of work life and personal effectiveness of teachers (Impas & Gempes, 2018). Thus, this study aimed to investigate the moderating effects of students' time management skills on their perceptions of IELTS and English language skills.

Theoretical Framework

This study proposes Bandura's triadic reciprocal determinism (TRD) theory (1986) to explain the process by which students perceive the IELTS and enhance their English language learning. TRD aims to describe humans' learning behavior in a social environment. This finding suggests that personal characteristics, environmental factors, and behavior are independent of one another and interact with each other (Bandura, 1986). Ecological factors are related to the external social factors that affect an individual's personal, cognitive, and behavioral factors. Moreover, personal factors encompass an individual's thought processes, self-evaluation, mental abilities, perceptions of their surroundings, and internal characteristics (Guo & Jiang, 2008). According to the TRD model, there are three types of interactions. First, the interaction between the person and the environment explains how their surroundings influence a person's perceptions and cognitive abilities. Second, the interaction between a person and behavior is referred to as human perceptions and actions. Ultimately, the interaction between the environment and behavior elucidates how human activity impacts the environment and how the environment, in turn, influences human behavior (Guo & Jiang, 2008). Consequently, based on this theoretical model, students' perceptions of IELTS and learning behavior are interconnected. Mainly, there are connections between students' perceptions, the IELTS high-stakes test, and learning behaviors.

Moreover, regarding personal factors, Bandura emphasized the value of self-efficacy, which is the cognitive self-concept that one can successfully execute the behavior required to produce the desired outcome (Bandura, 1977). Self-efficacy is a self-regulatory process that drives an individual's perceptions of their capacity to apply motivation and cognitive resources, leading to the behaviors required to preserve control over a range of experiences and events (Wood & Bandura, 1989). According to Bandura (2024), people form their perceptions of the environment in their learning process. Thus, people evaluate their efficacy based on these environmental perceptions. A high self-perception of effectiveness might encourage people to make the necessary efforts to meet environmental demands and improve their learning. On the other hand, low self-perception of effectiveness might lead people to exaggerate the challenges they may encounter and undermine their performance. Therefore, this study examined the role of personal factors (i.e., perceived self-efficacy and learning motivation) that shape students' perceptions, beliefs, and attitudes toward the learning process, and how these perceptions impact their learning performance, particularly in high-stakes tests (IELTS).

Conceptual Model

Thus, based on Bandura's triadic reciprocal determinism theory and the remarks of several authors in the previous literature, this study presents a conceptual model of how students' perceptions of IELTS influence their English language skills. This study is unique because no study has assessed the relationships among these

constructs in a single model. Therefore, this study fills a gap in the literature by investigating students' perceptions of IELTS to improve English language skills. This study examined the mediating effects of learning motivation on self-regulated learning and perceived self-efficacy on academic achievement. Finally, the study examined the moderating effects of students' time management skills. Thus, this study presented the following conceptual framework.
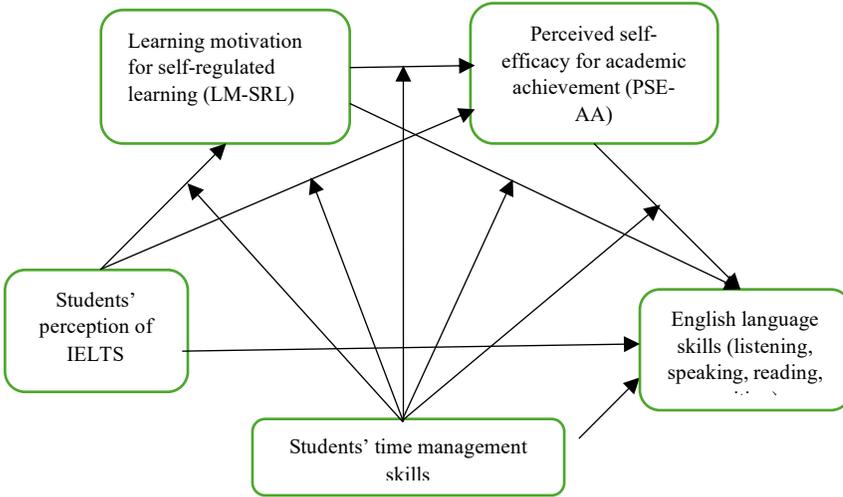
Figure 1. Conceptual model

RESEARCH METHOD

This quantitative study adopted a deductive and explanatory research approach to investigate the causal effects among the constructs (Creswell, 2013). The appropriate selection of the research methodology is based on the study's objectives. Therefore, in line with the goals of this study, a quantitative approach was selected. According to Creswell (2013), quantitative research approaches are particularly well-suited for assessing relationships between variables, testing hypotheses, and generalizing results to broader populations. A survey questionnaire was used to collect data from international students studying for the IELTS exam as part of their academic requirements, enrolled at Management Science University (MSU). These students were suitable for examining aspects of English language acquisition and competency in test preparation due to their varied linguistic and cultural backgrounds. For data collection, 300 Malaysian students were randomly selected, and this sample size was calculated using the formula "Number of items multiplied by 10" to obtain an appropriate sample size for multivariate analysis (Hair et al., 2014). Therefore, this study comprises 30 items, each repeated 10 times, resulting in a total sample size of 300. After 25

replies due to missing values and outliers were removed, 275 questionnaires were utilized for the data analysis (Hair et al., 2014).

Instrumentation

The present study is based on five latent research variables, i.e., perception of IELTS; learning motivation for self-regulated learning (SRL); perceived self-efficacy for academic achievement; time management skills; and English proficiency, such as reading, listening, speaking and writing skills. First, a nine-item scale was adopted from Zhang's study (2021) to measure the students' perception of IELTS as the independent variable. To measure the mediational effects, this study adopted a six-item scale of learning motivation for SRL (Purnama et al., 2019) and a five-item scale of perceived self-efficacy for academic achievement adapted from Bostonaksen et al. (2013). Additionally, the students' time management skills four-item scale was adapted from (Mata et al., 2021) to examine moderation effects. Furthermore, each English language skill comprises five items, totaling 20 items. Listening skills, a five-item scale, were adapted from (Wakamoto and Rose, 2021). For speaking skills, a five-item scale was adapted from Agca and Özdemir (2013). The five-item scale for reading skills was adapted from Huynh (2022), and the five-item scale for writing skills was adapted from a previous study (Nushi & Razdar, 2021). Finally, this study employed a 5-point Likert scale to measure each construct, assigning a score of 1 to "strongly disagree" and a score of 5 to "strongly agree".

Pilot Study

To improve the effectiveness and quality of the primary research, the current study conducted a pilot study using exploratory factor analysis (EFA) with sixty participants (In, 2017). To evaluate the validity and reliability of the survey instrument, participants in the pilot research were invited to think aloud about the questionnaire and offer feedback. The pilot test findings revealed the factor loading of each item, confirming the validity and reliability of the assessment. Within the framework, a collection of item factor loadings was assessed. Items with factor loadings less than 0.60 were eliminated from the final scale. Before the pilot study, there were 44 items; however, after the pilot study, 14 items were excluded due to lower factor loading. Ultimately, 30 remaining items were utilized to gather information for the final research. Three hundred students were given the questionnaire. Nonetheless, each construct's associated Cronbach's alpha values were found; for example, the students' perceptions of the IELTS showed internal consistency and reliability values of 0.88 and 0.86 for learning motivation in self-regulated learning, 0.95 for perceived self-efficacy in academic achievement, 0.96 for English language skills, and 0.92 for management skills.

DATA ANALYSIS

The present study used a two-step model development method to validate the measurement model and evaluate the structural model (Hair et al., 2014).

Confirmatory factor analysis (CFA) was conducted in the first phase to ensure construct validity, including convergent and discriminant validity latent construct measurements (Kline, 2016). In the second phase, a structural model was created to evaluate the relationships between the research variables. Covariance-based structural equation modeling (CB-SEM) was selected due to its robustness in theory testing and capacity to manage measurement errors. AMOS version 25.0 was used for both the confirmatory factor analysis and CB-SEM. Third, the mediator's mediational impact was evaluated via the bootstrapping approach on the 5000 bootstrapping model (Hayes, 2009). Lastly, the study employed the product-item method proposed by Hayes (2013) to examine the moderating influence of time management skills. The process was applied to a sample of 10,000 and a 95% confidence interval using IBM SPSS 26.

CFA measurement model

Instrument validity was confirmed through face and content validity assessments by experts, where four items belonging to all constructs were removed due to low factor loadings, which were below a threshold level of 0.60. The measurement model was validated by examining all model fitness indices, i.e., the values of the chi-square (χ 2/df), RMSEA, CFI, TLI, and NFI (Hair et al., 2019). The model was examined with 26 items; all the constructs were first-order variables. The fitness indices achieved the threshold level of Bollen Stine values of χ^2 2213.454 with 267 df, so the values of ChiSq were 1.561, 0.49 for RMSEA, 0.979 for CFI, 0.976 for TLI and 0.974 for NFI (Hair et al., 2019). The values of all the item factor loadings were above 0.70, which signifies that construct validity was achieved at a significance level of $p < 0.001$. The items were statistically convergent for their conforming latent constructs (Hair et al., 2014; Hair et al., 2019).

Table 1: Descriptive statistics, correlation matrix and discriminant validity

Construct	Mean	S.D.	VIF	SPT-ITELS	ELS-OE	LM-SRL	PSE-AA	STMS
SPT-ITELS	4.06	0.64	1.158	*0.875*				
ELS-OE	3.76	0.95	1.113	0.381	*0.827*			
LM-SRL	3.93	0.82	1.119	0.112	0.358	*0.813*		
PSE-AA	4.10	0.86	1.891	0.597	0.417	0.568	*0.853*	
STMS	3.97	0.83	1.231	0.447	0.331	0.651	0.497	*0.842*

The AVE values were above 0.50, which signifies the assumption of convergent validity. The CR value was above 0.70, demonstrating the internal consistency of the construct (Hair et al., 2014). Furthermore, SMC values were generated to check the items' reliability, which was achieved because all items were valued above 0.38 and the threshold level (Fornell & Lacker, 1981). When the correlation estimations are compared with diagonal values generated by taking the square root of each construct's AVE, the results show that no correlation

estimation value is above 0.85 and diagonal values; hence, the model achieves discriminant validity. The measurement model fits better with the sample data, providing a solid foundation for conducting structural analysis (Hair et al., 2019). The factor loadings, average variance extracted, and composite reliability are presented in **Appendix 1**.

PATH ANALYSIS THROUGH CB-SEM

The causal relationship among the constructs via the structural model and the model fitness for the path model attained a Bollen-Stine value of χ^2 2213.454 with 267 df, so the values of ChiSq were 1.561, 0.049 for RMSEA, 0.979 for CFI, 0.976 for TLI, and 0.974 for NFI. Model fitness was achieved based on the observed covariance matrix, as suggested by (Hair et al., 2014). The value of R2 is 0.53, which explains why the structural model achieves 53% variance in sustainable performance (p <.05) by exogenous variables in each path.

Using covariance-based structural equation modeling (CB-SEM), path analysis was carried out to investigate the causal relationships between students' perceptions of IELTS (SP-IELTS) and English language skills (ELS), considering both direct and indirect effects through two mediators: perceived self-efficacy for academic achievement (PSE-AA) and learning motivation for self-regulated learning (LM-SRL). The indirect effect named SIE1, SP-IELTS→LM-SRL→ELS, is significant (β = .159, p < 0.05). SIE2 was significant for the mediation SP-IELTS→PSE-AA→ELS-OE (β = .067, p < 0.05). The SIE3 path, SP-IELTS→ LM-SRL→ PSE-AA→ELS (β = .258, p < 0.01), was also significant. The direct relationship between the SP-IELTS score and the ELS score was statistically significant (β = 0.182, SE = 0.065, Z = 2.874, p < 0.01), suggesting that students' perceptions of the IELTS score significantly impacted their language proficiency. Additionally, the indirect effect was significant (β = 0.467, p < 0.001) through learning motivation for self-regulated learning (LM-SRL), suggesting that LM-SRL mediates this connection. However, the overall effect was significant (β = 0.669, p < 0.001), indicating partial mediation. Similarly, this connection was strongly mediated by perceived self-efficacy for academic achievement (PSE-AA), with a direct effect of β = 0.175 (p < 0.01) and an indirect effect of β = 0.413 (p < 0.001). The overall impact was β = 0.612 (p < 0.001). These results demonstrate that the impact of students' perceptions of IELTS on their English language proficiency is somewhat mediated by both the LM-SRL and the PSE-AA. These paths were analyzed using a bootstrapping confidence interval, but the value of "0" did not fall between the lower and upper bounds.

MODERATED MEDIATION ANALYSIS

As suggested by Carrión et al. (2017), this study used a distal mediation approach to investigate the intricate causal relationships between components. To better understand how students' perceptions of IELTS (SP-IELTS) impact English language skills (ELS) through learning motivation for self-regulated learning (LM-SRL) and perceived self-efficacy for academic achievement (PSE-AA),

distal mediation was selected to capture indirect effects that arise through a sequence of mediators rather than a single variable. The model examined three distinct indirect effects: SIE1 (SP-IELTS → LM-SRL → ELS), SIE2 (SP-IELTS → PSE-AA → ELS), and SIE3 (SP-IELTS → LM-SRL → PSE-AA → ELS). This method is consistent with the recommendations of Preacher et al. (2007), who argued that serial mediations should be examined to uncover more complex pathways in behavioral research. Nevertheless, other research has demonstrated that conventional causal step methods could have limited statistical power and fail to identify real mediation effects (Hayes, 2009). To overcome this constraint, the Sobel test was utilized as an additional technique to guarantee the strength and importance of the mediation effects. To evaluate indirect and moderated mediation effects without relying on multivariate normality assumptions, the study employed a bootstrapping method, specifically the Bollen-Stine and naïve bootstrapping techniques, as the normality assumptions required by the Sobel and causal step approaches were not met (Bollen & Stine, 1990; Stone & Sobel, 1990).

All three grade levels showed substantial overall indirect effects, as indicated by the moderated mediation analysis: Grade 1 ($\beta = 0.419$), Grade 2 ($\beta = 0.491$), and Grade 3 ($\beta = 0.539$). SIE1 ($\beta = .027$, ns) and SIE2 ($\beta = .008$, ns) were not significant in Grade 1, whereas SIE3 ($\beta = .379$) was significant. SIE1–SIE3 ($\beta = -.349$) and SIE2–SIE3 ($\beta = -.367$) were significantly different. While SIE1 ($\beta = .117$, ns) and SIE2 ($\beta = .091$, ns) were still nonsignificant and no significant pairwise differences were discovered, SIE3 remained significant in Grade 2 ($\beta = .226$). SIE1 ($\beta = .335$) and SIE3 ($\beta = .130$) were both significant in Grade 3, and there was a significant difference between SIE1 and SIE3 ($\beta = .206$, *), suggesting that LM-SRL plays a greater mediating function at higher time management levels.

Table 2: Moderation mediation analysis: point estimates and SIE comparison with each grade

Grade	A point estimate of the indirect effect				SIE comparison		
	Total indirect effect	SIE1	SIE2	SIE3	SIE1-SIE2	SIE1-SIE3	SIE2-SIE3
1	.419***	.027 (ns)	.008 (ns)	.379***	.019 (ns)	-.349*	-.367***
2	.491***	.117 (ns)	.091 (ns)	.226***	.022 (ns)	-.116	-.133 (ns)
3	.539***	.335***	.098 (ns)	.130***	.226 (ns)	.206*	-.032 (ns)

Furthermore, indirect and direct effects were compared at each grade level. No significant difference prevails among the grades when comparing direct, indirect, and total effects. However, the 1st grade and 3rd grade were different at each level of SIE1 and SIE3 (SIEdiff = -0.0311 and p=0.029 and SIE3 (SIEdiff = 0.243, p =

0.039)). Moreover, the effect size was moderate for SIE1 (Hedges' g = 0.213) and small for SIE3 (Hedges' g = 0.109).

Table 3: Moderated mediation analysis: Direct and indirect effect comparison among the grades.

Grade	Estimate	Bootstrapping with 95% confidence					
		Bias-correct			Percentile		
		Lower	Upper	p value	Lower	Upper	p value
Total indirect effect comparison							
G1 – G2	-.018	-.354	.254	.863	-.344	.261	.921
G1 – G3	-.0153	-.580	.117	.262	-.531	.143	.352
G3 – G2	.134	-.211	.564	.597	-.231	.538	.471
SIE 1 comparison							
G1 – G2	-.083	-.397	.193	.589	-.411	.181	.531
G1 – G3	**-.0311**	-709	-.044	**.029**	-.651	.016	***.034***
G3 – G2	.227	-.059	.623	.101	-109	.543	.171
SIE 2 comparison							
G1 – G2	-.081	-.274	.051	.251	-.261	.057	.271
G1 – G3	-.094	-.287	.041	.196	-2.64	.054	.249
G3 – G2	.009	-.192	.212	.906	-.199	.291	.953
SIE 3 comparison							
G1 – G2	.143	-.116	.374	.261	-076	.409	.183
G1 – G3	**.243***	.018	.479	**.039**	.003	.479	**.049**
G3 – G2	-.097	-.342	.117	.303	-.309	.159	.463
Direct effect comparison							
G1 – G2	-.006	-.304	.321	.966	-.304	.331	.971
G1 – G3	-.007	-.294	.311	.957	-.291	.317	.982
G3 – G2	.000	-.324	.321	.993	-.321	.321	.991

DISCUSSION

This study examined students' perceptions of IELTS and how it helped them become more proficient in English. The results demonstrated that students' perceptions of IELTS have a positive and significant impact on their ability to communicate in English, including speaking, listening, reading, and writing. Additionally, the moderating effects of time management skills and the mediating functions of perceived self-efficacy for academic achievement (PSE-AA) and learning motivation for self-regulated learning (LM-SRL) were investigated. This section examines these results, compares them to earlier studies, and highlights their relevance to learning English and preparing for necessary tests.

The results show that students with a strong perception of IELTS are more likely to actively participate in various educational activities, which significantly improve their English language skills. As part of their IELTS preparation, they incorporate reading English-language books, viewing English-language shows, writing essays, and learning vocabulary. According to Zhang (2021), Chinese test-takers' opinions on the NMET significantly impact their participation in extracurricular English language learning activities, which helps them become more proficient in the language. According to Li et al. (2012), students' opinions on the College English Test also inspired them to put in extra effort and improve their English language proficiency. The findings of the present study align with those of Rerung (2018), who reported that positive perceptions of learning English lead to better language acquisition outcomes. The results further support Pradanti and Muqtada's (2023) findings, which established perception as a predictor of academic performance by demonstrating that students with solid perceptions demonstrate good learning behaviors and motivation. The findings also support those of Zahari et al. (2016) and Hosseini (2013), who reported that students' academic performance and English proficiency significantly improved following their participation in IELTS tests.

The mediational analysis in this study highlights the critical role of learning motivation for self-regulated learning (LM-SRL) in the relationship between students' perceptions of IELTS and English language skills. Students with high motivation levels actively engage in IELTS-related activities, adopting autonomous learning approaches to enhance their language skills. These findings align with those of Ma and Chong (2022), who demonstrated that learning motivation positively mediates the relationship between foreign language learning and student-teacher interaction. Students' intrinsic motivation is critical in the context of high-stakes tests, as it fosters persistence and goal-oriented behavior. For example, the study revealed that students eagerly practiced IELTS assessments, such as speaking tests and essay writing, to improve their skills. This aligns with Pan (2020), who reported that learning motivation mediates attitudes toward technology-based self-directed learning, suggesting that motivation drives the success of self-regulated learning activities.

Additionally, the association between students' opinions of IELTS and their English language proficiency was found to be favorably mediated by perceived self-efficacy for academic accomplishment (PSE-AA). Students with high self-

efficacy believe that they can perform well on the IELTS and use coping mechanisms to overcome obstacles. The triadic reciprocal determinism hypothesis of Bandura (1986), which holds that students' self-efficacy affects their feelings, thoughts, and behaviors in learning settings, is consistent. The results align with Zhang's (2021) identification of PSE-AA as a mediator between students' views of high-stakes exams and their participation in extracurricular English language learning activities. The current study builds upon these findings by demonstrating that students with high self-efficacy perceive obstacles as opportunities for growth, thereby enhancing their performance in all four language skills. The role of the PSE-AA highlights the importance of building students' confidence and competence in high-stakes test IELTS preparation to achieve better academic outcomes.

The study further explored the moderating role of time management skills and revealed that they positively influence the relationship between students' perceptions of IELTS and their English language skills. Students who effectively managed their time reported being able to complete IELTS assessments within deadlines, which subsequently improved their English proficiency. This finding supports previous studies by Iqbal Amin Khan et al. (2020) and Rashid et al. (2020), who demonstrated that time management skills enhance academic performance. The current study extends this understanding by revealing that students who adhered to structured schedules for IELTS preparation were more likely to complete English language assessments. This highlights the importance of teaching time management strategies in test preparation programs, enabling students to effectively balance their efforts across various skills.

CONCLUSION

This study was an initial attempt to investigate how students' perceptions of IELTS affect their English language skills and yielded significant results. The suggested model provided an excellent fit for the collected data and explained a substantial portion of the variance in English language skills, indicating that the introduction of TRD theory illuminates the process underlying the contribution of IELTS assessments to the acquisition of English language skills. Moreover, this study investigated the two mediational variables in the model of interest. These variables have a significant impact on the relationship between students' perceptions of the IELTS and their English language skills. Finally, moderation analysis also revealed positive effects on students' perceptions of IELTS and English language skills. Moreover, the study has several limitations. First, the results of this study may not be as applicable to students in other nations or situations, as it is limited to international students studying for the IELTS in Malaysia. Second, the cross-sectional methodology and self-reported data restrict the precision and causal interpretation of the findings. Finally, the study may not adequately capture the complex nature of language acquisition due to its reliance on Bandura's Triadic Reciprocal Determination.

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REFERENCES

Abdulwahed Ahmed Ismail, S. (2011). Exploring students' perceptions of ESL writing. *English Language Teaching*, *4*(2), 73. https://doi.org/10.5539/elt.v4n2p73

Adams, R. V., & Blair, E. (2019). Impact of time management behaviors on undergraduate engineering students' performance. *SAGE Open*, *9*(1). https://doi.org/10.1177/2158244018824506

Agca, R. K., & Özdemir, S. (2013). Foreign language vocabulary learning with mobile technologies. *Procedia - Social and Behavioral Sciences*, *83*, 781–785. https://doi.org/10.1016/j.sbspro.2013.06.147

Ahmad, F., & Aziz, J. (2009). Students' perception of the teachers' teaching of literature communicating and understanding through the eyes of the audience. *European Journal of Social Sciences*, *7*(3).

Akande, S. O., Oyeniyi, S., Kenneth, A., & Library, D. (2009). Knowledge, perception, and attitudes of library personnel toward preservation of information resources in Nigerian federal university libraries. *Library Philosophy and Practice (e-Journal)*. https://digitalcommons.unl.edu/libphilprac/303

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191–215. https://doi.org/10.1037/0033-295x.84.2.191

Bandura, A. (1986). Social foundations of thought and action. *The Health Psychology Reader*, 94–106. https://doi.org/10.4135/9781446221129.N6

Bandura, A. (2024). Self-efficacy mechanism in human agency. *Psihologìâ ì Suspìl'stvo*, *37*(2), 122–147. https://doi.org/10.1037/0003-066X.37.2.122

Benzie, H. J. (2010). Graduating as a "native speaker": International students and English language proficiency in higher education. *Higher Education Research and Development*, *29*(4), 447–459. https://doi.org/10.1080/07294361003598824

Bo, W. V., Fu, M., & Lim, W. Y. (2023). Revisiting English language proficiency and its impact on the academic performance of domestic university students in Singapore. *Language Testing*, *40*(1), 133–152. https://doi.org/10.1177/02655322211064629

Bollen, K. A., & Stine, R. A. (1990**).** Direct and indirect effects: Classical and bootstrap estimates of variability. *Sociological Methodology, 20*, 115–140.https://doi.org/10.2307/271084

Bonsaksen, T., Kottorp, A., Gay, C., Fagermoen, M. S., & Lerdal, A. (2013). Rasch analysis of the General Self-Efficacy Scale in a sample of persons with morbid obesity. *Health and Quality of Life Outcomes, 11*(1), 1–11.https://doi.org/10.1186/1477-7525-11-202

British Council. (2023). *Why choose IELTS?* Retrieved from https://www.britishcouncil.org

Carrión, G. C., Nitzl, C., & Roldán, J. L. (2017). Mediation analyses in partial least squares structural equation modeling: Guidelines and empirical examples. *partial least squares path modeling: Basic Concepts, Methodological Issues and Applications*, 173–195. https://doi.org/10.1007/978-3-319-64069-3_8

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approach* (4th ed.). SAGE Publications.

Davies, A. (2018). Assessing academic English language proficiency: Language testing reconsidered. 73–86. https://doi.org/10.2307/j.ctt1ckpccf.10

Dong, M., & Liu, X. (2022). Impact of learners' perceptions of a high-stakes test on their learning motivation and learning time allotment: A study on the washback mechanism. *Heliyon*, *8*(12), e11910. https://doi.org/10.1016/j, heliyon.2022.E11910

Dörnyei, Z. (2018). Motivating students and teachers. *The TESOL Encyclopedia of English Language Teaching*, 1–6. https://doi.org/10.1002/9781118784235.eelt0128

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39–50. https://doi.org/10.1177/002224378101800104

Green, A. (2006). Washback to the learner: Learner and teacher perspectives on IELTS preparation course expectations and outcomes. *Assessing Writing*, *11*(2), 113–134. https://doi.org/10.1016/j.asw.2006.07.002

Guo, B., & Jiang, F. (2008). *Self-efficacy theory and its application*. Shanghai Educational Publishing House.

Hafrizal, H., Kasim, U., & Samad, I. A. (2021). Students' perception toward English subject and their learning outcome. *English Education Journal*, *12*(3), 476–494. https://doi.org/10.24815/eej.v12I3.19251

Hair, J. F., Babin, B. J., Anderson, R. E., & Black, W. C. (2019). *Multivariate data analysis* (8th ed.). Pearson.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis* (7th ed., Pearson New International Edition). Pearson.

Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, *76*(4), 408–420. https://doi.org/10.1080/03637750903310360

Hayes, B., & Read, J. (2004). IELTS test preparation in New Zealand: Preparing students for the IELTS academic module. *Washback in Language Testing*, 119–134. https://doi.org/10.4324/9781410609731-15

Hayes, A.F. (2013) Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. *Journal of Educational Measurement*, 51, 335-337.
https://doi.org/10.1111/jedm.12050

Hazari, A. (2014). Learning Curve: student perceptions have an enormous impact on understanding. Retrieved from South China Morning Post: https://www.scmp.com/lifestyle/family-education/article/1407745/learning-curve-studentperceptions-have-huge-impact.

Hosseini, S. B. (2013). A study on the perception of Iranian candidates toward the general IELTS test. *International Journal on New Trends in Education and Their Implications October* 17–1309.

Huynh, [Initials]. (2022). Extensive reading on postgraduate students' perceptions and its effects on reading comprehension. *International Journal of TESOL & Education*, 2(4), 32–47.
https://doi.org/10.54855/ijte.22243

Impas, R. T., & Gempes, G. P. (2018). The moderating effect of time management on the relationship between quality of work life and personal effectiveness of junior high school teachers in Davao Region. *International Journal of Management Excellence*, 12(1).

In, J. (2017). Introduction of a pilot study. *Korean Journal of Anesthesiology*, 70(6), 601. https://doi.org/10.4097/kjae.2017.70.6.601

Iqbal Amin Khan, Alam Zeb, Shabir Ahmad, & Rizwan Ullah. (2020). Relationship between university students' time management skills and their academic performance. *Review of Economics and Development Studies*, 5(4). https://doi.org/10.26710/reads.v5I4.900

Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). Guilford Press.

Krok, D., & Gerymski, R. (2019). Self-efficacy as a mediator of the relationship between meaning in life and subjective well-being in cardiac patients. *Current Issues in Personality Psychology*, 7(3), 242–251.
https://doi.org/10.5114/cipp.2019.89168

Li, H., Zhong, Q., & Suen, H. K. (2012). Students' perceptions of the impact of the college English test. *Language Testing in Asia*, 2(3).
https://doi.org/10.1186/2229-0443-2-3-77

Ma, H., & Chong, S. W. (2022). Predictability of IELTS in a high-stakes context: a mixed methods study of Chinese students' perspectives on test preparation. *Language Testing in Asia*, 12(1), 1–18.
https://doi.org/10.1186/S40468-021-00152-3

Mangal, S. K. (2016). *General psychology.* Sterling Publishing Private Limited.

Mata, M. N., Sohail, M., Haider, A., Martins, J. M., Sheraz, F., Rita, J. X., & Correia, A. B. (2021). The relationship between time management, work stress and work performance: A quantitative study in Portugal. *Academy of Strategic Management Journal, 20*(6), 1–11.

Meral, M., Colak, E., & Zereyak, E. (2012). The relationship between self-efficacy and academic performance. *Procedia - Social and Behavioral Sciences*, *46*, 1143–1146. https://doi.org/10.1016/j.sbspro.2012.05.264

Muluk, S., Zainuddin, Z., & Dahliana, S. (2022). Flipping an IELTS writing course: Investigating its impacts on students' performance and attitudes. *Studies in English Language and Education*, *9*(2), 591–612. https://doi.org/10.24815/siele.v.23314

Nushi, M., & Razdar, M. (2021). IELTS writing preparation course expectations and outcome: A comparative study of Iranian students and their teachers' perspectives. *Cogent Education*, *8*(1). https://doi.org/10.1080/2331186X.2021.1918853

Pan, X. (2020). Technology acceptance, technological self-efficacy, and attitude toward technology-based self-directed learning: Learning motivation as a mediator. *Frontiers in Psychology*, *11*, 564294. https://doi.org/10.3389/fpsyg.2020.564294

Pearson, W. S. (2019). Critical perspectives on the IELTS test. *ELT Journal*, *73*(2), 197–206. https://doi.org/10.1093/elt/ccz006

Pradanti, P., & Muqtada, Moh. R. (2023). Students' perceptions on learning, motivation, and performance through project-based learning: undergraduate students' case. *Pythagoras: Jurnal Program Studi Pendidkan Matematika*, *12*(1), 16–26. https://doi.org/10.33373/pythagoras.v12I1.5011

Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: theory, methods, and prescriptions. *Multivariate Behavioral Research*, *42*(1), 185–227. https://doi.org/10.1080/00273170701341316

Purnama, N. A., Rahayu, N. S., & Yugafiati, R. (2019). Students' motivation in learning English. *Project (Professional Journal of English Education)*, *2*(4), 539. https://doi.org/10.22460/project.v2I4.P539-544

Rahimi, A. R. (2023). The role of EFL learners' L2 self-identities, and authenticity gap on their intention to continue LMOOCs: insights from an exploratory partial least approach. *Computer Assisted Language Learning*. https://doi.org/10.1080/09588221.2023.2202215

Rashid, A., Sharif, I., Khan, S., & Malik, F. (2020). Relationship between time management behavior and academic performance of university students. *Journal of Business and Social Review in Emerging Economies*, *6*(4), 1497–1504. https://doi.org/10.26710/jbsee.v6i4.1481

Read, J. (2022). Test Review: The international English language testing system (IELTS). *Language Testing*, *39*(4), 679–694. https://doi.org/10.1177/02655322221086211

Rerung, M. K. T. (2018). Students' perception on blended learning in English listening and speaking class. *Journal of English Language and Culture*, *9*(1). https://doi.org/10.30813/jelc.v9I1.1449

Poza, L. E., & Shannon, S. M. (2020). Where language Is beside the point: English language testing for Mexican students in the Southwestern United States. *The Socio-Politics of English Language Testing*, *46*, 1–27.

Steinmayr, R., Weidinger, A. F., Schwinger, M., & Spinath, B. (2019). The importance of students' motivation for their academic achievement-replicating and extending previous findings. *Frontiers in Psychology*, 464340. https://doi.org/10.3389/fpsyg.2019.01730

Stone, C. A., & Sobel, M. E. (1990). The robustness of estimates of total indirect effects in covariance structure models estimated by maximum. *Psychometrika*, *55*(2), 337–352. https://doi.org/10.1007/bf02295291

Thumvichit, A., & Laoriandee, W. (2024). Evaluating English-medium instruction in higher education: EMI-QE. *Journal of English for Academic Purposes*, *71*. https://doi.org/10.1016/j.jeap.2024.101434

UNESCO. (2018). The global flow of tertiary-level students. Retrieved from http://uis.unesco.org/en/uis-student-flow

Wakamoto, N., & Rose, H. (2021). Learning to listen strategically: Developing a listening comprehension strategies questionnaire for learning English as a global language. *System*, *103*. https://doi.org/10.1016/j.system.2021.102670

Wang, Y., Yasmin, F., & Akbar, A. (2023). Impact of the internet on English language learning among university students: mediating role of academic self-efficacy. *Frontiers in Psychology*, *14*, 1184185. https://doi.org/10.3389/fpsyg.2023.1184185

Wilson, R., Joiner, K., & Abbasi, A. (2021). Improving students' performance with time management skills. *Journal of University Teaching and Learning Practice*, *18*(4). https://doi.org/10.53761/1.18.4.16

Woolfolk, A. (2019). *Educational Psychology*, *14th Edn.* Pearson.

Wood, R., & Bandura, A. (1989). Effect of perceived controllability and performance standards on self-regulation of complex decision-making. *Journal of Personality and Social Psychology*, 56(5), 805-814. https://doi.org/10.1037/0022-3514.56.5.805

Zahari, D. A., Dhayaalan, J., & Dhayaalan, J. (2016). The perception of Malaysian ESL tertiary level students on the IELTS Test. *Asian Journal of Education and Training*, *2*(1), 1–6. https://doi.org/10.20448/journal.522/2016.2.1/522.1.1.6

Zhang, J. (2021). A moderated mediation analysis of the relationship between a high-stakes English test and test takers' extracurricular English learning activities. *Language Testing in Asia*, *11*(1), 1–22. https://doi.org/10.1186/S40468-021-00120

Zimmerman, B. J., & Pons, M. M. (1986). Development of a structured interview for assessing student use of self-regulated learning strategies. *American Educational Research Journal*, *23*(4), 614–628. https://doi.org/10.3102/00028312023004614

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Appendix 1

Construct	Items	Indicator	Test of Significance				Factor loading	Item reliability (SMC)	Convergent Validity (AVE)	Composite Reliability (CR)
			Unstd.	SE	t value	p				
SP-IELTS	I read English books to attempt IELTS.	SPTI1	1.000				0.89	0.69	0.766	0.942
	IELTS preparation helps me memorize vocabulary sets.	SPTI3	.893	.053	16.564	***	0.91	0.87		
	During IELTS writing tasks, I practice English writing on different topics.	SPTI4	.934	.043	21.345	***	0.79	0.62		
	IELTS speaking assessments help me to improve my speaking skills.	SPTI5	1.051	.045	22.456	***	0.87	0.89		
	I watch English movies and TV programs to improve my English proficiency in IELTS.	SPTI6	.948	.044	23.546	***	0.91	0.79		
ELS-Writing	I can find out information from different resources to use in writing essays.	ELSW1	1.000				0.85	0.87	0.710	0.924
	By practicing IELTS writing tasks, I learn to write essays and reports at university level.	ELSW3	1.181	.047	25.452	***	0.89	0.86		

Construct	Item	Statement								
	ELSW4	I learn to use ideas from academic journals and textbooks in my writing.	1.211	.049	26.787	***	0.79	0.77		
ELS-Speaking	ELSS1	IELTS helps me to learn new vocabulary that improves my speaking skills.	1.000				0.84	0.78	0.666	0.909
	ELSS2	I use online resources to acquire new vocabulary sets to improve my speaking skills.	1.211	.047	28.945	***	0.79	0.69		
	ELSS4	I prefer to watch English news and TV programs to improve my speaking skills.	.947	.049	29.367	***	0.81	0.86		
ELS-Reading	ELSR1	Reading tasks help me to get ideas about the diverse range of topics to improve speaking skills.	1.000				0.81	0.79	0.681	0.914
	ELSR3	Extensive reading helps me to summarize and conclude the topic in a creative manner to improve speaking skills.	1.056	.054	24.567	***	0.79	0.87		
	ELSR4	Reading helps me to answer the reading comprehension questions effectively to improve speaking skills.	1.063	.056	17.677	***	0.83	0.88		
ELS-Listening	ELSL1	I listen English speaker with strong accent to improve my listening skills.	1.000				0.81	0.87	0.684	0.915

	Item	Code	Estimate	S.E.	C.R.	P				
	I carefully listen the people to improve my listening skills.	ELSL4	.991	.042	19.785	***	0.78	0.78		
	I listen to news and talk shows to improve my listening skills.	ELSL5	1.048	.055	26.464	***	0.87	0.87	0.661	0.907
LM-SRL	I like to improve my English language skills.	LMSRL1	1.000				0.81	0.99		
	I am motivated to improve my English skills because it enables me to communicate with people all over the world.	LMSRL2	1.029	.051	23.453	***	0.84	0.88		
	I eagerly learn English because it is necessary to improve English language skills being an educated person.	LMSRL3	.967	.044	26.675	***	0.86	0.89		
	I significantly learn English to become a good communicator in English language.	LMSRL4	1.081	.064	22.765	***	0.81	0.81		
PSE-AA	I can manage the difficulties in my English assignments.	PSEAA1	1.000				0.87	0.81	0.728	0.930
	It is easy for me to stick with my aims and goals to learn English language skills.	PSEAA2	0.947	.045	19.353	***	0.81	0.76		

	Code								
I use the different online resources to handle the unplanned situation during my English tasks.	PSEAA3	0.948	.043	21.453	***	0.89	0.76		
I invest the necessary efforts to improve my English language skills.	PSEAA4	0.887	.038	23.456	***	0.78	0.71		
I use coping strategies when I face difficulties in English assessments.	PSEAA5	0.911	.041	21.446	***	0.91	0.88		
STMS									
I am always conscious to manage my time for my IELTS tasks.	STMS1	1.000				0.78	0.78	0.709	0.907
I make a schedule of things to do every day.	STMS2	0.963	.045	24.657	***	0.88	0.88		
I give priorities to my academic tasks.	STMS3	0.994	.044	25.677	***	0.78	0.78		
I completed my IELTS assessment before the deadline.	STMS4	0.897	.038	19.578	***	0.92	0.75		