Language Testing in Asia

RESEARCH Open Access

Take language assessment easy: the mediator impacts of self-assessment, test-taking skills in predicting student evaluation apprehension, foreign language learning self-esteem, and language achievement in online classes

KDV Prasad[1,2], Alaa Aladini[3], Nozliya Zarilovna Normurodova[4] and Barana Belton[5*]

*Correspondence:
barana.belton@gmail.com

[1] Symbiosis Institute of Business Management, Hyderabad, India
[2] Symbiosis International (Deemed University), Pune, India
[3] Dhofar University, Salalah, Oman
[4] Alisher Navoi Tashkent State University of Uzbek Language and Literature, Tashkent, Uzbekistan
[5] Department of English Language and Literature, Ardahan University, Ardahan, Turkey

Abstract

Many different elements have a significant impact on the effectiveness of both teaching and assessment. The ever-expanding body of research on assessment has provided an overview of several cognitive, social, and emotional aspects that impact the academic accomplishment of learners in either a direct or indirect manner. In spite of the promising literature on assessment, no research has been done to investigate the probable interactions between self-assessment (SA), test-taking skills (TTS), student evaluation apprehension (SEA), self-esteem (S-E), and language achievement (LA). The purpose of this research was to offer a model that would illuminate the connection among SA, TTS, SEA, S-E, and LA in online classes. Therefore, 417 Turkish EFL students were given the Core of Self-assessment Questionnaire (CSAQ), the Test-Taking Skills Scale (TTSS), the Student Evaluation Apprehension Scale (SEAS), and the Foreign Language Learning Self-esteem Scale (FLLSE). Structural equation modeling (SEM) and confirmatory factor analysis (CFA) both found that SA and TTS are related to SEA, S-E, and LA. Based on the data analysis, EFL students' SA and TTS can predict the level of SEA, S-E, and LA in online classes. This has important implications for the development of EFL students' feeling of effectiveness and their ability to define and achieve goals. Consequences and potential future directions are also examined.

Keywords: Self-assessment, Test-taking skills, Student evaluation apprehension, Self-esteem, Language achievement, EFL learners, Online classes

Introduction

Instruction and evaluation are linked in the framework of an educational setting, and both of these aspects have an impact on the whole procedure of education. Consequently, as reflection and planning are the primary elements of educational achievement, good teaching, and assessment planning are also crucial. Consequently, as

reflection and planning are the primary elements to educational achievement, good teaching and assessment planning are also crucial. The development of technology has had a significant and positive impact on the educational system as a whole and on the teaching, learning, and testing of foreign languages in particular (Manca, 2020). Computer-assisted language learning (CALL) and mobile-assisted language learning (MALL) have grown up as a consequence of the move away from the courageous application of technology regarding the social and integrative use of such affordances, illustrating how useful the Internet is for use in language instruction (Barrot, 2021).

In the words of GuoJie (2021), SA is a cohesive character framework that represents the learners' appraisal and analysis of the endeavors that they participate in. SA enables learners to assess themselves and make conclusions about their educational procedure as well as outcomes of learning, based on guidelines that they and their instructor have established (Bachman, 2015). The manner in which learners perceive themselves and all of the moves that are included in their instructional procedures are impacted by SA (Tavousi et al., 2018). According to Umeanowai and Lei (2022), SA paves the way for pupils to become more open to critically evaluating the highs and lows of educational attainment and making intelligent decisions. To put it another way, having a good SA bestows a positive outlook on educational experiences and promotes learners' participation (Jahara et al., 2022; Syairofi et al., 2022). To be more precise, positive SA gives students the ability to better handle the emotional demands placed on them and to establish stronger social interactions with both their classmates and their instructors (Alazemi et al., 2023; Rezai & Namaziandost, 2022).

In the opinion of Andrade (2021), those who have high levels of SA are better able to cope with challenges and obstacles and to strive to perform to the best of their abilities in their many duties. Learners who have a strong capacity for SA are better able to control and shape their emotional experiences (Miller Smedema et al., 2015). Students are equipped to analyze their emotional experiences and directed to enhance their learning when a positive core of self-assessment is present (Jamali Kivi et al., 2021; Riswanto et al., 2022). A while back, Heydarnejad et al., (2022) employed SEM to examine the impact of emotion regulation on EFL learners' SA and academic buoyancy. Students who adapt a healthy state of emotion regulation fared better in self-monitoring and buoyancy, the researchers found. They learned strategies for coping with and restraining the anxiety they felt while taking language courses. Students who score higher on SA tend to have greater emotional regulation and more positive connections with their teachers and classmates, according to Wongdaeng (2022).

Assessing students in a way that is focused on their ability to learn is something that should be encouraged in the classroom (Bachman, 2015). This will help to guarantee student's educational and mental health. The basic objective of test-taking` tactics is to enhance students' overall performance on standardized tests. The second, related goal is to help students feel less anxious about their upcoming tests. If both of these objectives are accomplished, then exam results will improve. Students' testing proficiency and, by extension, their academic achievement may be improved by the presence or development of test-taking methods and abilities (Ritonga et al., 2023). Research shows that students who prepare for exams with a schedule (1) feel more confident before exams, (2) experience less stress during exams, and (3) do better overall (Bachman et al., 2010;

Davoudi & Heydarnejad, 2020). The spread of novel tools and their integration into educational settings, as well as the introduction of a range of new challenges, have the ability to change students' psychological balance. Evaluation apprehension theory, which was first presented by Cottrell (1972), is where the idea of SEA was first derived from. The SEA model takes into account individuals' worries about the assessments of other people even while they are participating in group activities. People feel pressure to display themselves in a positive light whenever they are in the presence of a group (Jahedizadeh & Ghanizadeh). In addition, the worry or concern that anything unfavorable may occur during an examination might be classified as evaluation apprehension. Tzounopoulos (2016) looked at the factors that contribute to the worry and unease that college students have in regard to adverse SEA in her research. She came to the conclusion that the primary causes of students' social anxiety include worries about examinations, class participation, queries from professors, and assessments from peers.

Individuals' ideas regarding themselves and how they feel are the foundation of self-esteem (S-E) as a term in psychology. In the context of education, S-E refers to the confidence that students have in their own capabilities or value. S-E is more likely to grow among learners in learning circumstances in which self-assessment is promoted, according to research conducted by Riswanto et al., (2022). According to Mandokhail et al., (2018), engaging in S-E helps students develop the skills necessary to successfully navigate the challenges presented by the current world. Therefore, it is essential for the foundational aspects that are required for the growth and accomplishment of S-E to be brought up to the top level of instructional study. The formation of a positive self-image and a healthy self-conscience are both linked to S-E. More specifically, S-E is connected to self-evaluation and entails cognitive assessments related to self-worth and emotional experiences, as stated by Manning et al., (2006).

Dörnyei and Ryan (2015) proposed that S-E is connected to both self-concept and self-evaluation in their research. To be more specific, Lawrence (2006) defined self-concept as an umbrella word that covers self-image, a perfect self, and S-E. There is a correlation between S-E and student performance in the classroom. Higher levels of S-E indicate that individuals will persevere through adversity and set loftier personal objectives as a result (Murk, 2006; Namaziandost et al., 2022). Techniques of self-regulation and psychological well-being might potentially both benefit from S-E balance and emotional equilibrium (Heydarnejad et al., 2019; Hosseinmardi et al., 2021). Students who had greater levels of S-E in general performed better in mixed-ability groups on measures related to total spoken words and interruptions, according to the research conducted by Faramarzzadeh and Amini (2017). They discovered that S-E worked as a mediator in the development of learners' oral competency. In the same vein, Mandokhail et al., (2018) concluded that instructors' own high levels of S-E facilitated the growth of their pupils' S-E. Moreover, Namaziandost et al., (2023) provide evidence that academic resilience, critical thinking, emotion regulation, and self-esteem might assist educational systems in preventing demotivation.

In spite of the fact that SA, TTS, SEA, S-E, and LA have each been independently illustrated to support students in executing their assessments and, as a result, enhancing their academic accomplishment, no research has ever investigated the connections between them. This gap in our knowledge is also shown by the existing body of scholarly

work on the issue of the contributions that online courses give and provide to language acquisition. The present research sought to evaluate the role that TTS, SEA, and SA, play in S-E and LA in the light of the aforementioned gaps in existing research and the significance of the learners' attributed constructs (in particular, TTS, SEA, and SA) in terms of their online assessment. On the basis of the current research and theories, a model is proposed and validated using SEM and CEM. The following research questions are offered keeping these points of view in mind:

1) Can EFL students' SA improve their SEA, S-E, and LA in online classes?
2) Can EFL students' TTS improve their SEA, S-E, and LA in online classes?

In this regard, the following model is proposed and tested, accordingly (Fig. 1).

Methodology

Participants

There were a total of 417 students studying English in private language institutions in Turkey. Their command of the English language ranged between intermediate and above intermediate levels. Their coursework was presented to them in an online manner, and during the course of the semester, students were tested and evaluated on their language skills using an online platform. Their online exams were held mostly via social media and Google Forms. Participants were recruited either via a random selection process or by a sample drawn at the participants' discretion. There were a total of 186 females and 231 males. The ages of those who contributed ranged from 17 to 28 years old.

Materials

Dodeen's Test-Taking Skills Scale (TTSS), developed specifically to assess test-taking skills, was used to evaluate the participants' performance (2008). A total of 31 elements on this scale are broken down into four categories: pre-test, test day, post-test,

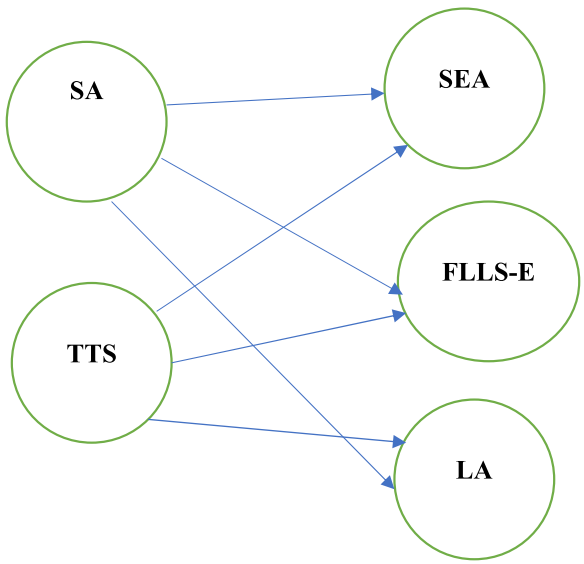

Fig. 1 The proposed model

and time management. A high score on the TSS is indicative of respectable test-taking abilities on the part of the student. This scale's internal consistency was satisfactory, falling within the range of 0.844 to 0.874.

The participants' levels of evaluation apprehension were measured using the Student Evaluation Apprehension Scale (SEAS). Jaheidzadeh and Ghanizadeh (2021) designed and verified this scale. Twenty statements are included in SEA, each with a 5-point Likert scale ranging from 1 ("definitely disagree") to 5 ("definitely agree"): reading commotion, presentation in the classroom, and participation in classroom discussions/question and answer exchanges.

The SA levels of students were evaluated by Judge et al. (2003) utilizing the Core of Self-assessments Questionnaire (CSAQ). A Likert scale from 1 to 5 is used for each of the 12 questions, with 1 indicating strong disagreement and 5 indicating strong agreement. On this scale, students obtained grades ranging from 12 to 60. A high score on this scale indicates that the respondent has a positive opinion of themselves. The findings of this study indicate that the CSEQ is reliable, with a coefficient of reliability of 0.878, which meets the necessary requirements for use in practice.

Using the Foreign Language Learning Self-esteem Scale (FLLSE), the researchers analyzed the level of confidence among university-level EFL students. Using a 5-point Likert scale (from 1 (strongly disagree) to 5 (strongly agree)), Rubio (2007) created this measure. Twenty-five measures make up FLLSE's four dimensions, which are (1) language capability, (2) real in-class language utilization, (3) in-class correlations, and (4) attitude toward/behavior in the class of foreign language. In this particular investigation, the dependability of this instrument was evaluated, and the result was found to be satisfactory ($\alpha = 0.851$).

In order to get an accurate picture of the students' level of linguistic competence, how well language learners did overall during the semester was considered and used that figure as this research benchmark.

Procedures and data analysis

This investigation started in October 2022 and lasted all the way until January 2023. In order for the participants to finish filling out the questionnaire that was sent to them, they were required to make use of online questionnaires. The TTSS, SEAS, CSAQ, and FLLSE were all included as separate components of the overall questionnaire. It was vital for every part of the electronic survey form to have a tight link to every other part of the form because of the way the online questionnaire was created. It was necessary to take these steps in order to guarantee that the layout of the survey would not cause any of the data to be lost during the processing of the responses. As a consequence of this, there has to be a connection that is essential between all of the different parts. A total of 417 properly filled-out forms were received, for a total submission return rate of 86.8%. For the purpose of determining whether or not the data follow a normal distribution, the Kolmogorov–Smirnov test was carried out. Due to the fact that the data followed a normal distribution, the statistical procedures of CFA and SEM were used to analyze them. These approaches were applied using LISREL 8.80.

Result

TTS improves their SEA, S-E, and LA

The SA, TTS, SEA, S-E, and LA are each broken down into various descriptive statistics that may be seen in Table 1.

The acquired mean score related to SA was ($M = 39.237$, SD = 9.854). During test ($M = 27.151$, SD = 6.844) had the highest mean scores on the TTA. On the SEA, the third instrument, Presentation in the Classroom, was shown to be the most important factor ($M = 23.880$, SD = 5.958). The "Attitude toward Behavior in the Class of Foreign Language" component had the highest mean score ($M = 25.540$, SD = 5.830) among the S-E factors. The average score for LA was $M = 29.139$ (standard deviation = 8.387). The Kolmogorov–Smirnov test was then performed to determine the most appropriate statistical approach.

According to Table 2, all of the instruments and the subscales included within them had Sig. values that were larger than 0.05. Because the data follow a normal distribution, parametric approaches may be used because of this property of the data. With the use of a Pearson product-moment correlation, the researchers in this study investigated whether or not there was a link between SA, TTS, SEA, S-E, and LA.

Based on the findings shown in Table 3, there were positive relationships that were also statistically significant between SA and the major components of TTS as well as LA. That is to say, there were statistically significant positive correlations found between SA and before test ($r = 0.633$), time management ($r = 0.656$), during test ($r = 0.594$), after test ($r = 0.617$), and LA ($r = 0.925$). These connections were found between SEA and before test ($r = 0.673$), time management ($r = 0.625$), during test ($r = 0.642$), after test ($r = 0.603$), and LA ($r = 0.722$). In addition to this, there were significant favorable linkages between the different aspects of FLLSE and TTS. These

Table 1 Descriptive statistics

	Number	Minimum	Maximum	Mean	Std. deviation
The Core of Self-assessments Questionnaire (SA)	417	13	60	39.237	9.854
Before test	417	8	40	25.542	8.340
Time management	417	8	40	26.748	7.405
During test	417	8	40	27.151	6.844
After test	417	7	35	23.597	6.461
Test-taking Skills Scale (TSS)	417	35	155	103.038	25.663
Reading commotion	417	7	35	23.300	6.058
Presentation in the classroom	417	9	35	23.880	5.958
Participation in the classroom discussions/question and answer exchanges	417	6	30	20.926	5.641
The Student Evaluation Apprehension Scale (SEA)	417	25	100	68.106	14.762
Language capability	417	13	30	22.336	4.088
Real in-class language utilization	417	12	30	21.396	4.992
In-class correlations	417	6	30	20.916	5.542
Attitude toward behavior in the class of foreign language	417	9	35	25.540	5.830
The Foreign Language Learning Self-esteem Scale (FLLSE)	417	41	121	90.187	17.928
Language achievement (LA)	417	20	35	29.139	8.387

Table 2 The results of the Kolmogorov–Smirnov test

Scales		Kolmogorov–Smirnov *Z*	Asymp. Sig. (2-tailed)
SA		0.765	0.602
TSS	Before test	0.752	0.623
	Time management	0.737	0.649
	During test	0.921	0.365
	After test	0.673	0.756
SEA	Reading commotion	0.915	0.372
	Presentation in the classroom	0.944	0.335
	Participation in the classroom discussions/question and answer exchanges	0.598	0.867
FLLSE	Language capability	1.355	0.051
	Real in-class language utilization	0.772	0.590
	In-class correlations	0.734	0.654
	Attitude toward behavior in the class of foreign language	0.840	0.481
LA		0.776	0.584

Table 3 The correlation coefficients between the SA, TTS, SEA, S-E, and LA

	SA	Before test	Time management	During test	After test	SEA	FLLSE	LA
The Core of Self-assessments Questionnaire (SA)	1.000							
Before test	0.633[a]	1.000						
Time management	0.656[a]	0.556[a]	1.000					
During test	0.594[a]	0.589[a]	0.590[a]	1.000				
After test	0.617[a]	0.611[a]	0.609[a]	0.621[a]	1.000			
The Student Evaluation Apprehension Scale (SEA)	0.946[a]	0.673[a]	0.625[a]	0.642[a]	0.603[a]	1.000		
The Foreign Language Learning Self-esteem Scale (FLLSE)	0.973[a]	0.772[a]	0.732[a]	0.749[a]	0.708[a]	0.689[a]	1.000	
Language achievement (LA)	[a]0.925	0.861[a]	0.844[a]	0.890[a]	0.811[a]	0.722[a]	0.559[a]	1.000

[a] Correlation is significant at the 0.01 level (2-tailed)

relationships were as follows: before test ($r=0.772$), time management ($r=0.732$), during test ($r=0.749$), after test ($r=0.708$), and LA ($r=0.559$).

Following that, CAF and SEM analyses of the structural relationships between SA, TTS, SEA, S-E, and LA were carried out by using the LISREL 8.80 statistical software. In addition, the appropriateness of the model was evaluated by the use of the chi-square magnitude, the root mean squared error of approximation (RMSEA), the comparative fit index (CFI), the good fit index (GFI), and the nominal fit index (NFI). The chi-square test should not provide a significant result, and the ratio of chi-square to df should be lower than 3. It is commonly believed that RMSEA values should be

lower than 0.1 (Jöreskog, 1990). In addition, Jöreskog (1990) recommends setting the cutoff value for the NFI, GFI, and CFI at a value of 0.90 or higher.

The influence of SA and TTS on SEA, S-E, and LA was validated by standardized estimates and *t*-values, which are shown in Figs. 2 and 3, respectively. The SA had a beneficial influence on SEA ($\beta = 0.92$, $t = 22.28$), FLLS-E ($\beta = 0.94$, $t = 25.37$), and LA ($\beta = 0.89$, $t = 20.65$). There was also a statistically significant positive impact that TTS had on SEA ($\beta = 0.59$, $t = 10.21$), S-E ($\beta = 0.72$, $t = 15.63$), and LA ($\beta = 0.81$, $t = 18.54$).

As Table 4 summarizes, the chi-square/df ratio (2.742), the RMSEA (0.065), GFI (0.924), NFI (0.963), and CFI (0.952) reached the acceptable fit thresholds.

Figures 4 and 5 show the route coefficient values for the correlations between SA, TTS (subfactors), SEA, S-E, and LA as calculated by model 2. It is possible to make conclusions about SA and SEA ($\beta = 0.92$, $t = 22.41$), FLLS-E ($\beta = 0.94$, $t = 25.66$), and LA ($\beta = 0.89$, $t = 20.77$). It was determined that the following factors are related

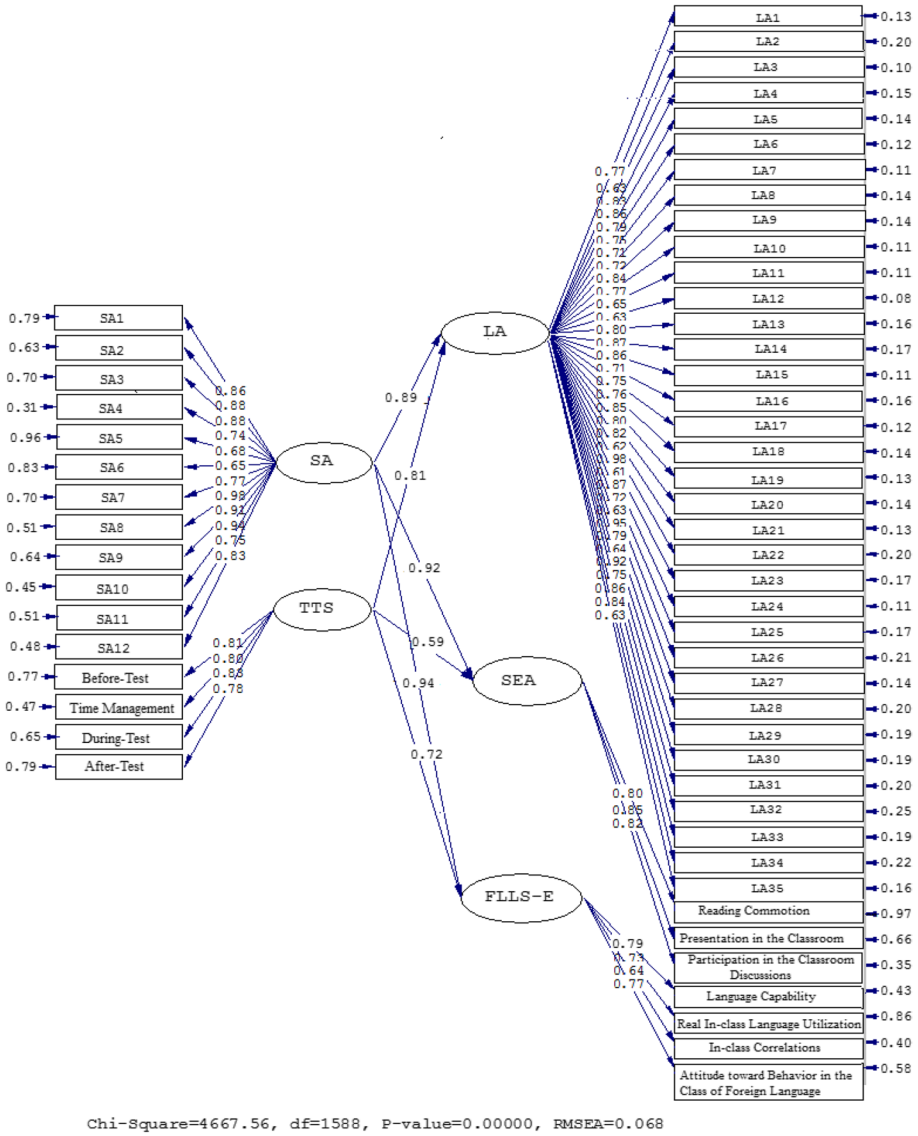

Fig. 2 A symbolic representation of the values of the path coefficients (model 1)

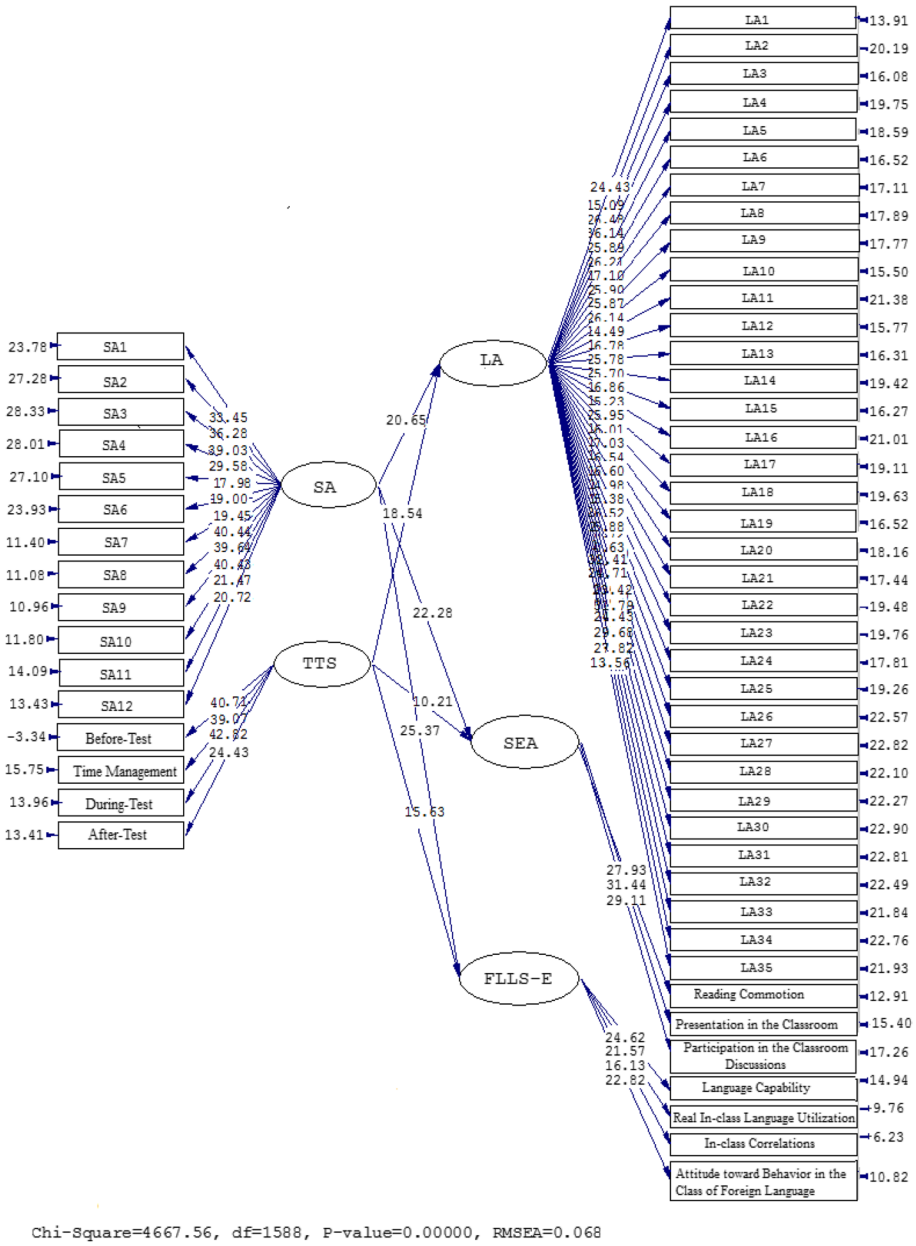

Fig. 3 *T* values for path coefficient significance (model 1)

Table 4 Model fit indices (model 1)

Fitting indexes	χ^2	df	χ^2/df	RMSEA	GFI	NFI	CFI
Cut value			< 3	< 0.1	> 0.9	> 0.9	> 0.9
Model 1	4667.56	1588	2.939	0.068	0.933	0.952	0.925

to SEA and TTS (subfactors): before test ($\beta = 0.63$, $t = 11.25$), time management ($\beta = 0.58$, $t = 9.74$), during test ($\beta = 0.60$, $t = 10.54$), and after test ($\beta = 0.55$, $t = 8.32$). Furthermore, S-E was shown to be connected to before test ($\beta = 0.74$, $t = 16.32$), time management ($\beta = 0.69$, $t = 12.87$), during test ($\beta = 0.71$, $t = 14.48$), and after test ($\beta = 0.66$, $t = 11.43$). A similar pattern emerges when looking at the LA and TTS

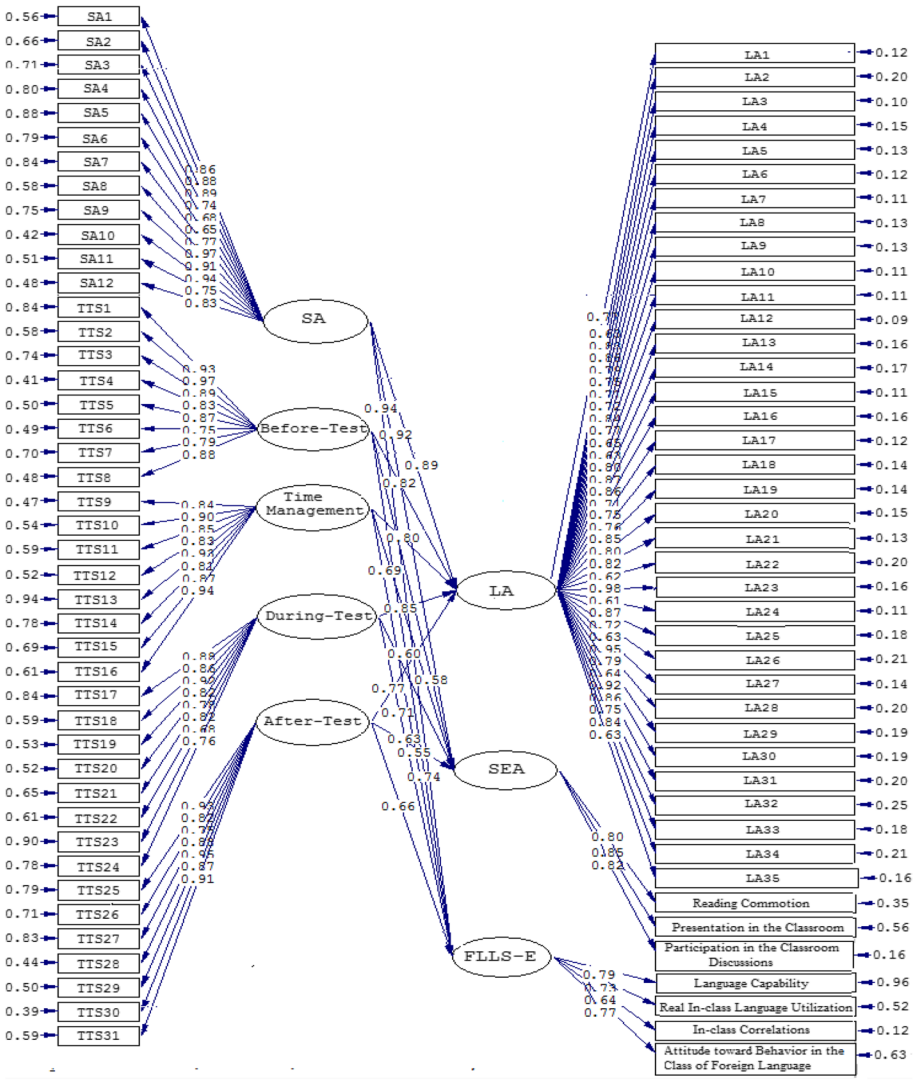

Fig. 4 A symbolic representation of the values of the path coefficients (model 2)

subfactors: before test ($\beta = 0.82$, $t = 19.85$), time management ($\beta = 0.80$, $t = 19.13$), during test ($\beta = 0.85$, $t = 20.06$), and after test ($\beta = 0.77$, $t = 16.98$).

The second model's fit indices are also included in Table 5. The RMSEA (0.069) and chi-square (2.985) ratios indicate a satisfactory match. In addition, the CFI (0.923), NFI (0.949), and GFI (0.935) were all within reasonable ranges.

Discussion

The purpose of this study was to probe into the effects that establishing and practicing SA, TTS, SEA, and S-E on AE and LA while participating in online courses at academic institutions may have. In order to accomplish this objective, a qualitative study inquiry was carried out with EFL students who were enrolled in language schools in Turkey and were making use of online learning opportunities. According to

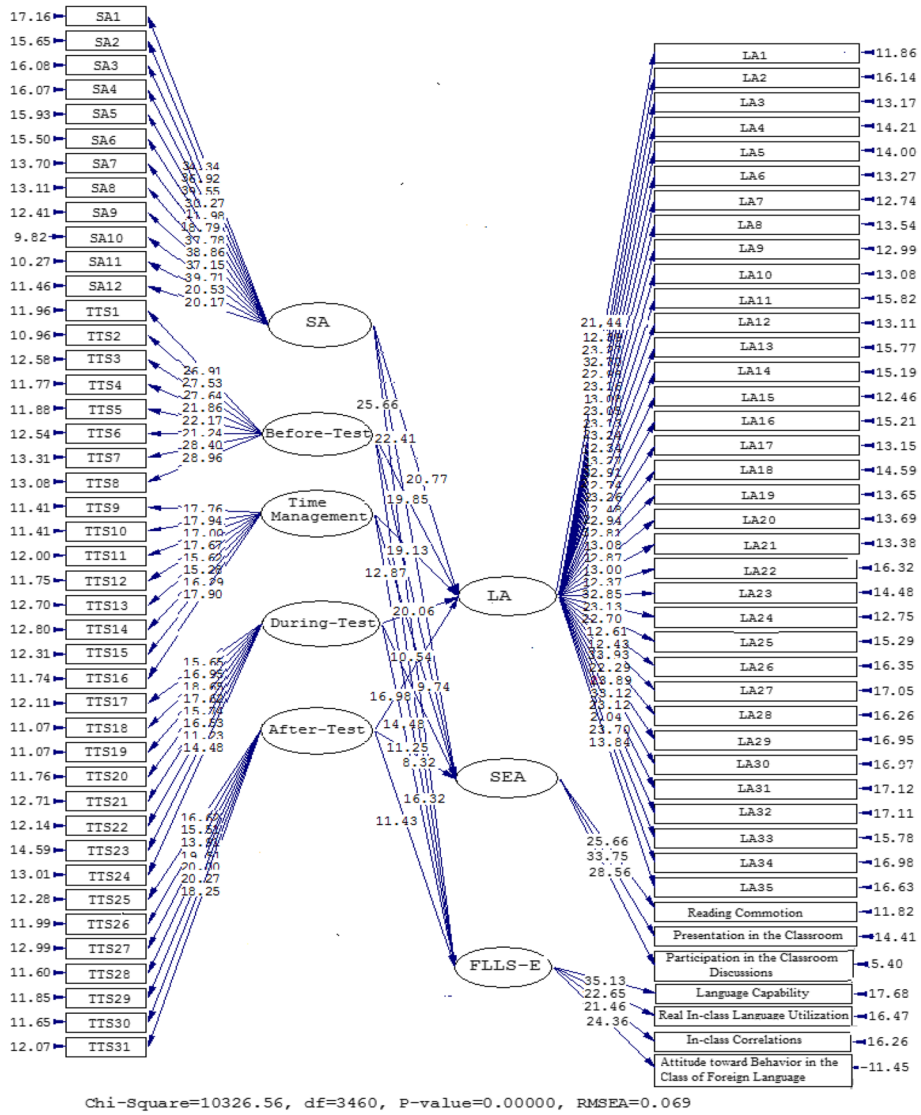

Fig. 5 *T* values for path coefficient significance (model 2)

Table 5 Model fit indices

Fitting indexes	χ^2	df	χ^2/df	RMSEA	GFI	NFI	CFI
Cut value			< 3	< 0.1	> 0.9	> 0.9	> 0.9
Model 2	10,326.56	3460	2.985	0.069	0.935	0.949	0.923

the findings, students who participate in SA and TTS have greater levels of SEA and S-E and also have better exam scores. These results demonstrated the significant role that online courses and evaluation play in enhancing students' emotional well-being and their desire to continue their education. The next part of this article is a discussion that expands on the findings from the study.

The potential impact of SA in distance education settings was the subject of the other research question (Can EFL students' SA improve their SEA, S-E, and LA in online classes?). The results showed that students with strong SA do better on online tests and

are more satisfied with the process (model 1). Therefore, independence is essential in terms of importance and feeling of belonging, perception of capabilities, course value, interaction with instructors, interaction with peers, social relationships, and participation in the online evaluation. It seems to reason that providing students with more independence via access to language learning resources like online courses will aid in the development of their linguistic skills. It is assumed that the alignments of students toward self-assessment help in the creation and rebuilding of a favorable view of oneself and a sense of self which in turn promotes constructive goal settings. EFL learners who are exposed to experiences like these are better able to cultivate an internal feeling of control and a perception of effectiveness in their skills to carry out activities successfully (Alazemi et al., 2023).

This finding is congruent with the results obtained by Riswanto et al., (2022), who discovered that SA and critical thinking have a big effect on engaging EFL students. Specifically, they discovered that SA and critical thinking play a substantial influence in engaging EFL students. This result is in line with the findings of research carried out by Huang (2022) and Namaziandost et al., (2023), who found that self-evaluation helps with both self-control and confidence, which ultimately leads to learners enjoying the experience more. This outcome is questionable from a theoretical standpoint. According to Bourke and Mentis (2013), the philosophy of SA is founded on the ideas of self-determination and the idea of individual autonomy. In both overt and covert ways, learners of English as a foreign language might benefit from an evaluation strategy that is more learner-centered. It has a domino effect on the pupils' ability to maintain healthy connections with one another.

Taking into account the last study question "Can EFL students' TTS improve their SEA, S-E, and LA in online classes?", the results showed that the SEA and S-E of EFL learners increased as their TTS proficiency rose (model 1). This suggests that EFL students experience less boredom and stress during online assessment when they prepare for it using proven methods and exhibit their true level of competence. Based on model 2, the three components of TTS (i.e., before test, time management, and during test) are critical in directing EFL learners' SEA. That means learning the related strategies to manage learners' anxiety before and during the online examination, teaching the techniques to manage time during the test, and helping them actualize their real potentials in completing the exams will increase their SEA. To achieve this goal, one must gather the data required to efficiently plan for, take, and process an examination. Since more and more schools are using online platforms for both teaching and grading, it is essential that teachers and students learn how to make the most of these tools (Alazemi et al., 2023; Ritonga et al., 2023). This result cannot be compared to others since no other study has specifically investigated the link between TTS and SEA. However, it has the potential to motivate brand new lines of inquiry within the field of TEFL.

According to the findings of the first and second models, EFL students who take an active role in their study association (SA) report feeling more interested in their studies. This conclusion is in agreement with the findings of Riswanto et al., (2022), who found that SA and critical thinking had a significant influence on the level of motivation shown by EFL students. This conclusion is consistent with the findings of Huang's (2022) research, which revealed that students' enjoyment of a topic rose when they participated

in the self-reflective evaluation of their own performance in relation to the subject. It is possible that this conclusion is not entirely accurate. In the words of Martin and Marsh (2009), gaining a deeper understanding of oneself is predicted to increase feelings of motivation, satisfaction, resiliency, and participation in the classroom. Therefore, EFL students who have a high TTS are more likely to react positively to challenges by establishing goals that are within their reach and making conscious efforts to adapt to the cultural and social norms of their new communities.

Conclusion

The overall goal of this research was to illuminate the connections between SA, TTS, SEA, S-E, and LA as they pertain to EFL language online instruction. The results suggest that boosting SA, TTS, SEA, S-E, and LA may increase online assessment participation among EFL students (models 1 and 2). Each of these methods—SA, TTS, SEA, S-E, and LA—requires some degree of self-awareness and metacognition. Effective learning strategies should become second nature for students after repeated experience across a range of classroom activities. Language instructors and other educators play a vital role in fostering an atmosphere conducive to the spread of SA, TTS, SEA, S-E, and LA, in particular, virtual classes. Therefore, it is crucial that students learn effective strategies to apply in the educational setting.

EFL professors and instructors play essential responsibilities in the development and upkeep of an atmosphere that is favorable to the effective application of SA, TTS, SEA, S-E, and LA in online classrooms. They need training in efficient procedures that may be used right away in online education and evaluation. By participating in in-service and pre-service training programs, educators and academics have the opportunity to have access to relevant expertise. A certain amount of cognitive and metacognitive awareness is required for SA, TTS, SEA, and S-E, as well as for LA. Students of English as a foreign language should, with enough experience in a wide range of in-class tasks, ultimately reach a stage where they can use effective learning approaches automatically.

Instructors and learners of foreign languages stand to profit from an understanding of personal development frameworks and technology literacy, as well as the values represented by those concepts. It is possible that educators and academics may have access to the necessary information by participation in in-service and pre-service education courses. In their efforts, policymakers, curriculum designers, content producers, assessment developers, and language instructors should all pay substantial thought to online learning and teaching self-help initiatives. This will guarantee that students are successful in the classroom, that evaluations are centered on the specific requirements of individual students, and, most importantly, that the health of our society as a whole is maintained.

The current study has certain flaws, although they are analogous to those found in earlier studies: (1) No attempt was made to account for the students' sociocultural contexts or personal details. Possible topics for future research include how variations in sociocultural context and demographic data could impact the connection between SA, TTS, SEA, S-E, and LA in online instruction and assessment. (2) It would help to generalize if students from other departments and schools were included. This study might

be replicated in various types of educational institutions, including public and private schools and language academies, in the future. (3) Quantitative techniques were used to conduct this study. Mixed-method techniques allow for a more in-depth investigation and hence might be used in future research.

Abbreviations

EFL	English as a Foreign Language
SA	Self-assessment
TTS	Test-taking skills
SEA	Student evaluation apprehension
S-E	Self-esteem
LA	Language achievement
CSAQ	Core of Self-assessment Questionnaire
TTSS	Test-Taking Skills Scale
SEAS	Student Evaluation Apprehension Scale
TTSS	Test-Taking Skills Scale
FLLSE	Foreign Language Learning Self-esteem Scale
SEM	Structural equation modeling
CFA	Confirmatory factor analysis
LISREL	Linear structural relations
RMSEA	Root mean squared error of approximation
CFI	Comparative fit index
NFI	Normed fit index
GFI	Good fit index

Acknowledgements
Not applicable.

Authors' contributions
All authors have made equal contributions.

Authors' information
Dr. KDV Prasad is a faculty in Symbiosis Institute of Business Management, Hyderabad, Symbiosis International (Deemed University), Pune, India. Prasad holds MS in Computers, MS in Software Systems from BITS, Pliani, MBA from IGNOU, New Delhi, and PhD in Business Management and PhD in Business Administration. Dr. Prasad's research interests are general management, behavioral science, data analysis using SPSS, organizational psychology, and related subjects. Dr. Prasad published over 100 research articles in national and international journals. He can be contacted at kdv.prasad@sibmhyd.edu.in.
Alaa Aladini is an assistant professor of ELT working at Dhofar University. He worked as a teacher trainer and inclusive learning specialist in the United Nations for 22 years.
Prof. Dr. Nozliya Normurodova is a vice-rector for International Cooperation at Alisher Navo'i Tashkent State University of Uzbek Language and Literature, Tashkent, Uzbekistan. The head of the department "English Philology and simultaneous translation" in Alisher Navo'i Tashkent State University of Uzbek Language and Literature, Tashkent, Uzbekistan. The head of the department "Monitoring and assessment quality of implementation of Common European Framework Reference (CEFR) in all sectors of education" in Republican Practical Center for Innovations in Teaching Foreign Languages, Tashkent, Uzbekistan.
Barana Belton got her MA from the Department of English Language and Literature, Ardahan University, Ardahan, Turkey.

Funding
This study did not receive any funding.

Availability of data and materials
The authors state that the data supporting the findings of this study are available within the article.

Declarations

Competing interests
The authors declare that there is no competing interests.

Received: 21 May 2023 Accepted: 15 June 2023
Published online: 04 July 2023

References

Alazemi, A. F. T., Jember, B., & Al-Rashidi, A. H. (2023). How to decrease test anxiety: A focus on academic emotion regulation, L2 grit, resilience, and self-assessment. *Language Testing in Asia,13*, 28. https://doi.org/10.1186/s40468-023-00241-5

Andrade, H. L. (2021). A critical review of research on student self-assessment. *Frontiers in Education, 4*, 87. https://doi.org/10.3389/feduc.2019.00087
Bachman, L. F. (2015). Justifying the use of language assessments: Linking test performance with consequences. *JLTA Journal,18*, 3–22.
Bachman, L. F., Palmer, A. S., & Palmer, A. S. (2010). *Language assessment in practice: Developing language assessments and justifying their use in the real world*. Oxford University Press.
Barrot, J. S. (2021). Social media as a language learning environment: A systematic review of the literature (2008–2019). *Computer Assisted Language Learning.* 1–29. (in press). https://doi.org/10.1080/09588221.2021.1883673
Bourke, R., & Mentis, M. (2013). Self-assessment as a process for inclusion. *International Journal of Inclusive Education,17*(8), 854–867. https://doi.org/10.1080/13603116.2011.602288
Cottrell, N. B. (1972). Social facilitation. In C. G. McClintock (Ed.), *Experimental social psychology*. Holt, Rinehart & Winston.
Davoudi, M., & Heydarnejad, T. (2020). The interplay between reflective thinking and language achievement: A case of Iranian EFL learners. *Language Teaching Research Quarterly,18*, 70–82.
Dörnyei, Z., & Ryan, S. (2015). *The psychology of the language learner revisited*. Routledge.
Faramarzzadeh, R., & Amini, D. (2017). The relationship between self-esteem and conversational dominance of Iranian EFL learners' speaking. *The Journal of Applied Linguistics and Applied Literature: Dynamics and Advances,5*(1), 55–68. https://doi.org/10.22049/jalda.2018.26306.1081
GuoJie, M. (2021). The role of athletic psychology, athlete engagement in athletic performance and athletes' sports success in China: Does coaching behavior moderates? *Revista De Psicología Del Deporte (Journal of Sport Psychology),30*(3), 191–204. https://www.rpd-online.com/index.php/rpd/article/view/485
Heydarnejad, T., Ebrahimi, M. R., & Adel, S. M. R. (2019). The influence of applying emotion-based language instruction in teaching oral skills to EFL learners. *International Journal of Instruction,12*(2), 275–288.
Heydarnejad, T., Ibrahim, A. A., & K. A., Abdelrasheed, N. S. G., & Rezvani, E. (2022). The effect of academic emotion regulation on EFL learners' core of self-assessment and academic buoyancy: A structural equation modeling. *Language Testing in Asia,12*, 57. https://doi.org/10.1186/s40468-022-002
Hosseinmardi, A. A., GhorbanShiroodi, S., Zarbakhshbahri, M. R., & Tizdast, T. (2021). The relationship of academic engagement, school engagement and school belonging with academic achievement by mediated the academic achievement motivation in male students. *Iranian Journal of Educational Society,14*(2), 178–189. https://doi.org/10.22034/ijes.2021.534830.1123
Huang, X. (2022). Constructing the associations between creative role identity, creative self-efficacy, and teaching for creativity for primary and secondary teachers. *Psychology of Aesthetics, Creativity, and the Arts.* Advance online publication. https://doi.org/10.1037/aca0000453
Jahara, S. F., Hussain, M., Kumar, T., Goodarzi, A., & Assefa, Y. (2022). The core of self-assessment and academic stress among EFL learners: The mediating role of coping styles. *Language Testing in Asia,12*, 21. https://doi.org/10.1186/s40468-022-00170-9
Jaheidzadeh, S., & Ghanizadeh, A. (2021). EFL students' evaluation apprehension and their academic achievement, gender, and educational level: Towards designing and validating a comprehensive scale. *International Journal of Language Testing,11*(1), 1–21.
Jamali Kivi, P., Namaziandost, E., Fakhri Alamdari, E., Ryafikovna Saenko, N., Inga-Arias, M., Fuster-Guillén, D., Sirisakpanich, D., & Nasirin, C. (2021). Correction to: The comparative effects of teacher versus peer-scaffolding on EFL learners' incidental vocabulary learning and reading comprehension: A socio-cultural perspective. *Journal of Psycholinguistic Research,51*, 679–680. https://doi.org/10.1007/s10936-021-09808-w
Jöreskog, K. G. (1990). New developments in LISREL: analysis of ordinal variables using polychoric correlations and weighted least squares. *Quality and Quantity, 24*(4), 387–404. https://doi.org/10.1007/BF00152012
Judge, T. A., Ereza, A., Bono, J. E., & Thoreson, C. J. (2003). The core self-evaluation scale (CSAs): Development of a measure. *Personnel Psychology, 56*, 303–331.
Lawrence, D. (2006). *Enhancing self-esteem in the classroom*. Pine Forge Press.
Manca, S. (2020). Snapping, pinning, liking or texting: Investigating social media in higher education beyond Facebook. *The Internet and Higher Education,44*, 100707. https://doi.org/10.1016/j.iheduc.2019.100707
Mandokhail, S., Khan, F. R., & Malghani, M. (2018). Impact of ESL learners' self-esteem on their oral proficiency. *International Journal of English Language and Linguistics,8*, 210–222. https://doi.org/10.5539/ijel.v8n3p210
Manning, M. A., Bear, G. G., & Minke, K. M. (2006). Self-concept and self-esteem. In G. G. Bear & K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 341–356). National Association of School Psychologists.
Martin, A. J., & Marsh, H. W. (2009). Academic buoyancy: Towards an understanding of students' everyday academic resilience. *Journal of School Psychology, 46*(1), 53–83.
Miller Smedema, S., Chan, F., Yaghmaian, R., DaSilva Cardoso, E., Muller, V., & Keegan, J. (2015). The relationship of core self-evaluations and life satisfaction in college learners with disabilities: Evaluation of a mediator model. *Journal of Post-Secondary Education and Disability,28*(3), 341–358.
Murk, J. C. (2006). Self-esteem research, theory, and practice. *Toward a positive psychology of self-esteem* (3rd ed.). Springer Publishing Company.
Namaziandost, E., Heydarnejad, T., Rahmani Doqaruni, V., & Aziai, Z. (2022). Modeling the contributions of EFL university professors' emotion regulation to self-efficacy, work engagement, and anger. *Current Psychology*.https://doi.org/10.1007/s12144-022-04041-7
Namaziandost, E., Heydarnejad, T., & Azizi, Z. (2023). To be a language learner or not to be? The interplay among academic resilience, critical thinking, academic emotion regulation, academic self-esteem, and academic demotivation. *Current Psychology*. https://doi.org/10.1007/s12144-023-04676-0
Rezai, A., & Namaziandost, E. (2022). Is Iranian university students' computer self-efficacy a strong contributor to learning anxiety? A mixed-methods investigation. *Iranian Journal of Learning & Memory,5*(19), 27–40.
Riswanto, Heydarnejad T., Saberi Dehkordi, E., & Parmadi, B. (2022). Learning-oriented assessment in the classroom: The contribution of self-assessment and critical thinking to EFL learners' academic engagement and self-esteem. *Language Testing in Asia,12*, 60. https://doi.org/10.1186/s40468-022-00210-4

Ritonga, M., Shaban, A. A., Al-Rashidi, A. H., & Chilani, N. (2023). Engagement in on-line language assessment: Are test-taking skills, self-assessment, resilience, and autonomy critical? *Language Testing in Asia,13*, 25. https://doi.org/10.1186/s40468-023-00236-2

Rubio, F. (2007). Self-Esteem and Foreign Language Learning: An introduction. In F. Rubio (Ed.), *Self-esteem and foreign language learning,* (pp. 2–12). Cambridge Scholars Publishing.

Syairofi, A., Mujahid, Z., Mustofa, M., Ubaidillah, M. F., & Namaziandost, E. (2022). Emancipating SLA findings to inform EFL textbooks: A look at Indonesian school english textbooks. *The Asia-Pacific Education Researcher,32*, 177–188. https://doi.org/10.1007/s40299-022-00642-9

Tavousi, N., & Pour Sales, H. (2018). The role of optimism in the relationship between core self-evaluation and hardiness with life satisfaction. *Contemporary Psychology,11*(2), 52–66.

Tzounopoulos, M. (2016). Foreign language anxiety and fear of negative evaluation in the Greek university classroom. *Selected papers on theoretical and applied linguistics at the 21st International Symposium on Theoretical and Applied Linguistics (ISTAL 21)* (pp. 823–838).

Umeanowai, K. O., & Lei, W. (2022). A study of Chinese learners' beliefs, strategy use, and proficiency in learning Chinese as a foreign language. *International Journal of Linguistics Studies,2*(1), 19–30.

Wongdaeng, M. (2022). The role of metacognition in the learning of English as a foreign language. In N. Siddiqui, & S. Gorard (Eds.), *Making your doctoral research project ambitious: Developing Large-Scale Studies with Real-World Impact.* Routledge.

Publisher's Note