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# I like language assessment: EFL learners' voices about self-assessment, self-efficacy, grit tendencies, academic resilience, and academic demotivation in online instruction

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# **Abstract**

Self-awareness and self-evaluation are at the heart of both core of self-assessment. self-efficacy, and grit tendencies. Although there is a lot written about self-assessment, self-efficacy, and grit tendencies, academic resilience, and motivation, very little is known about how self-assessment, self-efficacy, and grit tendencies contribute to the academic resilience and academic demotivation of the learners, especially in online English as a foreign language (EFL) assessment. Therefore, the purpose of this study was to investigate a structural model of core of self-assessment, self-efficacy, grit tendencies, academic resilience, and academic demotivation among EFL students. Consequently, 385 EFL students took surveys measuring their language-learning endeavors using the Core of Self-assessment Questionnaire (CSAQ), the Self-Efficacy Scale (S-ES), the language-domain-specific grit scale (L2-Grit S), the Academic Resilience Scale (ARS), and the Academic Demotivation Scale (ADS). Structural equation modeling (SEM) findings revealed that highly resilient and motivated EFL students had high core of self-assessment. Additionally, grit tendencies and self-efficacy displayed effectiveness in elevating academic resilience and motivation in online assessment. The results of this study may have worthwhile pedagogical implications for incorporating technologically enhanced learning and assessment into the classroom.

**Keywords:** Self-assessment, Self-efficacy, Grit tendencies, Academic resilience, Academic demotivation, Online instruction, EFL learners

# **Background of the study**

The lightning-fast rate of technological innovation requires the development of novel approaches to education in order to keep up with the times. Virtual classrooms have been more popular over the course of the last half century, particularly during the COVID-19 pandemic crisis, which resulted in the almost complete closure of schools and few connections between persons. Learning is made easier by the use of online programs and social media, which also allow for interaction in both directions between teachers and the students they teach (Akachi & Ayed, 2021). In this particular setting,



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research on online learning environments has been particularly vital to represent the potential benefits and drawbacks of the option. It is possible that the mental and psychological balance of the students will be disrupted as a result of the expansion of online instruction and assessment, their assimilation into the field of education, and the presentation of a range of new difficulties (Kisworo et al., 2023). Effective instructional planning enables students to build and practice ways to get around any potential roadblocks that may lie in the path of their education (Khan et al., 2021). Research conducted by Kim and Kim (2016) found that students who used academic resilience had a greater ability to handle the sentiments of fear and hopelessness that were brought on by their language classes. One description of the idea of resilience is the capacity to continue regular functioning and create beneficial modifications in spite of considerable adversity, as stated by Fletcher and Sarkar (2003). This is an example of how resilience may be defined.

According to Cassidy (2016), resilient learners are individuals who make an attempt to prevail over adversity and have a larger possibility of being successful in completing tough undertakings. Resilient learners also have a stronger capacity to absorb and use feedback. Academic resilience is influenced by a broad variety of internal and external elements, including competence, perspectives, personal ambitions, and adaptive capabilities. According to Tamannaeifar and Shahmirzaei (2019), some examples of these include the students' families, the environment of the school, the students' teachers, and the students with whom they interact. Rudd et al. (2021) underlined that academic resilience is a living and supportive structure that shapes helpful adaptation in order to overcome hurdles to positive growth. This idea was supported by the study that they conducted. In a similar vein, Heydarnejad et al. (2022b) identified that grit tendencies play a mediator function in the process of boosting self-assessment and managing anxiety in language learners. Recent research by Alazemi et al. (2023b) found that students who used academic resilience and emotion control techniques were able to reduce their test anxiety.

Demotivation is a state of mind that is defined by a loss of interest in and pleasure of tasks that were earlier deemed to be attractive. This lack of interest and enjoyment may lead to decreased productivity. Students who lack motivation may find it challenging to participate in activities, finish chores, or communicate with their peers. A lack of motivation may be brought on by a number of things, including boredom, tension, worry, and exhaustion, to name a few. A lack of motivation may result in lower levels of productivity, poor performance, and even absenteeism. In order to avoid the bad impacts that demotivation might have, it is essential to recognize it and deal with it as soon as possible (Namaziandost et al., 2023b). Certain features have the ability to improve students' motivation in online courses and instruments, but others have the capacity to block progress and lead to feelings of inadequacy in addition to a loss of desire for students. Students are inspired to do well and to persevere in their studies in spite of the difficulties they encounter and the setbacks they encounter. Learners who are not motivated, on the other hand, are often hesitant to complete their assignments; they are unable to engage in speaking activities, and they are paralyzed by the challenges involved with the learning of a new language. When trying to make sense of the elements that may prevent or slow the progression of academic demotivation, the aspects that help improve

an individual's self-perception and sense of self-worth stand out as especially significant considerations to take into account Cao (2022).

In accordance with Rojas (2015), a student's level of motivation has a role in the degree to which they worry about failing their classes and doing badly in their coursework. As a result, we may reach the following conclusion: motivation and demotivation are intricately linked. Arias et al. (2022) carried out study along these same lines, looking at how EQ and motivation impact the mental health of students. According to the findings of their investigation, there is a strong connection between the two aspects. In addition, Cao (2022) adopted a different approach and investigated the influence that students' level of motivation and enjoyment of the target language had on their willingness to communicate in the target language. In the same vein of research, Heydarnejad et al. (2022c) came to the conclusion that performance-based evaluation increases EFL students' levels of motivation and self-efficacy. They also discovered that performancebased evaluation might lower levels of anxiety and academic demotivation associated with learning a foreign language. Recent research conducted by Namaziandost et al. (2023b) discovered that language learners who were better able to regulate their emotions, think critically, and have higher levels of self-esteem were better able to cope with instances of academic demotivation.

Several methods were proposed to evaluate student development and guide instructional design. Learners' active participation in their own evaluation is at the heart of selfassessment, which stands apart from both teacher- and peer assessment. Assessment or evaluation of oneself or one's behaviors, attitudes, or performance is how Bachman et al. (2010) defined core of self-assessment. For this reason, it is crucial for educators to promote and educate each student to engage in a process of self-assessment. Learners get insight into their own progress via the use of core of self-assessment's strategies. Learners' mental health is only one aspect of their lives that might be negatively impacted by engaging in core of self-assessment. High core of self-assessment was also associated with improved emotional regulation and academic achievement among EFL students (Punpromthada et al., 2022). Students develop critical thinking and decision-making skills via core of self-assessment procedures and gain the ability to cope more effectively with challenges in the classroom as a result (Al-Mamoory & Abathar Witwit, 2021; Namaziandost et al., 2023a). The current condition of core of self-assessment may be affected by both internal and external values. External values like as grades and instructor evaluation may have a significant impact on core of self-assessment, while internal values such as defining objectives and individual autonomy can have an even greater impact. Additionally, Hu (2022) highlighted core of self-assessment might be used to guide students toward more desirable emotional development. In the same vein, Ritonga et al. (2023) pinpointed that the state of EFL learners' engagement and autonomy in virtual classes depended on their level of core of self-assessment.

The self-efficacy dimension reflects an individual's level of self-assurance on their own excitement, attitude, and relationships. According to Olivier et al. (2018) and Namaziandost et al. (2022), self-efficacy has a substantial impact on the decisions that students make and the motivation they have to finish their tasks. According to Lai and Hwang (2016), successful students have a positive attitude on the process of learning, and they believe that their lack of success is due to a lack of effort on their part

rather than a lack of skill on their part. According to Bandura's definition (2012), selfefficacy inspires individuals to believe that they are capable of selecting the approach that will allow them to achieve their goals in the most effective and efficient manner. According to Bong and Clark (1999), there is a connection between people's selfefficacy beliefs and the way in which they react to various forms of adversity in terms of their thoughts, behaviors, and coping methods. This link was found between the two. The social-cognitive theory developed by Bandura in 1998 provides a theoretical foundation for the perceptions of abilities. This theory adopts an agent-based perspective of personality and places an emphasis on the influence that self-referential experiences have.

In addition, self-efficacy was defined by Bandura (1997) as the degree to which a person feels that they are capable of effectively completing a task or displaying a set of behaviors under certain circumstances. Self-monitoring, self-guidance through personal standards, and corrective self-reactions are all examples of self-regulatory processes that reflect this metacognitive capacity which underscored the self-efficacy skills (Cerit, 2019). This metacognitive competence underlines the importance of the self-efficacy skills. Olivier et al. (2018) found that the positive effects of students' self-efficacy views and classroom engagement on their academic success were corroborated by the findings of their study. A similar finding was made by Namaziandost et al. (2022), who came to the conclusion that an individual's state of emotional balance and involvement are directly related to their self-efficacy. A recent attempt also highlighted the significant impacts of growth mindset, self-efficacy, and intrinsic value in self-regulated learning and English language learning achievements. They found out that the students' motivating beliefs influenced the extent to which they used self-regulatory strategies as well as self-efficacy beliefs (Bai & Wang). Moreover, they discovered that monitoring and effort control were major contributions to the participants' accomplishments in learning.

Grit may be defined as a mix of effort, perseverance, and a desire for long-term goals on the part of students. People who have a high degree of grit also have a positive attitude on their professional life, as shown by the results of Lan (2022). When seen from a different perspective, the attribute of grit as a personality trait confers upon people the capacity to concentrate their efforts and make more attempts to attain their objectives (Hejazi & Sadoughi, 2022). Duckworth (2007) was the one who first established the idea of learner L2 grit, and it lays an emphasis on an individual's passion for, and persistent efforts toward, accomplishing their chosen goals.

Language student who has a high level of grit is able to sustain their motivation to work toward long-term objectives despite the fact that they are presented with barriers and problems (Alazemi et al., 2023a). Grit may be defined as the ability to persist in the face of adversity. According to the findings of the study that was conducted out by Shafee Rad and Jafarpour (2022), effective management of one's emotions is advantageous to one's levels of grit, ER, and resilience when it comes to learning English as a second language (L2). In addition, Ghanbari and Abdolrezapour (2021) found that the pleasant sentiments experienced by EFL learners in L2 and the tenacity of EFL learners in L2 were advantageous to their academic progress. Furthermore, Wei and colleagues (2020) found that there was a positive association with L2 grit and achievement in the English language.

# Objectives of this research

In accordance to the findings of the study that has previously been conducted on core of self-assessment, a multitude of factors may be to blame for the way in which students feel demotivation. This finding suggests that putting core of self-assessment into practice and actively participating in it have an effect on the cognitive, metacognitive, and affective phases of the academic life of learners (Wei, 2020). It has been proven that the efforts of the learners would be well worth it if they were given the option to rebuild their practices and were involved in critically analyzing their own growth as learners (Ismail & Heydarnejad, 2023). This has been proved via a variety of activities. It is to the best of the researcher's knowledge that there have never been any studies that studied the links between core of self-assessment, self-efficacy, grit tendencies, academic resilience, and academic demotivation; this is despite the fact that all four of these components are essential in ensuring the health and happiness of students participating in online assessment, in particular EFL students. This gap in the existing body of research inspired the present study, which was aimed to explore the interactions that take place between core of self-assessment, self-efficacy, grit tendencies, academic resilience, and academic demotivation during online assessment. The goal of this inquiry was to address this gap in the existing body of research. To be more explicit, the purpose of the study was to demonstrate how core of self-assessment self-efficacy and grit tendencies could accurately predict academic resilience as well as academic demotivation. It is hoped that the results of this study will provide sufficient evidence upon which meaningful conclusions about the instruction of languages and their evaluations may be reached. Taking all of this into account, the following research questions were formulated:

- RQ1: Is there a connection between core of self-assessment, self-efficacy, grit tendency, and academic resilience among EFL students in online classes?
- RQ2: Is there a connection between core of self-assessment, self-efficacy, grit tendency, and academic demotivation among EFL students in online classes?

# Methodology

# Participants and settings

This research was carried out on an overall number of 385 (114 females and 271 males) enrolled to learn English at Ethiopia's numerous institutions. Both their education and their evaluation took place in an online environment. All of the participants varied in age from 23 to 36 years old, and their language skills fell into the intermediate or higher intermediate classification. The participants in the study were selected using a series of procedures that either entailed sampling based on the availability of opportunities or sampling based on the availability of alternatives that were convenient. This investigation began in September 2022 and ended in February 2023.

# Instruments

The Academic Resilience Scale (ARS) introduced by Kim and Kim (2016) was applied to assess the academic resilience. ARS includes 26 items on 5-point Likert scale ranging

from completely disagree (1) to completely agree (5). ARS comprises five facets, including perceived happiness (9 items), empathy (7 items), sociability (3 items), persistence (4 items), and self-regulation (2 items). As Table 1 displayed, the internal consistency yielded a satisfactory result of 0.924.

The Academic Demotivation Scale (ADS) measures academic demotivation. Sakai and Kikuchi (2009) created and validated an ADS to measure participants' feelings of demotivation. The scale employed has 35 items, with (1) representing full disagreement and (5) indicating perfect agreement. ADS assesses six factors: professors (6 things), class features (7 items), class atmosphere (7 items), class materials (6 items), lack of interest (4 items), and failure experiences (5 items). Cronbach's alpha was then used to measure internal consistency, providing a score of 0.871 (Table 1).

Judge et al. (2003) developed and validated the Core of Self-assessments Questionnaire (CSAQ), which was used to examine students' basic self-assessments. There are a total of 12 items, which are all scored on a Likert scale of 1 (strongly disagree) to 5 (strongly agree). The averages of the students on this metric ranged from 12 to 60. Positive self-assessment resulted in higher scores on this test, whereas negative self-assessment resulted in lower ones. According to Table 1, CSAQ has a fair reliability of 0.885 in the present study.

To gauge the degree of students' beliefs about their successful achievement, the Self-efficacy Scale (S-ES) (Greene et al., 2004) was employed. This scale contains seven statements ranging from strongly disagree (1) to strongly agree (4). The reliability of this scale estimated through Cronbach's alpha (Table 1) was acceptable (0.897).

The language-domain-specific grit scale (LDSGS) developed and validated by Teimouri et al. (2020) was used to assess the grit of EFL students. This measure consists of 12 questions: six items to evaluate Perseverance of Effort and six items to test Consistency

Table 1	Reliability	results of the	questionnaires
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		N	Cronbach's Alpha
GT	Perseverance of effort	6	0.855
	Consistency of interest	6	0.733
	Total	12	0.858
AR	Perceived happiness	9	0.785
	Empathy	7	0.888
	Sociability	3	0.728
	Persistence	4	0.791
	Self-regulation	3	0.705
	Total	26	0.924
AD	Teachers	6	0.845
	Characteristics of classes	7	0.792
	Class environment	7	0.816
	Class materials	6	0.935
	Lack of interest	4	0.880
	Experiences of failure	5	0.889
	Total	35	0.965
CSA	The Core of Self-assessments Questionnaire	12	0.917
S-E	The Self-efficacy Scale	7	0.897

of Interest on a 5-point Likert scale ranging from 1 to 5, with 1 being "not at all like me" and 5 being "very much like me." In this study, the dependability of the L2-Grit measured by Cronbach's alpha was substantial (Table 1).

# Data collection procedures and analysis

The data collection procedure was carried out using web-based technologies. The questions were sent through online queries, which participants were obliged to complete. The core of self-assessment, self-efficacy, grit tendencies, academic resilience, and academic demotivation were all part of the survey. The Kolmogorov–Smirnov test was used to determine if the data had a normal distribution. Because the data had a normal distribution, it could be analyzed in LISREL 8.80 using CFA and SEM.

# **Results and discussion**

Reports of the data analysis are supplied in this part, and an explanation is given for each component of the report. In the first phase, which is represented by Table 2, descriptive data are presented.

The average core of self-assessment score was M=39.026~(SD=10.709), as shown in Table 2. With regard to S-ES, the mean score is 22.239 (SD=5.404). Noorollahi (2021) reached a conclusion that was consistent with this result when he examined the effects of self-efficacy on the performance of EFL students. Consistency of Interest had the highest mean score (M=21.488, SD=3.922) among the GTS components, which described students' tendencies to maintain a stable set of passions across language learning and language assessment. Among the ARS subscales, the mean score for perceived happiness was 32.810 (SD=5.563). Perceived happiness, in a nutshell, is how students imagine happiness to be rather than how it really is. Despite the fact that each student has their own unique idea of what constitutes pleasure, there are a few universal indicators that

**Table 2** Descriptive statistics

	N	Minimum	Maximum	Mean	Std. deviation
Core of self-assessment	385	13	60	39.026	10.709
Self-efficacy	385	7	28	22.239	5.404
Perseverance of effort	385	6	30	20.418	5.369
Consistency of interest	385	11	30	21.488	3.922
Grit tendencies	385	18	60	41.906	8.545
Perceived happiness	385	17	41	32.810	5.563
Empathy	385	13	35	25.927	5.981
Sociability	385	5	15	10.808	2.605
Persistence	385	4	20	14.278	3.705
Self-regulation	385	3	15	10.106	2.707
Academic resilience	385	44	126	93.930	17.385
Teachers	385	6	28	13.904	4.991
Characteristics of classes	385	7	30	16.925	5.014
Class environment	385	7	30	15.018	6.649
Class materials	385	6	30	17.465	5.657
Lack of interest	385	4	20	8.868	3.878
Experiences of failure	385	5	25	11.234	4.841
Academic demotivation	385	40	157	83.413	27.262

psychologists use to make a determination. Key indicators of contentment include the following: experience of having achieved one's lifelong goals and accepting situations and circumstances for what they are. Language students benefit emotionally when they have the mental flexibility to embrace novel situations with optimism. The study by Teng et al. (2022) as well as Khan et al. (2021) confirmed that outcome. In addition, the average of class materials (M=17.465, SD=5.657) was the highest among the ADS subcomponents. Thus, it can be inferred that the applied materials in the classroom, in particular online classes, is the cause of EFL learners' academic demotivation in online classes. The next subcomponents among ADS with highest mean score are characteristics of classes (M=16.925, SD=5.014). Therefore, it can be concluded that online classes and assessment may trigger academic demotivation. To avoid academic demotivation, the consideration of administrators as well as educators is being brought to the forefront to pay more focus on the design and tasks included inside the books, as well as the approach used while instructing students online.

After that, the Kolmogorov–Smirnov test was used so that the normal descriptions of the data could be investigated. According to Table 3, the sig values of all of the instruments and the constituents of those instruments were more than 0.05. As a result, one might get the conclusion that the data followed a normal distribution, and thus, parametric approaches are suitable for conducting data analysis.

CFA and SEM were used, together with the LISREL 8.80 statistical software, to carry out an investigation into the structural links that exist between core of self-assessment, self-efficacy, grit tendencies, academic resilience, and academic demotivation. This was done so that the data analysis could be finished. In addition, the chi-square magnitude, the root-mean-squared error of approximation (RMSEA), the comparative fit index (CFI), the good fit index (GFI), and the normed fit index (NFI) were used in order to

**Table 3** The results of Kolmogorov–Smirnov test

	Kolmogorov–Smirnov Z	Asymp. sig. (2-tailed)
Core of self-assessment	0.838	0.483
Self-efficacy	1.287	0.073
Perseverance of Effort	0.721	0.676
Consistency of interest	0.912	0.377
Grit tendencies	0.893	0.402
Perceived happiness	0.998	0.272
Empathy	1.111	0.169
Sociability	1.094	0.183
Persistence	1.160	0.135
Self-regulation	0.841	0.480
Academic resilience	0.997	0.273
Teachers	1.157	0.138
Characteristics of classes	1.207	0.108
Class environment	0.851	0.464
Class materials	1.440	0.062
Lack of interest	1.562	0.055
Experiences of failure	1.579	0.054
Academic demotivation	0.910	0.379

**Table 4** Model fit indices (model 1)

Fitting indexes	χ2	df	χ2/ <b>df</b>	RMSEA	GFI	NFI	CFI
Cut value			< 3	< 0.1	> 0.9	> 0.9	> 0.9
Model 1	1325.76	455	2.914	0.071	0.926	0.938	0.915

assess the degree to which the model represented the data. Based on Jöreskog (1990), the ratio of chi-squares to degrees of freedom should be less than 3, and the chi-square test should provide insignificant results. The range of the root-mean-square error of approximation (RMSEA) should be smaller than 0.1. In addition, it has been recommended that the cut values for the NFI, GFI, and CFI should all be higher than 0.90 (Jöreskog, 1990).

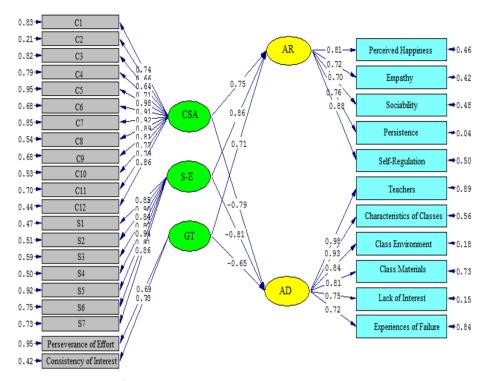
The results are shown in Table 4, and they show that the chi-square/df ratio (2.914), the RMSEA (0.071), the GFI (0.926), the NFI (0.938), and the CFI (0.915) all met the acceptable ft levels.

In Figs. 1, 2 and 3, the correlation between the variables is shown graphically. Standardized estimates and t-values are presented, respectively, to verify the impact of core of self-assessment, self-efficacy, and grit tendencies on academic resilience and academic demotivation. The academic resilience improved when students practiced core of self-assessment ( $\beta$ =0. 75, t=14.87), S-E ( $\beta$ =0.86, t=21.13), and grit tendencies ( $\beta$ =0.71, t=13.45). Moreover, core of self-assessment ( $\beta$ =-0.79, t=-16.78), self-efficacy ( $\beta$ =-0.81, t=-18.72), and grit tendencies ( $\beta$ =-0.65, t=-11.52) had beneficial effects on academic demotivation.

Table 5 displays the outcomes, which demonstrate that the requirements for a good fit were reached for the chi-square/df ratio (2.906), the RMSEA (0.071), the GFI (0.952), the NFI (0.948), and the CFI (0.937).

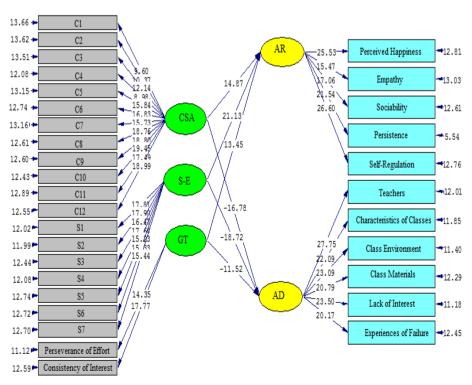
In the path values of coefficients that model 2 provides for the associations between the core of self-assessment, self-efficacy, grit tendencies, academic resilience, and academic demotivation, subfactors are graphically shown in Figs. 3 and 4. Results for the core of self-assessment and academic resilience ( $\beta$ =0.75, t=14.61), self-efficacy and academic resilience ( $\beta$ =0.86, t=20.65), Perseverance of Effort and academic resilience ( $\beta$ =0.70, t=12.88), and Consistency of Interest and academic resilience ( $\beta$ =0.72, t=13.90) were all shown to be associated. It was also depicted that the core of self-assessment and academic demotivation ( $\beta$ = -0.79, t= -16.82), self-efficacy and academic demotivation ( $\beta$ = -0.81, t= -18.57), Perseverance of Effort and academic demotivation ( $\beta$ = -0.64, t= -10.42), and Consistency of Interest and academic demotivation ( $\beta$ = -0.68, t= -11.36) are negatively related.

Table 6 demonstrates that there were statistically significant positive correlations between the main components of core of self-assessment and academic resilience (r=0.795), self-efficacy and academic resilience (r=0.892), Perseverance of Effort and academic resilience (r=0.731), and Consistency of Interest and academic resilience (r=0.755). Furthermore, there were substantial negative connections between core of self-assessment and academic demotivation (r=-0.837), self-efficacy and academic demotivation (r=-0.833), Perseverance of Effort and academic demotivation (r=-0.682), and Consistency of Interest and academic demotivation (r=-0.708).



Chi-Square=1325.76, df=455, P-value=0.00000, RMSEA=0.071

Fig. 1 Path coefficient values expressed schematically (model 1)



Chi-Square=1325.76, df=455, P-value=0.00000, RMSEA=0.071

Fig. 2 T-values for path coefficient significance (model 1)

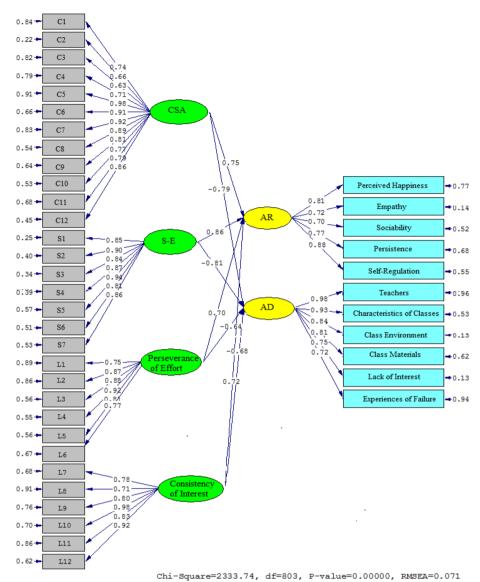


Fig. 3 Path coefficient values expressed schematically (model 2)

Table 5 Model fit indices (model 2)

Fitting indexes	<b>x</b> <sup>2</sup>	df	χ2/ <b>df</b>	RMSEA	GFI	NFI	CFI
Cut value			<3	< 0.1	> 0.9	> 0.9	> 0.9
Model 2	2333.74	803	2.906	0.071	0.952	0.948	0.937

Thereby, taking into consideration the first study question that dealt with the probable link between core of self-assessment, resilience, self-efficacy, grit tendencies, and demotivation among EFL students in online courses, the findings demonstrated that the level of core of self-assessment, resilience, self-efficacy, and grit tendencies possessed by EFL students had a direct influence on the condition of resilience as well as demotivation, particularly in online classes. The fundamental tenets of

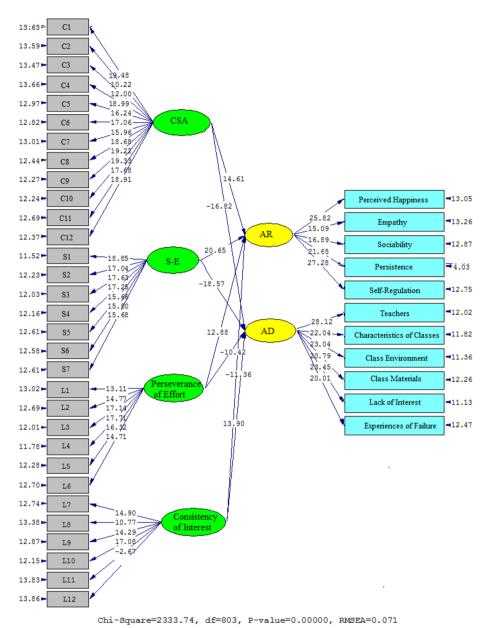


Fig. 4 T-values for path coefficient significance (model 2)

social-cognitive theory (Bandura, 2012) provide validity to this finding by highlighting the value of students' active engagement in self-management and self-examination as a method of encouraging development in their feeling of effectiveness. Students who have a good dosage of the positive self-concept that arises from core of self-assessment are better equipped to apply successful intellectual, metacognitive, and solution-focused approaches (Alazemi et al., 2023b; Heydarnejad et al., 2022b). The progressive process of language learning provides specific problems for pupils, and the analysis of the data reveals that self-evaluation sends a very positive message about how to aid language learners in confronting the issues they experience.

**Table 6** The correlation coefficients between the core of self-assessment, self-efficacy, grit tendencies, academic resilience, and academic demotivation subfactors

	Core of self- assessment	Self-efficacy	Perseverance of effort	Consistency of interest	Academic resilience	Academic demotivation
Core of self- assessment	1.000					
Self-efficacy	0.704 <sup>a</sup>	1.000				
Perseverance of Effort	0.568 <sup>a</sup>	0.677 <sup>a</sup>	1.000			
Consistency of Interest	0.652 <sup>a</sup>	0.751 <sup>a</sup>	0.572 <sup>a</sup>	1.000		
Academic resilience	0.795 <sup>a</sup>	0.892 <sup>a</sup>	0.731 <sup>a</sup>	0.755 <sup>a</sup>	1.000	
Academic demotivation	- 0.837 <sup>a</sup>	-0.833 <sup>a</sup>	- 0.682 <sup>a</sup>	$-0.708^{a}$	— 0.589 <sup>a</sup>	1.000

<sup>&</sup>lt;sup>a</sup> Correlation is significant at the 0.01 level (2-tailed)

In addition, the findings corroborated the hypothesis that EFL students would benefit from a greater emphasis on self-efficacy in online education and evaluation. In this study, EFL students from Ethiopia who has developed a more positive sense of selfefficacy are more confident in their skills and do better in class. This result agrees with the findings of Heydarnejad et al. (2022a, 2022b, 2022c), who found that the method of evaluation affects students' motivation and self-efficacy. In addition, Wang et al. (2023) verified that Chinese EFL students' levels of learning adaptability are affected by their levels of language anxiety and self-efficacy. Efficacious students are better able to handle the variety and complexity of the language classroom. Teimouri et al.'s (2020) model of language-domain-specific grit puts a premium on students' desire to stay at a task for a lengthy amount of time and demonstrate a constant level of interest. This is perhaps the most essential component of the model. The conclusion that can be drawn from this is that EFL students who have a healthy regard for education and have a goal in mind will endeavor to critically examine the activities they engage in order to find ways to improve themselves and make the necessary modifications. This result is also in line with the findings of Alazemi et al. (2023a), who established and verified a model that exhibited the predictive potential of L2 grit to regulate emotion regulation and guide personal best aspirations. Students get an additional advantage from participating in core of selfassessment since it provides them with assistance in reflecting on the assessment procedures that are an essential component of any educational system. It is reasonable to get to the conclusion that students who exhibit a greater degree of grit are more likely to attain higher levels of resilience, and as a consequence, they will gain bigger feelings of self-worth and a more expansive sense of self-efficacy (model 2).

With regard to the second study question, which aimed to determine the probable linkages between core of self-assessment, self-efficacy, grit tendencies, and academic demotivation among EFL students in online courses, the findings indicated that motivated students are successful at core of self-assessment, self-efficacy, and grit tendencies. This was determined by looking at the correlations between the four variables. This indicates that a lack of practice in core of self-assessment, self-efficacy, and grit tendencies might be the parent from which demotivation can sprout. It seems that EFL students who have

L2 grit are better able to acquire control over their motivation and engagement, test anxiety, and anxiety associated with attending online lessons in a foreign language (model 2). This conclusion is consistent with the results of the prior study; however, the scope of those investigations was limited (Alazemi et al., 2023a, 2023b; Ritonga et al., 2023). This research brought to light the important role that grit plays in the modulation of feelings and in maintaining motivation (Heydarnejad et al., 2022a; Khajavy & Aghaee, 2022; Namaziandost et al., 2023b; Wongdaeng, 2022). In the case of English as a foreign language (EFL), the result of Fathi et al. (2021) was also another piece of evidence showing the critical function that L2 grit plays in enhancing learners' motivation and improving their readiness to communicate in the target language.

As illustrated in models 1 and 2, EFL students who have high levels of cognitive flexibility reflect on their own growth and modify their opinions on the circumstances that put them at risk for academic demotivation. The findings revealed that students of English as a foreign language who reflected on their own learning processes were able to recognize both their strengths and areas in which they needed to improve. As a direct result of this, they were able to make great progress in developing a teaching strategy that is more efficient. According to Namaziandost et al.'s research (2023b), strategies such as continuous monitoring, planning, and evaluation may assist students in overcoming obstacles that arise during language instruction. In addition, research has shown that students who have a strong sense of their own value participate more actively in classroom activities and are less inhibited by challenging assignments. According to Khalilzadeh and Khodi (2021) as well as Bai and Wang (2023), the self-efficacy paradigm promotes introspection as a technique of enhancing an individual's potential for increasing their level of self-knowledge and self-assurance. Students who have a self-efficacy cognitive profile are given more help than other students in their efforts to achieve academic success. It is fair to predict that students' levels of motivation for and engagement in online education and assessment will increase as a direct result of the attention that self-efficacy places on the students' individual growth and development.

# **Conclusion and implications**

The target of this research was to investigate the influence that core of self-assessment, self-efficacy, and grit tendencies have on academic resilience and academic demotivation of EFL learners, particularly in online assessment. The outcomes of this research offer a solid empirical confirmation that involving in core of self-assessment and improving self-efficacy and grit tendencies while learning a second language is essential for academic resilience advancement and controlling demotivation that may be associated with online language acquisition. Self-efficacy and grit in L2 may be thought of as a key that unlocks the door to educational advancement for language learners. Self-efficacy and grit in L2 enable students to remain engaged and consistent over a longer length of time, despite the turmoil and difficulties of language learning. Specifically, with core of self-assessment, self-efficacy, and grit tendencies, students are engaged in critical thinking, intense attention, and lighthearted play while learning a new language. As a result, students enjoy and perform better on language assessments when they are in a positive frame of mind.

In addition to that, the findings of this study demonstrate the role that the core of self-assessment plays as a mediator in the demotivation experienced by language learners. Their encounters with one another are marked by an aggressive spirit. To put it another way, an individual's likelihood of feeling anxiety is inversely proportional to the degree to which they are able to accurately evaluate themselves. It is also feasible to reach the conclusion that core of self-assessment broadens the consciousness of the students, which is especially helpful in online classrooms, making it simpler for students to address difficulties in language acquisition and locate solutions to such difficulties. When regarded as a whole, the study represents one of the first phases in the process of explaining the reciprocal links that exist between the many elements. It would seem that this discipline is still in its infancy and demands for further empirical research to be conducted in order to shed light on the route that will both improve the academic accomplishments of the students and make certain that effective teaching is carried out.

In light of this study, certain pedagogical recommendations are offered to language instructors, students, and those responsible for developing curriculum. It may be beneficial for instructors, students, and those responsible for developing curricula to get a deeper knowledge of the individual and environmental elements that drive L2 grit and core of self-assessment. This will allow for more effective teaching and evaluation practices. When trying any type of communication, students of foreign languages often feel anxious about their abilities to express themselves. Students should avoid dwelling on their failures and negative thoughts from the past and instead focus on conquering their nervousness and improving their talents in order to be better prepared for future examinations. Learners' grit, self-efficacy skills, academic resilience, and core of self-assessment are essential traits that should be highlighted in training courses and design tactics, particularly for students enrolled in higher education. It is recommended that both pre-service and in-service training programs include instruction on how to foster perseverance and autonomy in second language (L2) learning in their students. Teachers have a responsibility to assist students in managing their negative emotions when they encounter the inevitable ups and downs of language acquisition. In this regard, it would be quite useful to provide educational opportunities for both educators and students. It is also important to include some substantial sections on self-assisted constructions and their implications for successful teaching and evaluation into the design of the curriculum and language learning syllabus. Materials development and the developing of assessment tasks may both benefit from these helpful practices.

Comparable to other studies, this study's findings should be evaluated with certain caveats. To begin, this research placed a significant emphasis on using quantitative methods. In further research, qualitative or mixed-method approaches could be used in the hope of gaining a deeper comprehension of the connections between the factors outlined above. Second, in next studies, it may be worthwhile to investigate the possible connections between these traits and other learner-attributed concepts, such as self-regulation, buoyancy, and critical thinking, to mention just a few. Thirdly, the purpose of this study was not to determine if the participants' age, gender, level of education, or ethnicity had any effect on their core of self-assessment, self-efficacy, grit tendencies, academic resilience, or academic motivation. This was not the

intention of the researchers. The consequences of these elements on the persistence, understanding, and acquisition of the L2 by learners may be the topic of research that is carried out in the future.

The trustworthiness of the findings was further undermined by the procedures that were used to select the participants. Due to time and resource constraints, this research relied on a convenience sample or random sampling; therefore, its results may not be representative of the population as a whole. To ensure that the results may be applied to a wider population, researchers planning further studies may choose to use other methods of data gathering. In addition, the purpose of this study was not to investigate whether the students' different cultural origins had an effect on their capacity to learn. This is a subject that requires a larger amount of research, and it is possible that it will be the focus of future studies. In conclusion, the participants in this study were students of EFL who were enrolled in language schools; it is possible that future research may benefit from looking at the inverse correlations between these qualities in other academic environments.

### **Abbreviations**

EFL English as a foreign language S-ES The Self-efficacy Scale

LDSG The language-domain-specific grit scale
CS-AQ Core of Self-Assessments Questionnaire

ARS Academic Resilience Scale
ADS The Academic Demotivation Scale
SEM Structural equation modeling
CFA Confirmatory factor analysis
CFI Comparative fit index
GFI Good fit index

LISREL Linear structural relations

NFI Normed fit index

RMSEA Root-mean-squared error of approximation

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Not applicable.

### Authors' contributions

We declare that all authors had equal contributions in the paper.

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# Availability of data and materials

The data that support the findings of this study are included in the paper.

### **Declarations**

### **Competing interests**

The authors declare that they have no competing interests.

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