

Ways to Decrease Anxiety in Online Assessment: Can Self-Assessment, Teacher Support, Self-esteem, and L2 Grit Be Empowering?

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Abstract

Test anxiety is defined by a confluence of physiological manifestations and emotional responses that impede one's capacity to perform optimally during examinations. Online assessment (OA) may trigger test anxiety. It is vital to uncover the factors that may hinder or decrease test anxiety, which is the main aim of this experimental research. The random allocation of participants was achieved the accomplishment into two distinct groups, namely the experimental group (EG) and the control group (CG), drawn from a population of 91 intermediate English as a Foreign Language (EFL) students. The students assigned to CG participated in regular attendance of online webinars. The participants assigned to EG attended online webinars. Furthermore, they were given tasks concentrating on self-assessment, self-esteem, and L2 grit. Teacher support during this research is more highlighted for EG. The data analysis through Multiple Analysis of Variance (MANOVA) showed that EFL students in the EG experienced less anxiety in the final assessment, which was done online. Further research avenues and pedagogical implications were discussed in detail.

Keywords: Anxiety in On-line Assessment, Self-assessment, Teacher Support, Self-esteem, L2 Grit, EFL Learners

Introduction

The rapid pace of technological advancement necessitates exploring novel educational approaches to remain current with contemporary developments. Virtual classrooms and examinations have gained significant popularity in the last five decades, with a particular surge during the COVID-19 pandemic. This global health emergency led to the widespread shutdown of schools and limited face-to-face interactions among individuals. In the contemporary context, the investigation of virtual teaching and evaluations has assumed significant importance in elucidating this alternative's possible advantages and disadvantages. The academic success of students taking online courses/assessments may be affected by various circumstances, some of which may be beneficial while others may be detrimental.

There was a lot of discussion on assessing student growth and using that information to improve instructional design in online instruction. Self-assessment (S-A) is distinct from both teacher assessment and peer assessment in that it emphasizes the learner's active engagement in their evaluation rather than relying only on the opinions of others. Bachman et al. (2010) defined S-A as an analysis of an individual's habits, beliefs, or effectiveness, which is how they referred to the process. Thus, the facilitation and

guidance instructors provide in promoting and directing students toward a consistent self-evaluation practice has a significant impact. Learners who make use of S-A's tactics have an understanding of how their development is proceeding.

Participation in S-A has the potential to have a detrimental effect on many facets of the life of learners, including but not limited to their mental health. A high S-A was also related to better mental equilibrium and academic performance in EFL students, as Punpromthada et al. (2022) reported. Students get the capacity to think critically and make decisions via the use of S-A methods, which in turn gives them the ability to deal with issues presented in the classroom in a more effective manner (Prasad et al., 2023; Wicaksono et al., 2023). In addition, Hu (2022) emphasized that S-A might be used to direct pupils toward the formation of more desired emotions. Academic support entails the instructor sharing helpful publications, substances, and supplies with learners, while personal and emotional support refers to the teacher offering affective support such as empathy, trust, and care. Within an L2 classroom, academic support (assistance linked to learning) and personal support (primarily emotional support) may be examples of L2 teacher support. This is the operational definition of L2 teacher support (Solhi, 2023).

The concept of grit may be characterized as a combination of diligent exertion, unwavering persistence, and an intrinsic drive toward achieving enduring objectives among pupils. The findings of Lan (2022) indicate that individuals with a notable level of perseverance and passion for long-term goals also have a favorable outlook toward their careers. When examined through an alternative lens, the characteristic of grit as a human quality bestows individuals with the ability to focus their endeavors and engage in repeated efforts to achieve their goals (Wicaksono et al., 2023). The notion of learner L2 grit was initially articulated by Duckworth (2016), highlighting the significance of an individual's enthusiasm and persistent efforts in pursuing their selected objectives.

The correlation between the development of a favorable self-perception and sound self-awareness is closely associated with the construct of self-esteem (SE). This construct, SE, is intricately linked to S-A and includes cognitive judgments critical to confidence and affluent experiences, as Riswanto et al. (2022) noted. SE might influence students' ability to learn and their academic progress. It suggests that students with a higher SE are more self-assured and set greater objectives for themselves despite the difficulties and problems they face.

Literature Review

Anxiety in Language Learning

As Cassady (2010) stated, academic anxiety is a catch-all phrase that encompasses a variety of distinct worries that students may face throughout their educational careers. According to this criterion, the anxiety that learners experience may impede their development academically (Cassady, 2010). As defined by Rodriguez and Abreu (2003), anxiety is a situation-specific phenomenon that causes an individual to have a negative self-appraisal of their communication abilities in a language-learning context. As stated by Horwitz et al. (1986), three components make up anxiety in language learning. These components include communication apprehension, test anxiety, and the fear of being negatively evaluated. The concept of communication apprehension pertains to the anxiety experienced by pupils while interacting with people or encountering challenges in comprehending auditory information. The second component of anxiety in language

learning is test anxiety, which may occur when students worry that they will do poorly on an examination. A person who suffers from fear of unfavorable assessment avoids circumstances that might lead to the formation of adverse judgments in the minds of others and feels uneasy about other people's opinions.

In the same vein of investigation, Alamer and Almulhim (2021) pointed out that the personality types of learners (introversion vs. extroversion) are critical determinants in influencing the level of anxiety that learners experience while taking lessons in foreign languages. According to Santos et al. (2021), anxiety impacts the relationships in class, learning, and evaluation of learners, which in turn helps to create learners' development and subsequent progress. According to Eysenck et al. (2007), the Attentional Control Theory (ACT) explains anxiety and its harmful effects. This theory outlines how anxiety causes damage to attentional control by absorbing stimuli connected to potential threats. The ACT also indicates that anxious learners have elevated levels of apprehension and diminished self-assurance, which contribute to unsatisfactory performance (Eysenck et al., 2007).

In addition, Bielak (2022) presented evidence that anxiety and enjoyment of the target language are the two most essential elements in establishing L2 fluency. From a different angle, recent research has investigated skill-based anxiety and its role in language acquisition. As an example, the focus of this research was on listening anxiety, speaking anxiety, reading anxiety, and writing anxiety (Prentiss, 2021). In a recent study, Zheng et al. (2023) witnessed that academic buoyancy and emotion regulation assisted language learners in moderating their experienced anxiety in telegram-assisted language instruction.

Self-Assessment (S-A)

Assessment is the systematic foundation for forming conclusions about students' development and learning. Over time, several methodologies have been developed to simplify the assessment process and improve the credibility and consistency of its results. Self-assessment (S-A) is a method of evaluation when learners actively assess their activities, attitudes, or performance. According to Bachman et al. (2010), promoting and providing instruction on self-assessment for every student is crucial. Andrade (2019) posits that the essential elements of S-A are CT, metacognition, monitoring, and self-regulated learning. Moreover, the study conducted by Ritonga et al. (2023) has classified S-A as a more advanced trait, including factors such as neuroticism, self-confidence, and generalized optimism about oneself. In the context of student-athlete (S-A) protocols, individuals acquire the ability to engage in comprehensive thinking and make informed decisions. Additionally, they may develop enhanced skills in effectively managing potential challenges within an academic setting (Prasad et al., 2023).

Using strategies in S-A in online education enhances learners' awareness and ability to evaluate their progress in the learning process. The effects of engaging in S-A practice extend beyond the cognitive domain of learners, as their emotional well-being is also affected by the tactics used. Within this particular context, Nurjain et al. (2023) underscored the significance of learners potentially shaping their emotional development via the framework of S-A. Furthermore, Punpromthada et al. (2022) emphasized that EFL students with elevated degrees of S-A exhibit improved regulation of their emotional experiences and demonstrate more excellent proficiency in acquiring language skills. According to Wei et al. (2020), the implementation and practice of S-A may impact the cognitive, metacognitive, and emotional aspects of learners' academic experiences.

Additionally, it has been shown that several elements have the potential to influence the tone of S-A interactions among learners. In their research, Pekrun et al. (2017) and Nurjamin et al. (2023) found that emotion regulation, buoyancy, and reflection affected the achievement of the learners" in S-A and managing test-taking abilities in OA.

Teacher Support

The term "teacher support" refers to the many kinds of aid, advice, and companionship the instructor offers. It also includes academic assistance and personal/emotional support (Solhi, 2023). Personal and emotional support refers to the teacher giving practical help such as empathy, trust, and care (Hejazi & Sadoughi, 2022). Academic support is defined by Luan et al. (2020) as the instructor's efforts focused on what and how much pupils learn, while emotional support refers to the learners' feeling of love, respect, and concern from the teacher throughout the learning process. Research has shown that second language (L2) teacher support is connected with second-language learner engagement (Luan et al., 2020), accomplishment (Wei et al., 2021), and good second-language academic feelings (Xie & Guo, 2022). Furthermore, it has been shown that L2 teacher support contributes to foreign language classroom pleasure by increasing L2 learners' admiration of their instructors (Dietrich et al., 2015).

This appreciation leads to greater enjoyment of foreign language classes. Wei et al. (2021) discovered that low-ability students could attain greater levels of English language acquisition when they had high levels of teacher assistance. This finding highlights the beneficial effect that teacher support has on learner accomplishment.

According to Liu et al. (2018), teachers' support is another essential factor in improving students' behavioral engagement in educational environments. For instance, Luan et al. (2020) found a positive connection between teacher support and behavioral engagement. In addition, they discovered that the relationship between teacher support and social, emotional, and cognitive engagement was mediated by the participants' level of behavioral involvement. Although instructors significantly impact their students' academic success, the significance of teacher assistance is mediated by students' motivation levels, according to research (Hejazi & Sadoughi, 2022). The findings of a longitudinal study conducted by Lei et al. (2018) with teenage pupils demonstrated that the support of teachers had a direct and beneficial impact on the participants' sense of self-efficacy and motivation. As a result, teacher support is a powerful and consistent predictor of motivation, and teachers' encouragement and support significantly contribute to L2 learners' motivated learning behavior (Sadoughi & Hejazi, 2021). The idea of grit is strongly connected to the notion of motivation. The goal-directed character of L2 grit aligns with the concept of focused psychological momentum, as outlined by Dörnyei et al. (2015).

Self-Esteem

Self-esteem, as defined by Manning et al. (2006), is the confidence an individual has in their own worth or skills. In addition, Dörnyei and Ryan (2015) showed in their study that SE is tied to one's self-concept and self-evaluation. Self-evaluation is the act of discussing the processes that are involved in the formation of an individual's self-concept. On the other hand, self-concept is the term that refers to individuals' perceptions of themselves. To be more explicit, self-concept was described by Lawrence (2006) as an umbrella term that encompasses self-image, ideal self, and SE. Self-esteem (SE) was also included in this definition. The expression "ideal self" is also a component of one's self-concept. Wang and Ollendick's (2001) research results from the individual's perceptions

of their skills, capabilities, and social interactions. SE is connected to the development of a favorable image of oneself and a sound sense of one's conscience.

In this regard, Faramarzzadeh and Amini (2017) concluded that structural elicitation mediates speaking abilities among advanced and intermediate language learners. According to the findings of the study, students of another language with higher self-esteem levels fared better on oral tests evaluating and interruptions while doing the tests in mixed groups. Piran et al. (2014) found evidence to support the theory that instructors who model positive SE for their pupils can facilitate the growth of positive SE in those students. According to Hosseinmardi et al. (2021), SE can also foster people's self-regulatory skills and emotional states. In their study, Riswanto et al. (2022) witnessed that S-A and higher-order thinking skills provided a significant background for language students' engagement and S-E.

L2 Grit

Grit is the ability to persist despite setbacks and maintain enthusiasm for an endeavor even when success seems elusive (Duckworth, 2016). It is also highlighted by Duckworth et al. (2007) that more than talent, which is essential in the development of students, also adds to the educational accomplishment of those learners. The concept of learner L2 grit was first articulated fundamentally by Duckworth (2016), who focused on people's enthusiasm and relentless efforts in pursuing their defined goals. A person's excitement and motivation to follow a particular purpose exemplify what we mean when discussing enthusiasm. According to Duckworth (2016), perseverance is an essential component of grit, which motivates people to devote themselves to achieving a particular goal. To explain the nature of grit, Yang et al. (2022) claimed that grit is a trait unique to a specific domain. In light of this aspect of grit, Teimouri et al. (2020) developed and validated a scale that they called "the Language-domain-specific grit" to evaluate students' grit levels in the context of language classes.

Students with extraordinary grit are more excited about their schoolwork and make a more significant effort to participate in activities that benefit their schooling (Sudina & Plonsky, 2021). Gritty students can maintain their desire for long-term goals even when faced with challenges and obstacles (Xu et al., 2022; Yang, 2021; Yang et al., 2022). According to Sudina et al. (2021), learners who exhibit grit can better manage their stress and anxiety, leading to more favorable views towards their engagement in work-related activities. As a result of its significance and contribution to an individual's well-being, several educational organizations have made efforts to include learners' grit into their instructional programs by scheduling, approaching, and implementing instructional materials and syllabi (Sutarto et al., 2022).

The study on learner grit that was reviewed parallels the current focus that is being placed on the bidirectional linkages between students' grit and its expressions in the academic arena. For instance, Wei et al. (2020) showed a beneficial connection between L2 grit and success in English language learning. In addition, Liu (2022) confirmed the mediating role of EFL students' academic desire and development attitudes in their grit. Similarly, Shafee Rad and Jafarpour (2022) demonstrated that good emotion regulation favors L2 grit, ER, and resilience in EFL learners. It is possible to generalize from this that L2 grit and a sense of equilibrium in the students' psychological states affect the whole process of language development.

The Current Investigation

Practical online evaluation is one of the primary aims of productive education. Instruction and evaluation function best when the students' behavioral and intellectual wellness are considered by administrators, curriculum developers, and teachers. Students must also be equipped with self-aid constructions to assist them check themselves and make successful conclusions, particularly amid challenges that learning a second/foreign language may pose. Via the lens of S-A, TS, S-E, and L2 grit, EFL learners are supposed to be able to defeat their anxiety in OA more effectively. As explained earlier, the reciprocal interaction of the constructions was entirely under darkness. The probable link between S-A, TS, S-E, L2 grit, and anxiety in OA was also overlooked, especially in the EFL setting.

The results of this study have the potential to provide theoretical and practical advantages. There is a potential for a rise in knowledge and understanding about online language education and evaluation, which may subsequently lead to enhanced efficiency in language learning. Keeping these points of view in mind led to the formulation of the following research question and null hypothesis:

RQ: Do S-A, TS, S-E, and L2 grit reduce EFL learners' anxiety in OA?

HO: S-A, TS, S-E, and L2 grit do not reduce EFL learners' anxiety in OA.

Methodology

Participants and Setting

This study included the participation of 91 individuals enrolled in an EFL course at a private language institute in Saudi Arabia. These students of the target language were chosen after taking the Oxford Quick Placement Test and receiving their results. According to the original plan, participation in this study is open to students who have reached an intermediate level of English proficiency. In addition, there was no room for additional English instruction during this assignment. The students ranged in age from 17 to 19, consisting of 43 girls and 47 boys. The average age of the students was 17. According to their program, they were supposed to complete and pass Top Notch 3 within the allotted 16 sessions. The students' participation in this research was entirely voluntary, and they were permitted to receive appropriate information to carry out this investigation.

Instruments

Oxford Quick Placement Test (OQPT)

OQPT was run to recruit intermediate learners. The OQPT is a versatile test of English language competence that Oxford University Press and Cambridge ESOL developed. This test determines which category of English language proficiency a person falls into. This exam has sixty multiple-choice questions on vocabulary (thirty items) and grammar (thirty items), and students are judged to be at the intermediate level if they score between forty and forty-seven. The reliability value for OQPT has been determined to be 0.811, suggesting an appropriate measure.

The Foreign Language Classroom Anxiety Scale (FLCAS)

The FLCA by Horwitz et al. (1986) was employed to evaluate the participants' anxiety in OA. Communication anxiety, fear of adverse evaluation, test anxiety, and anxiety of foreign language class are the components of this instrument with 33 items on a five-point

Likert scale. In the current investigation, the conclusion of Cronbach's alpha was satisfactory (ranging from 0.823 to 0.869).

The Core of Self-Assessments Questionnaire (CSAQ)

The CSAQ, designed and validated by Judge et al. (2003), was used to assess the S-A of the participants. There is a total of 12 questions in this Likert scale assessment, with the following response options: strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5). Learners' scores ranged from 12 to 60 on this scale. Scores high on this measure indicated positive self-evaluation, while scores low on the scale indicated an unfavorable assessment of oneself. The present analysis found that CSEQ has an acceptable level of dependability, with a value of 0.873 for its reliability coefficient.

Teacher Support Measure (TSM)

To assess TS, the Teacher Support Measure by Affuso et al. (2022) with two subscales was employed: teacher academic support (4 items) and teacher personal support (4 items). The items were graded from 1 (always) to 5 (never) on a five-point Likert scale. The questions in this scale were redesigned by adding 'English' to evaluate domain-specific teacher support.

The Foreign Language Learning Self-esteem Scale (FLLSES)

The FLLSE was selected to research the self-esteem of EFL students. This assessment tool was developed by Rubio (2007) using a Likert scale with five points, ranging from one for strongly disagreeing to five for strongly agreeing. There is a total of 25 questions on the FLLSE, and they are broken up into four categories: (1) language ability, (2) true in-class language usage, (3) in-class correlations, and (4) attitude toward / behavior in the class of foreign language. The reliability was inspected during this investigation, and the result was acceptable.

The Language-domain-specific Grit Scale (LDSGS)

To evaluate the perseverance of EFL university students, the LDSGS by Teimouri et al. (2020) was used. On a scale that ranges from 1 (which means "not at all like me") to 5 (which means "very much like me"), this measure includes a total of 12 questions: six things to assess the constancy of interest, and six items to evaluate the persistence of effort. Each item is rated on a five-point Likert scale. In this inquiry, it was interesting that the dependability of the (L2-Grit) estimated by Cronbach's alpha (which ranged from 0.818 to 0.879) was determined.

Data Collection Procedures

The OQPT was utilized first to evaluate the participant's current level of English proficiency. It was determined that a score of 0.4 to 0.6 was the minimum need for an intermediate level of English proficiency. The students with scores between 0.7 and 0.9, indicating a high level of language competence, were excluded, as were those with scores between 0.1 and 0.4, displaying poor linguistic competence. The final tally was 91 students, who were then divided into two groups: CG (n = 46) and EG (n = 45). This study was quasi-experimental designed. To ascertain the reliability of the findings obtained from this experiment, the students were explicitly told not to take any more English classes throughout the study. A preliminary examination was carried out before

the start of the therapy. This exam consists of five portions that assess the participants' S-A, TS, S-E, L2 grit, and anxiety in OA.

Secondly, the training was begun. In 2023, the course Top Notch 3 was presented to both EG and CG students during sixteen sessions corresponding to one semester. Students in both CG and EG participated in online instruction via the use of webinar platforms (Adobe Connect). Moreover, a private group in WhatsApp was defined in which text designed by the researchers of this study was provided, which intended to provide some strategies to develop S-A, TS, S-E, and L2 grit. The related literature and relevant literature inspire these strategies. During this project, the researchers of this study supported the EG, and their questions were answered via WhatsApp. They may also phone each other if they have any problems. EG was also encouraged to keep a journal and assess their own language-learning process. In this WhatsApp class, EFL students practiced in pairs or small groups; the need for social connections and support was emphasized heavily. This project needed a total of 16 sessions, which is equivalent to one semester. A posttest (i.e., the test of S-A, TS, S-E, L2 grit, and anxiety in OA) was administered to both CG and EG at session 16 before the final assessment of the participants to evaluate the development of the EFL learners and determine the level of success achieved by the project. Five EFL instructors were responsible for validating the reliability of the outcomes by evaluating both the pre-and posttests.

Data Analysis

The efficacy of the S-A, TS, S-E, and L2 grit on anxiety reduction in OA was studied by one-way MANOVA. In this study, S-A, TS, S-E, and L2 grit was the independent variable, while anxiety in OA was regarded as a dependent variable. Before conducting the MANOVA, the related assumptions (such as normality, sample size, outliers, linearity, homogeneity of regression, and so on) were analyzed and evaluated.

Results

Before analyzing the data, the researchers ran a Kolmogorov-Smirnov test to gauge the normality of the data. As the p values were higher than 0.05 ($p > 0.05$), the data were normal, and it was safe to use parametric statistics (i.e., one-way MANOVA). The next step was checking the performance of both groups on the pretest, which can be seen in Tables 1 and 2.

Table 1
Descriptive Statistics Results Comparing EG and CG on the Pretest of SE, TS, L2G, SA, and AOA

	Groups	Mean	Std. Deviation	N
SE Pre	EG	78.33	15.95	45
	CG	76.95	19.32	46
	Total	77.63	17.65	91
TS Pre	EG	23.46	7.60	45
	CG	24.76	6.83	46
	Total	24.12	7.21	91
L2G Pre	EG	37.97	14.25	45

	CG	40.82	9.55	46
	Total	39.41	12.12	91
SA Pre	EG	29.24	11.77	45
	CG	31.02	8.13	46
	Total	30.14	10.08	91
AOA Pre	EG	109.11	22.92797	45
	CG	108.43	39.19	46
	Total	108.76	32.01	91

Note: *SE*: Self-esteem; *TS*: Teacher Support; *L2G*: L2 Grit; *SA*: Self-assessment; *AOA*: Anxiety of On-line Assessment; *Pre*: Pretest

Table 1 displays the EG and CG performances on the pretest of the five dependent variables (i.e., Self-esteem, Teacher Support, L2 Grit, Self-assessment, and Anxiety of online assessment). The mean scores of both groups on each variable show no remarkable difference, which means that the two groups performed equally on the pretests before the treatment. However, to make sure that if there is any statistical difference among the two groups on the pretests, it is necessary to run a one-way MANOVA (Table 2).

Table 2

MANOVA Results Comparing EG and CG on the Pretest of SE, TS, L2G, SA, and AOA

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.97	722.51	5.00	85.00	.00	.97
	Wilks' Lambda	.02	722.51	5.00	85.00	.00	.97
	Hotelling's Trace	42.50	722.51	5.00	85.00	.00	.97
	Roy's Largest Root	42.50	722.51	5.00	85.00	.00	.97
Groups	Pillai's Trace	.02	.49	5.00	85.00	.78	.02
	Wilks' Lambda	.97	.49	5.00	85.00	.78	.02
	Hotelling's Trace	.02	.49	5.00	85.00	.78	.02
	Roy's Largest Root	.02	.49	5.00	85.00	.78	.02

Table 2 shows that Wilk's Lambda is 0.97, which is higher than the threshold of .05. This finding indicates no statistically significant differences between the EG and CG groups regarding their pretest scores for the five dependent variables.

Table 3

Descriptive Statistics Results Comparing EG and CG on the Posttest of SE, TS, L2G, SA, and AOA

Groups		Mean	Std. Deviation	N
SE Post	EG	93.22	15.48	45
	CG	80.15	21.36	46
	Total	86.61	19.71	91
TS Post	EG	33.51	4.74	45
	CG	29.06	14.22	46
	Total	31.26	10.82	91
L2G Post	EG	48.06	7.73	45

	CG	38.67	13.23	46
	Total	43.31	11.79	91
SA Post	EG	40.75	10.52	45
	CG	32.17	7.49	46
	Total	36.41	10.04	91
AOA Post	EG	81.26	16.11	45
	CG	143.84	18.78	46
	Total	112.90	35.96	91

The mean scores obtained from the posttest of the EG and CG on the five variables (Table 3) showed significant differences. To determine whether these differences are significant or not, it is essential to run a one-way MANOVA (Table 4).

Table 4

MANOVA Results Comparing EG and CG on the Posttest of SE, TS, L2G, SA, and AOA

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.99	2117.55	5.000	85.00	.00	.99
	Wilks' Lambda	.00	2117.55	5.0	85.00	.00	.99
	Hotelling's Trace	124.56	2117.55	5.00	85.00	.00	.99
	Roy's Largest Root	124.56	2117.55	5.00	85.00	.00	.99
Groups	Pillai's Trace	.79	67.21	5.00	85.00	.00	.79
	Wilks' Lambda	.20	67.21	5.00	85.00	.00	.79
	Hotelling's Trace	3.95	67.21	5.00	85.00	.00	.79
	Roy's Largest Root	3.95	67.21	5.00	85.00	.00	.79

Based on Table 4, the value of Wilk's Lambda was found to be .00, indicating a statistically significant result ($p < .05$). Consequently, there was a significant difference between EG and CG in terms of their posttest scores for SE, TS, L2G, SA, and AOA. To determine the causal relationship between the two groups, an examination of Table 5 is necessary to identify the specific dependent variable that contributed to the observed difference.

Table 5. *Test of Between-Subjects Effects for SE, TS, L2G, SA, and AOA*

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	SE Post	3885.82	1	3885.82	11.12	.00	.11
	TS Post	449.62	1	449.62	3.96	.05	.04
	L2G Post	2006.85	1	2006.85	16.99	.00	.16
	SA Post	1675.21	1	1675.21	20.14	.00	.18
Intercept	AOA Post	89087.37	1	89087.37	290.42	.00	.76
	SE Post	683752.41	1	683752.41	1957.99	.00	.95
	TS Post	89073.62	1	89073.62	785.21	.00	.89
	L2G Post	171148.69	1	171148.69	1449.45	.00	.94
Groups	SA Post	120985.98	1	120985.98	1454.52	.00	.94
	AOA Post	1152751.94	1	1152751.94	3757.95	.00	.97
	SE Post	3885.82	1	3885.82	11.12	.00	.11
	TS Post	449.62	1	449.62	3.96	.02	.10
	L2G Post	2006.85	1	2006.85	16.99	.00	.16
	SA Post	1675.21	1	1675.21	20.14	.00	.18
	AOA Post	89087.37	1	89087.37	290.42	.00	.76

Error	SE Post	31079.71	89	349.21
	TS Post	10096.04	89	113.43
	L2G Post	10508.90	89	118.07
	SA Post	7402.92	89	83.17
	AOA Post	27300.735	89	306.75
Total	SE Post	717668.00	91	
	TS Post	99491.00	91	
	L2G Post	183278.00	91	
	SA Post	129766.00	91	
	AOA Post	1276334.00	91	
Corrected Total	SE Post	34965.53	90	
	TS Post	10545.67	90	
	L2G Post	12515.75	90	
	SA Post	9078.13	90	
	AOA Post	116388.11	90	

It can be seen from table 5 that the treatment (using online webinars and tasks) has a statistically significant effect on SE ($F(1, 89) = 11.12; p < .05; \text{partial } \eta^2 = .11$), TS ($F(1, 89) = 3.96; p < .05; \text{partial } \eta^2 = .10$), L2G ($F(1, 89) = 16.99; p < .05; \text{partial } \eta^2 = .16$), SA ($F(1, 89) = 20.14; p < .05; \text{partial } \eta^2 = .18$), and AOA ($F(1, 89) = 290.42; p < .05; \text{partial } \eta^2 = .76$). Thus, it can be easily concluded that the EG's self-esteem, teacher support, L2 grit, self-assessment improved significantly and their anxiety of OA lessened accordingly.

Discussion

This study aimed to investigate the effects of S-A, TS, S-E, and L2 grit on anxiety reduction in OA. To accomplish this objective, an investigation was implemented in Saudi Arabia, and the outcomes of MANOVA indicated that those EFL learners who acquire appropriate levels of S-A, TS, S-E, and L2 grit can successfully handle their experienced anxiety in OA. Therefore, the first null hypothesis is rejected. This outcome was unsurprising given that the anxiety is influenced by the things that EFL students encounter in the online instruction and assessment. When students are comfortable and inspired to complete their learning activities, they do not suffer anxiety, or the intensity of their anxiety is much reduced.

It was revealed that S-A plays an intermediary function in the learners' foreign language anxiety. The study's findings indicate a correlation between engaging in self-reflection before online assessment and a reduced likelihood of experiencing stress among EFL students. It is concluded that via the prism of S-A, learners profoundly monitor and gauge themselves. This assessment may not be feasible without learners' higher-order thinking abilities, beliefs about self-worth, and self-confidence. In accordance with Al-Hoorie et al. (2022), if trainees have high ambitions above their capacities, they will suffer anxiety. Consequently, EFL students need to be well-equipped with S-A strategies for dealing with negative emotions like anxiety in the classroom.

The premises of social-cognitive theory (Bandura, 2012) provide credence to this conclusion by emphasizing the significance of pupils' active involvement in autonomy and S-A as a means of promoting in their sense that they are successful. This is done to encourage growth in the mind that they are effective. In line with the findings of Nurjamin et al. (2023), learners with positive self-assurance that develops due to S-A are more

suiting to use effective intellectual, metacognitive, and solution-focused methods. S-A effectively communicates a very optimistic notification about the strategies to support language learners in overcoming obstacles. The statistics suggest that the process of learning a language progressively presents pupils with many unique challenges.

Attachment theory is an essential component of developmental psychology since it elucidates the relationship patterns between individuals. It is based on the premise that a person's connection to other people forms a behavior in the individual that has the potential to become self-directed in the future. This idea has just lately been introduced into the field of language education (Bergin & Bergin, 2009) to emphasize the significance that emotional attachments among people have in developing classroom rapport, practices, experiences, and engagement in activities (Bergin & Bergin, 2009). EFL students have emotional ties with their professors and classmates that may be either secure or insecure, depending on the degree to which they are emotionally sensitive. The connection and rapport instructors have with their students will be more stable and beneficial in environments where they can approach them. As a result, the pupils do not need to flush out their thoughts before expressing them. This connection helps EFL students improve personally and academically and allows them to perform better in OA.

Moreover, the results indicated that S-E provided a greater insight into self-worth. That is to say, S-E defined the style of EFL learners' self-confidence. The more individuals use S-E techniques, the better they alter their views and attitudes. In other words, the more EFL learners practice S-E, the more they discover their qualities and ideals. The findings of Namaziandost et al. (2023) are consistent with this outcome. They demonstrated that intelligence, self-control, resilience, and S-E convictions are tightly correlated.

From the outcomes of this study, it can be inferred that the combination of persistence of effort and constancy of interest boosts EFL learners' self-confidence. It might be argued that students with more grit are more likely to be persistent in their attempts to attain their objectives, including learning a new language. They can more accurately evaluate themselves if they are consistent in their actions and the goals they set for themselves. It is reasonable to deduce that the learners with the most grit get higher levels of S-A, and as a consequence, they achieve higher levels of neuroticism, self-esteem, and locus of control. The findings showed that having grit in L2 helps English as a second language learners recognize and alter their negative emotions and recover quickly from setbacks. In support of this conclusion, Khajavy and Aghaee (2022) discovered that EFL learners' L2 grit and emotion may accurately anticipate the educational achievements of the students.

More precisely, the data revealed that possessing L2 grit assists language learners in regulating their interaction anxiety, fear of obtaining an unfavorable evaluation, anxiety about taking OA, and anxiety connected with attending courses in other languages. This result agrees with the results of other studies that demonstrated grit's vital role in regulating emotions in general and anxiety in particular (e.g., Alazemi et al., 2023; Wicaksono (2023). The findings of Fathi et al. (2021), conducted in an EFL setting, provided further proof that L2 grit is essential in reducing worried feelings among students and improving their general well-being throughout language assessment.

Conclusion

Some educational implications are proposed based on the study's results. Because of the swift growth of technological advances and the necessity for online and virtual educational environments, including psychological and mental curricula, may boost student access to course information at any time and from any location, even outside of class. As a result, instructors must attain digital literacy to use technological platforms for language education and assessment. As previously noted, the positive psychology of students should be fostered throughout their educational experience. In this sense, instructors and students must be aware of self-aid notions and their mental and physical health implications.

In a manner comparable to any empirical studies, the outcomes should be examined with certain restrictions. The current research involves a quasi-experimental design, and the intact groups participated in the sampling processes. Future study is proposed to utilize different methods to supplement the results of the current investigation. Furthermore, the number of participants in EG and CG was relatively small and may influence the generalizability of the results. Further experiments with additional participants are required in the future. This study was also restricted in its emphasis on the language competency of students studying at the intermediate level. Future studies may explore additional disciplines of study. Last but not least, this study did not examine the potential effects of demographic characteristics and social-cultural diversity among participants. Subsequent research endeavors could focus on investigating these factors and determining whether they have an impact on S-A, TS, S-E, L2 grit, and anxiety management in OA of EFL learners.

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References

- Alamer, A., & Almulhim, F. (2021). The interrelation between language anxiety and self-determined motivation; a mixed methods approach. *Frontiers in Education*, 6, 618655. <https://doi.org/10.3389/feduc.2021.618655>.
- Alazemi, A. F. T., Heydarnejad, T., Ismail, S. M., & Gheysari, A. (2023). A model of academic buoyancy, L2 grit, Academic Emotion Regulation, and personal best: an evidence from EFL context. *Heliyon*. <https://doi.org/10.1016/j.heliyon.2023.e13149>
- Al-Hoorie, A. H., Oga-Baldwin, W. Q., Hiver, P., & Vitta, J. P. (2022). Self-determination mini-theories in second language learning: A systematic review of three decades of research. *Language Teaching Research*, 9. <https://doi.org/10.1177/13621688221102686>.
- Bachman, L. F. (2015). Justifying the use of language assessments: linking test performance with consequences. *JLTA Journal*, 18, 3–22. https://doi.org/10.20622/jltajournal.18.0_3.
- 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: Oxford University Press

- Bandura, A. (2012). Social cognitive theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 349–373). Sage Publications Ltd. <https://doi.org/10.4135/9781446249215.n18>.
- Bergin, C., & Bergin, D. (2009). Attachment in the classroom. *Educational Psychology Review*, 21(2), 141-170. <https://doi.org/10.1007/s10648-009-9104-0>
- Bielak, J. (2022). To what extent are foreign language anxiety and foreign language enjoyment related to L2 fluency? An investigation of task-specific emotions and breakdown and speed fluency in an oral task. *Language Teaching Research*, 136216882210793. <https://doi.org/10.1177/13621688221079319>.
- Cassady, J. C. (2010b). Test anxiety. Contemporary theories and implications for learning. In J. C. Cassady (Ed.), *Anxiety in schools. The causes, consequences, and solutions for academic anxieties*, (pp. 7–26). New York: Peter Lang Publishing.
- Dietrich, J., Dicke, A.-L., Kracke, B., & Noack, P. (2015). Teacher support and its influence on students' intrinsic value and effort: Dimensional comparison effects across subjects. *Learning and Instruction*, 39, 45–54. <https://doi.org/10.1016/j.learninstruc.2015.05.007>
- Dörnyei, Z., Henry, A., & Muir, C. (2015). *Motivational currents in language learning: Frameworks for focused interventions*. Routledge.
- Dörnyei, Z., & Ryan, S. (2015). *The psychology of the language learner revisited*. Routledge.
- Duckworth, A. L. (2016). *Grit: the power of passion and perseverance*. New York: Simon & Schuster, Inc.
- Duckworth, A. L., Peterson, C., Matthews, M., & Kelly, D. (2007). Grit: perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92, 1087–1101. <https://doi.org/10.1037/0022-3514.92.6.1087>
- Eysenck, M. W., Derakshan, N., Santos, R., & Calvo, M. G. (2007). Anxiety and cognitive performance: attentional control theory. *Emotion*, 7(2), 336–353. <https://doi.org/10.1037/1528-3542.7.2.336>.
- 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>.
- Fathi, J., Mohammaddokht, F., & Nourzadeh, S. (2021). Grit and foreign language anxiety as predictors of willingness to communicate in the context of foreign language learning: a Structural equation modeling approach. *Issues in Language Teaching*, 10(2), 1–30. <https://doi.org/10.22054/ilt.2021.63362.627>
- Lan, Y. (2022). The role of teachers' grit and motivation in self-directed professional development. *Frontiers in Psychology*, 13, 922693. <https://doi.org/10.3389/fpsyg.2022.922693>.
- Lawrence, D. (2006). *Enhancing self-esteem in the classroom*. Pine Forge Press.
- Lei, H., Cui, Y., & Chiu, M.M. (2018). The Relationship between Teacher Support and Students' Academic Emotions: A Meta-Analysis. *Frontiers in Psychology*. 22; 8:2288. <https://doi.org/10.3389/fpsyg.2017.02288>.
- Liu, Y. (2022). Investigating the role of English as a foreign language learners' academic motivation and language mindset in their grit: a theoretical review. *Frontiers in Psychology*, 13, 872014. <https://doi.org/10.3389/fpsyg.2022.872014>.

- Luan, W., Li, J., & Zhang, Y. (2020). Teacher support and student engagement in second language classrooms: A multiple mediation model. *Frontiers in Psychology*, 11, 1-12. <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.710736/full>.
- Hejazi, S. Y., & Sadoughi, M. (2022). How does teacher support contribute to learners' grit? The role of learning enjoyment. *Innovation in Language Learning and Teaching*, 17(9), 1–14. <https://doi.org/10.1080/17501229.2022.2098961>
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125–132. <https://doi.org/10.1111/j.1540-4781.1986.tb05256.x>
- Hosseinmardi, A. A., Ghorban Shiroodi, 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>.
- Hu, N. (2022). Investigating Chinese EFL learners' writing strategies and emotional aspects. *LEARN Journal: Language Education and Acquisition Research Network*, 15(1), 440–468. <https://files.eric.ed.gov/fulltext/EJ1336148.pdf>
- Khajavy, G. H., & Aghae, E. (2022). The contribution of grit, emotions and personal bests to foreign language learning. *Journal of Multilingual and Multicultural Development*(In Press). <https://doi.org/10.1080/01434632.2022.2047192>.
- 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
- 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>
- Nurjain, A., Salazar-Espinoza, DE., Saenko, N. *et al.* (2023). Learner-oriented assessment matters: testing the effects of academic buoyancy, reflective thinking, and learner enjoyment in self-assessment and test-taking anxiety management of the EFL learners. *Lang Test Asia* 13, 30. <https://doi.org/10.1186/s40468-023-00247-z>
- Piran, N. A. (2014). The relationship between self-concept, self-efficacy, self-esteem and reading comprehension achievement: evidence from Iranian EFL learners. *Int. J. Soc. Sci. Educ.* 5, 58–66. <http://ijsse.com/sites/default/files/issues/2014/v4-i5-2014/Abstract-7.pdf>
- Prentiss, S. (2021). Speech anxiety in the communication classroom during the COVID-19 pandemic: supporting student success. *Frontiers in Communication*, 6, 642109. <https://doi.org/10.3389/fcomm.2021.642109>.
- Prasad, K., Aladini, A., Normurodova, N.Z., & Belton, B. (2023). 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. *Lang Test Asia* 13, 34. <https://doi.org/10.1186/s40468-023-00246-0>.
- Punpromthada, A., Bhanthumnavin, D. E., Bhanthumnavin, D. L., Meekun, K., Sitsirat, S., Pimthong, S., & Yaemyuen, A. (2022). Why has COVID-19 easily spread at home and which psycho-behavioral model can better explain it in university

- students. *Educational Sciences: Theory and Practice*, 22(1), 101–115. <https://doi.org/10.12738/jestp.2022.1.0009>.
- 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.
- Rodriguez, M., & Abreu, O. (2003). The Stability of General Foreign Language Classroom Anxiety Across English and French. *The Modern Language Journal*, 87(3), 365–374. <https://doi.org/10.1111/1540-4781.00195>.
- Santos, A. C., Simões, C., Cefai, C., Freitas, E., & Arriaga, P. (2021). Emotion regulation and student engagement: age and gender differences during adolescence. *International Journal of Educational Research*, 109, 101830. <https://doi.org/10.1016/j.ijer.2021.101830>.
- Sadoughi, M., & Hejazi, S. Y. (2021). Teacher support and academic engagement among EFL learners: The role of positive academic emotions. *Studies in Educational Evaluation*, 70. <https://doi.org/10.1016/j.stueduc.2021.101060>.
- Shafee Rad, H., & Jafarpour, A. A. (2022). Effects of well-being, grit, emotion regulation, and resilience interventions on L2 learners' writing skills. *Reading & Writing Quarterly* (In Press. <https://doi.org/10.1080/10573569.2022.2096517>).
- Solhi, M. (2023). Do L2 Teacher Support and Peer Support Predict L2 Speaking Motivation in Online Classes?. *Asia-Pacific Edu Res.* <https://doi.org/10.1007/s40299-023-00767-5>.
- Sutarto, Dwi Hastuti, I., Fuster-Guillén, D., Palacios Garay, J. P., Hernández, R. M., & Namaziandost, E. (2022). The effect of problem-based learning on metacognitive ability in the conjecturing process of junior high school students. *Education Research International*, 1–10. <https://doi.org/10.1155/2022/2313448>.
- Sudina, E., & Plonsky, L. (2021). Language-specific grit, achievement, and anxiety among L2 and L3 learners in Russia. *International Journal of Applied Linguistics*, 172, 161–198. <https://doi.org/10.1075/itl.20001.sud>.
- Teimouri, Y., Plonsky, L., & Tabandeh, F. (2020). L2 grit: Passion and perseverance for second-language learning. *Language Teaching Research. Advance online publication.* <https://doi.org/10.1177/1362168820921895>.
- Wang, Y., & Ollendick, T. H. (2001). A cross-cultural and developmental analysis of self-esteem in Chinese and Western children. *Clinical Child and Family Psychology Review*, 4, 253–271. <https://doi.org/10.1023/A:1017551215413>
- Wei, R., Liu, H., & Wang, S. (2021). Exploring L2 grit in the Chinese EFL context. *System.*, 93, 102295. <https://doi.org/10.1016/j.system.2020.102295>.
- Wicaksono, B.H., Ismail, S.M., Sultanova, S.A. et al. (2023) I like language assessment: EFL learners' voices about self-assessment, self-efficacy, grit tendencies,

- academic resilience, and academic demotivation in online instruction. *Lang Test Asia* 13, 37.
- Yang, A. C., Chen, I. Y., Flanagan, B., & Ogata, H. (2022). How students' self-assessment behavior affects their online learning performance. *Computers and Education: Artificial Intelligence*, 3, 100058. <https://doi.org/10.1016/j.caeai.2022.100058>
- Zheng, X., Ismail, S.M. & Heydarnejad, T. (2023). Social media and psychology of language learning: The role of telegram-based instruction on academic buoyancy, academic emotion regulation, foreign language anxiety, and English achievement. *Heliyon* 9(5): e15830. <https://www.sciencedirect.com/science/article/pii/S2405844023030372>