Psychological determinants of student achievement in a short-term TOEFL workshop

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ABSTRACT

This study examines the relationships between three psychological constructs—interest, anxiety, and grit—and academic achievement within a short-term TOEFL preparation workshop. Using a quantitative correlational design, data were collected from 18 prospective English teachers at a state Islamic college in Riau, Indonesia. Participants completed Likert-scale questionnaires measuring interest, anxiety, and grit, alongside pre- and post-intervention TOEFL tests. Spearman's rank correlation analysis revealed no statistically significant associations between any of the psychological factors and achievement gains. Interest demonstrated a weak negative correlation ($\rho = -0.370$, $p = 0.131$), while anxiety ($\rho = 0.022$, $p = 0.931$) and grit ($\rho = 0.032$, $p = 0.899$) exhibited negligible positive correlations. Linearity tests further confirmed the absence of significant relationships. These findings challenge prevalent assumptions regarding the direct predictive power of psychological traits on short-term test performance in intensive preparation contexts. Instead, they suggest that variables such as instructional quality, baseline language proficiency, and contextual support systems may exert a greater influence on outcomes in brief, focused interventions. Although interest, anxiety, and grit are well-established correlates of long-term academic success, this study indicates their limited role in explaining achievement variance within condensed training formats. The study concludes by recommending further investigation into a broader range of cognitive, instructional, and situational factors that may impact TOEFL performance, particularly

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in English as a Foreign Language (EFL) settings characterized by limited resources or geographic isolation.

Keywords: *TOEFL workshop; Test performance; Psychological factors; Short-term intervention; Language learning*

1. Introduction

TOEFL, Test of English as a Foreign Language, is an English proficiency exam which is widely accepted by academic institutions and professional organizations worldwide. It evaluates English proficiency that are listening, structure and written expressions, and reading comprehension of individuals from non-English-speaking countries. Many universities, government programs, and scholarship agencies rely on TOEFL as the measurement of individual's ability to use English effectively in academic contexts (Hussain et al., 2023; Pati et al., 2023; Riaz & Ahmad, 2023). Beyond its academic relevance, the TOEFL test has also become increasingly important in the global job market. In an era where English serves as the primary medium of international business and professional exchange, many multinational companies and institutions view TOEFL scores as reliable indicators of an individual's ability to operate in English-speaking environments. A high TOEFL score reflects not only linguistic competence but also the ability to comprehend instructions, write reports, participate in meetings, and engage in cross-cultural communication (Khoiruman & Irawan, 2025). Research shows that TOEFL-certified professionals tend to have greater access to employment opportunities, promotions, and cross-border assignments due to their proven English proficiency (Abbas et al., 2021).

In addition to facilitating access to international education and employment, TOEFL certification is increasingly regarded as a benchmark for professional development and personal growth. Many professional licensing bodies in fields such as healthcare, engineering, and law require proof of English proficiency as part of their certification process. This means that TOEFL not only supports initial job placement but also plays a role in long-term career advancement by opening doors to international collaborations, global conferences, and postgraduate opportunities (Aprilliandari & Sugiharto, 2023; Khan et al., 2023; Lee & Kim, 2023; Mustapha & Razak, 2023). TOEFL thus empowers individuals to participate more fully in the global knowledge economy, where English is often the default language for research, innovation, and networking.

The importance of English proficiency is further emphasized by the increasing implementation of English as a Medium of Instruction (EMI) in higher education institutions worldwide, even in non-English-speaking countries. Universities in countries like the Netherlands, Germany, China, and the United Arab Emirates are offering full degree programs in English to attract international students and foster global academic collaboration. This shift amplifies the value of TOEFL scores as they serve as reliable indicators of a student's ability to succeed in an EMI environment (Yuksel et al., 2025).

As institutions aim for internationalization, a standardized and validated language proficiency measure like TOEFL becomes essential to maintain academic quality and ensure inclusive participation.

Additionally, the personal development fostered through TOEFL preparation should not be overlooked. Students who engage deeply in preparing for the TOEFL not only enhance their English but also build soft skills such as discipline, self-regulation, problem-solving, and digital literacy especially when utilizing online practice tools or taking the test remotely. These skills are crucial in both academic and workplace settings that demand autonomy and adaptability. As noted by Chen and Sukying (2024), the rigorous structure of TOEFL helps students become more self-aware of their linguistic strengths and weaknesses, which in turn encourages lifelong learning habits and confidence when navigating multicultural environments. Besides, students with strong TOEFL performance often show higher levels of academic preparedness, as the test evaluates real-life academic tasks that students will encounter during their studies (Dalimunte et al., 2025).

However, preparing for the TOEFL is not an easy job. Many people face multiple challenges, including language skill development, test format familiarity, and the sustained effort required to reach proficiency. Students may struggle with advanced vocabulary and grammar across listening, structure and written expressions, and reading comprehension sections. This often involves intensive practice with academic sources and developing active listening skills that align with TOEFL's academic English requirements (Barrot et al., 2023). Familiarity with the test format also poses difficulties, as students must manage time efficiently and navigate TOEFL-specific question types, which differ from general English tasks (Hussain et al., 2023). Additionally, the need for consistent, focused study is crucial for TOEFL success, as periodic and structured review tends to yield better outcomes than last-minute preparation. Instructors recommend strategies tailored to each section to effectively address these specific challenges, fostering the consistent practice and familiarity essential for high scores (Barrot et al., 2023; Hussain et al., 2023).

Another significant obstacle for many TOEFL candidates is the lack of immersive English environments, especially for students from non-English-speaking countries. Without daily exposure to English in natural contexts such as conversation, media, or academic discussions students often find it difficult to internalize the nuances of the language, including idiomatic expressions and formal academic tone. This limited exposure can hinder fluency and responsiveness, particularly in the listening section, which demand quick comprehension and structured responses. As noted by Silviyanti et al. (2020), students who rely solely on textbook learning may find TOEFL tasks overly complex. These challenges become even more pronounced in short-term or intensive TOEFL workshops, where time pressure and high expectations can intensify the influence of psychological factors such as grit, interest, and anxiety.

Test anxiety, grit, and interest play crucial roles in shaping students' performance in TOEFL preparation. Test anxiety and psychological stress often hinder learners' performance, particularly when the high stakes of university admission or scholarships heighten pressure and cognitive overload during timed sections (Shih & Liu, 2023). To counter these effects, strategies such as simulation-based practice, mindfulness, and peer collaboration have proven effective in enhancing preparedness and reducing anxiety (Benavides-Gil et al., 2024). At the same time, grit, or sustained perseverance toward long-term goals, fosters persistence, motivation, and resilience, enabling learners to maintain consistent effort even when progress appears slow (Postigo et al., 2020; Fathi et al., 2024). Grit also supports essential self-regulatory skills—such as time and stress management—that contribute to success in intensive language tasks (Alharbi & Hossain, 2022; Credé et al., 2017; Tiabarte, 2024). Interest, as another psychological determinant, stimulates engagement and deeper cognitive processing, encouraging students to invest more time and energy in learning and thereby boosting comprehension and retention (Fauzi & Anindiati, 2021; Ghanizadeh & Moafian, 2023; Savoy et al., 2023). Collectively, these psychological traits interact to influence how learners navigate short-term TOEFL preparation—where managing anxiety, sustaining effort through grit, and maintaining genuine interest are vital for achieving maximum test performance.

Despite the recognized importance of individual factors like grit, interest, and anxiety in language learning, there is a notable lack of research that specifically examines their combined effects on TOEFL performance among students. Most studies tend to focus on these constructs in isolation, which limits our understanding of how they interact and collectively influence achievement in high-stakes language assessments. For instance, grit has been shown to correlate with academic perseverance and success (Liu & Wang, 2021), and interest is linked to increased motivation and engagement (Dörnyei et al., 2022). Meanwhile, anxiety remains a critical factor that may undermine these positive influences during test-taking situations (MacIntyre & Gregersen, 2018). Exploring these factors together is essential for a holistic understanding of their impact on TOEFL performance, as it could provide valuable insights for developing targeted interventions that help students manage anxiety while fostering grit and interest, ultimately leading to improved test outcomes.

To fill the gap, this research focuses on revealing the impact of these three factors (grit, interest, and anxiety), both independently and collectively, on students' achievement in a short TOEFL workshop. This study enabled researchers to identify key variables that enhance or undermine TOEFL performance, offering educators and test-prep programs insights into how best to support students in managing all these psychological factors. The objective of this research is to analyze the correlation among grit, interest, and anxiety and their combined impact on students' TOEFL achievement.

2. Literature review

2.1. Psychological determinants in language learning

Interest, in the learning context, is both a psychological state and a motivational force. It is defined as a state of focused attention and emotional involvement toward a specific object, task, or topic, as well as a lasting tendency to reengage with it over time (Renninger & Hidi, 2016). Izard (1977) highlighted that interest–excitement serves as a fundamental emotion that drives individuals to approach and explore their environment for better understanding. In educational contexts, interest plays an important role by enhancing students' engagement, focus, and persistence, ultimately improving learning outcomes (Ainley, 2006; Hulleman & Harackiewicz, 2009). It acts as a powerful internal motivator that affects both immediate task engagement (situational interest) and long-term commitment to a subject (dispositional interest). The four-phase model of interest development further provides a framework for fostering and maintaining learners' interest through well-structured interventions. Key dimensions of interest in language learning include attention, motivation, enjoyment, positive perception, and active engagement (Liang, 2023; Sari, 2023; Utami et al., 2023). These indicators manifest both internally (e.g., excitement, desire to learn) and externally (e.g., active participation, consistent effort). Moreover, interest can be nurtured through contextual factors such as teacher rapport, task relevance, and meaningful learning experiences, all of them are essential in shaping learners' attitudes and behaviors toward learning.

Anxiety, particularly in the context of language learning, is a physiological response marked by feelings of unease, fear, or dread that may not be directly tied to a specific situation (Rahmadani & Etfita, 2022). It is commonly experienced by students as a reaction to linguistic difficulties, fear of failure, or perceived inadequacy in mastering a foreign language (Hakim, 2019). This emotional state influences learners' self-perception, motivation, and overall academic performance. Horwitz (cited in Rodriguez, 2022) identified three major dimensions of foreign language anxiety: communication apprehension (e.g., fear of speaking in groups), test anxiety (e.g., stress related to assessments), and fear of negative evaluation (e.g., worry about being judged or criticized). Anxiety has physical symptoms such as sweating, trembling, or rapid heartbeat) and psychological symptoms; like blanking out, negative self-talk, and avoidance behaviours (Oteir & Al-Otaibi, 2019). These symptoms can reduce students' participation, concentration, and willingness to communicate, often resulting in avoidance of language-related tasks. Moreover, anxiety can be intensified by academic pressure and unrealistic expectations, leading to a cycle of low motivation and impaired performance (Zahra et al., 2024). Recognizing and addressing these dimensions is crucial for creating supportive language learning environments that decrease anxiety and promote confidence.

Grit is the combination of passion and perseverance for long-term goals, involving sustained effort and unwavering commitment even in the face of challenges (Duckworth et al., 2007). It is not merely about hard work but also about maintaining consistent enthusiasm and resilience over time to achieve meaningful objectives. Grit consists of two core dimensions: perseverance of effort, which refers to persistent hard work despite

obstacles, and consistency of interests, which indicates the ability to maintain long-term focus without frequently changing goals (Khoirunnisa et al., 2023). In educational contexts, grit plays several essential roles. It improves academic performance, supports self-regulated learning, promotes engagement, improves resilience to setbacks, and contributes to personal growth by building confidence and a sense of purpose (Wang, 2021). Gritty individuals often demonstrate higher motivation, goal orientation, and adaptive coping strategies, which are crucial for navigating academic and life challenges. Key indicators of grit include passion, perseverance, sense of purpose, hope, and deliberate practice—each reflecting the learner's internal drive and ability to stay committed over time (Ismail et al., 2023). As such, grit is considered a strong predictor not only of academic success but also of psychological well-being and professional achievement.

2.1. Measuring student achievement in language

Assessing students' achievement in a language intervention requires clear theoretical foundation of what forms "achievement" and how it can be best assessed, especially in the programs targeting short-term improvement such as TOEFL workshops. Traditionally, achievement is often assessed through proficiency tests like TOEFL, IELTS, or TOEIC to measure learners' mastery of linguistic accuracy and fluency under academic conditions. Yet, current researches suggest those assessments only capture part of learning process. Achievement in language interventions also embrace broader indicators such as progress in communicative competence, self-regulated learning, and strategic language use (Buzick et al., 2024). These viewpoints recognize that learners' development encompasses both measurable linguistic gains and the ability to apply language knowledge in real life contexts. Hence, scholars have promoted assessments that integrate formative and summative elements to reflect not only end-point proficiency but also progressive learning process (Latif & Wasim, 2024). Assessments that are dynamic and performance-oriented have proven to be effective substitutes, providing a more genuine reflection of students' ability to use language in real-life contexts (Rukmini & Saputri, 2023; Sato & Loewen, 2023).

Recent advancements in language testing and assessment literacy have also shaped how achievement is evaluated in short-term interventions such as TOEFL workshops. In this contexts, TOEFL test remains the primary measure to assess learners' achievement, as they can provide clear evidence on learners' progress in listening, structure and written expression, and reading comprehension. However, Estaji (2024) highlights that teachers' assessment literacy and their ability to interpret scores in relation to instructional objectives influence the effective use of such high-stakes tests. More than just analyzing scores, instructors must contribute to aligning classroom activities and exam strategies with the targeted skill domains assessed in TOEFL. Moreover, integrating structured feedback sessions and peer discussions after each practice test encourages learners to reflect on their performance, build test-taking strategies, and strengthen self-efficacy—

psychological factors that contribute to achievement gains in intensive programs (Wicaksono et al., 2023). Collectively, these practices highlight that while TOEFL scores remain central indicators of progress, a comprehensive understanding of achievement in short-term interventions also requires attention to the cognitive and affective processes supporting score improvement.

2.3. The context of short-term language preparation workshops

Short-term language preparation workshops are intensive, goal-oriented programs designed to equip learners with specific linguistic and test-taking skills within a short-term period. Unlike regular semester-based courses, these workshops emphasize efficiency, strategic instruction, and focused practice on high-stakes assessments on TOEFL. The pedagogical approach commonly integrates explicit instruction in test-taking strategies with repeated exposure to test-like tasks, often using time-constrained drills and simulated exams to build familiarity and confidence (Brown & Abeywickrama, 2023). Given the compressed duration—only 3 days—these programs prioritize immediate test performance improvement rather than long-term language acquisition. Therefore, motivational and psychological factors such as anxiety, grit, and interest play a more visible role in shaping outcomes, as learners must rapidly adjust to demanding cognitive and emotional pressures (Pérez & Chen, 2024). While short-term workshops can lead to observable score improvements, researchers argue that the outcomes often represent procedural familiarity rather than deep language mastery, highlighting the importance of balancing strategic preparation with meaningful linguistic development (Latif & Wasim, 2024).

3. Method

3.1. Research design

This study adopted a quantitative correlational design to investigate the relationship between three psychological factors—interest, anxiety, and grit—and students' achievement in a TOEFL workshop. The purpose of using a correlational approach was to examine the strength and direction of association among these variables without manipulating any of them. The research was conducted during 10-hours TOEFL preparation workshop held at a state Islamic college in Riau, Indonesia. The workshop was conducted by teaching the participants strategies and skills in listening, structure and written expression, and reading comprehension, followed by practice sessions and reflective discussions.

3.2. Sampling method

A total of 18 prospective English teachers participated in the study, selected through purposive sampling, as they were all actively enrolled in the workshop and preparing for the same standardized TOEFL test. Before data collection, students were informed about the study's goals and procedures and provided their informed consent.

3.3. Data collection

To gather data, four main instruments were used. The first three were standardized Likert-scale questionnaires that measured psychological factors. The Interest Questionnaire was adapted from Ainia (2020) to assess students' enthusiasm and motivation toward learning English and preparing for TOEFL. The Anxiety Scale, based on the Foreign Language Classroom Anxiety Scale (FLCAS), was modified to reflect the TOEFL context and measured students' emotional discomfort and nervousness. The Grit questionnaire was adopted from Kholili and Ferdiyanto (2022) developed based on Grit Scale (Grit-S) by Duckworth and Quinn (Duckworth et al., 2007), which assessed students' perseverance and consistency in long-term goals. The fourth instrument was a TOEFL test, adopted from Phillips (2001), consisting of Listening Comprehension, Structure and Written Expression, and Reading Comprehension sections. Students took both a pre-test in the first week and a post-test in the final week of the workshop.

3.4. Data analysis

The achievement score for each student was from the margin of the post-test score and pre-test score to see the improvement of the TOEFL-short workshop. All responses from the questionnaires were collected anonymously to ensure honesty and reduce bias. Data analysis was carried out using SPSS version 25. Descriptive statistics were used to get the means and standard deviations of the variables. To examine the relationships between interest, anxiety, grit, and TOEFL achievement, Spearman product-moment correlation was conducted since none of the independent variables show a statistically significant linear relationship with Achievement. Additionally, a multiple regression analysis was not used to determine the extent to which these psychological factors predicted students' TOEFL gain scores because none of Spearman correlation analysis result showed significant correlation.

4. Findings

4.1. Interest

The Interest variable reflects the students' motivation and enthusiasm in learning English and preparing for the TOEFL test. Based on the questionnaire result (Table 1), scores ranged from 3.5 to 4.8 with a mean score of 4.0 and standard deviation of 0.34, indicating low to very high levels of interest among participants. All students scored above 3.41. It suggests that all students participated in the workshop with relatively high enthusiasm or internal motivation.

Table 1

Descriptive information of students' interest.

No	Participant	Average	Category	No	Participant	Average	Category
1	Participant 1	4.4	Very High	10	Participant 10	3.7	High
2	Participant 2	4.8	Very High	11	Participant 11	4.3	Very High

No	Participant	Average	Category	No	Participant	Average	Category
3	Participant 3	4.2	High	12	Participant 12	4.1	High
4	Participant 4	3.9	High	13	Participant 13	3.9	High
5	Participant 5	3.7	High	14	Participant 14	3.7	High
6	Participant 6	3.8	High	15	Participant 15	4.3	Very High
7	Participant 7	4.0	High	16	Participant 16	3.7	High
8	Participant 8	4.3	Very High	17	Participant 17	4.3	Very High
9	Participant 9	3.5	High	18	Participant 18	3.9	High
			Mean			4.0	High
			Standard Deviation			0.34	

Categorization:

1.00 – 1.80	Very Low Interest
1.81 – 2.60	Low Interest
2.61 – 3.40	Moderate Interest
3.41 – 4.20	High Interest
4.21 – 5.00	Very High Interest

4.2. Anxiety

The Anxiety variable measured the degree of nervousness and stress students experienced related to TOEFL preparation and testing. Based on the result of questionnaire (Table 2), anxiety scores ranged from 2.2 to 3.9, with a mean of 3.1 and standard deviation of 0.45. These results indicate that while the overall anxiety level was moderate, there was considerable variation among students. 3 participants exhibited low anxiety, while 5 of them experienced high anxiety levels, which could potentially interfere with their performance and learning engagement during the workshop.

Table 2

Descriptive information of students' anxiety.

No	Participant	Average	Category	No	Participant	Average	Category
1	Participant 1	3.8	High	10	Participant 10	3.3	Moderate
2	Participant 2	2.2	Low	11	Participant 11	3.3	Moderate
3	Participant 3	3.6	High	12	Participant 12	3.0	Moderate
4	Participant 4	3.5	High	13	Participant 13	3.1	Moderate
5	Participant 5	2.9	Moderate	14	Participant 14	3.0	Moderate
6	Participant 6	3.7	High	15	Participant 15	2.5	Low
7	Participant 7	3.9	High	16	Participant 16	3.1	Moderate
8	Participant 8	3.0	Moderate	17	Participant 17	3.0	Moderate
9	Participant 9	3.2	Moderate	18	Participant 18	2.6	Low
			Mean			3.1	Moderate
			Standard Deviation			0.45	

Categorization:

1.00 – 1.80	Very Low Anxiety
1.81 – 2.60	Low Anxiety
2.61 – 3.40	Moderate Anxiety
3.41 – 4.20	High Anxiety
4.21 – 5.00	Very High Anxiety

4.3. Grit

The Grit variable assessed students' perseverance and passion for long-term academic goals. Based on the questionnaire result, scores ranged from 3.3 to 4.9, with a mean of 4.1 and standard deviation of 0.54. The data show that most students had a very high level of grit, which aligns with the nature of TOEFL preparation that requires sustained effort and commitment. Only 4 students scored in moderate level, indicating their ambiguous consistency or determination, which may affect their ability to persist through academic challenges.

Table 3
Descriptive information of students' grit.

No	Participant	Average	Category	No	Participant	Average	Category
1	Participant 1	4.7	Very High	10	Participant 10	4.9	Very High
2	Participant 2	4.6	Very High	11	Participant 11	3.3	Moderate
3	Participant 3	3.6	High	12	Participant 12	4.7	Very High
4	Participant 4	3.3	Moderate	13	Participant 13	4.1	High
5	Participant 5	4.4	Very High	14	Participant 14	4.2	Very High
6	Participant 6	3.3	Moderate	15	Participant 15	4.4	Very High
7	Participant 7	3.8	High	16	Participant 16	4.6	Very High
8	Participant 8	4.6	Very High	17	Participant 17	4.2	Very High
9	Participant 9	4.3	Very High	18	Participant 18	3.3	Moderate
			Mean			4.1	High
			Standard Deviation			0.54	

Categorization:

1.00 – 1.80	Very Low Grit
1.81 – 2.60	Low Grit
2.61 – 3.40	Moderate Grit
3.41 – 4.20	High Grit
4.21 – 5.00	Very High Grit

4.4. Achievement

The Achievement variable represented the improvement in TOEFL performance, calculated as the difference between post-test and pre-test scores. Achievement scores (table 4) ranged from -37 to 160, with a mean of 40 and standard deviation of 42.9. The wide spread of scores shows considerable diversity in learning outcomes. While many students improved significantly after the workshop, a few (2 participants) experienced negative gains. The highest score increase (160 points) indicates a highly successful workshop experience for at least one student, while the lowest score (-37) suggests a need for further support.

Table 4

Descriptive information of students' achievement.

No	Participant	Pre	Post	Margin	No	Participant	Pre	Post	Margin
1	Participant 1	367	400	33	10	Participant 10	523	550	27
2	Participant 2	420	417	-3	11	Participant 11	410	373	-37
3	Participant 3	320	350	30	12	Participant 12	357	433	76
4	Participant 4	397	427	30	13	Participant 13	387	460	73
5	Participant 5	470	487	17	14	Participant 14	340	440	100
6	Participant 6	380	420	40	15	Participant 15	457	503	46
7	Participant 7	387	420	33	16	Participant 16	307	467	160
8	Participant 8	403	417	14	17	Participant 17	377	387	10
9	Participant 9	457	477	20	18	Participant 18	367	413	46
	Mean						396	436	40
	Standard Deviation								42.9

To decide what analysis was used to see the relationship between independent variables (Interest, Anxiety, and Grit) and dependent variable (achievement), normality and linearity tests were done. The results are presented in the following tables

Table 5

Normality test.

Variable	Shapiro-Wilk		
	Statistic	**df**	**Sig.**
Interest	.942	18	.313
Anxiety	.968	18	.763
Grit	.882	18	.028
Achievement	.900	18	.057

From the above table, the Shapiro-Wilk normality test, the results showed that Interest (W = 0.942, p = 0.313) and Anxiety (W = 0.968, p = 0.763) were normally distributed, as their p-values were greater than 0.05. Achievement (W = 0.900, p = 0.057) was also considered approximately normal, although the p-value was close to the threshold. However, Grit (W = 0.882, p = 0.028) did not follow a normal distribution, as indicated by a p-value below 0.05

Table 6

Linearity test result.

Variables	df	Mean	F	Sig
Interest and Achievement	1	.385	5.639	.098
Anxiety and Achievement	1	.001	.275	.636
Grit and Achievement	1	.311	.883	.417

The results indicated that the relationship between Interest and Achievement showed a marginal indication of linearity, with F (1) = 5.639 and p = 0.098, although the p-value did not reach the conventional significance level of 0.05. This suggests that the linear relationship is not statistically significant, but it is relatively closer to the threshold compared to the others. Meanwhile, the relationship between Anxiety and Achievement

(F (1) = 0.275, p = 0.636) and between Grit and Achievement (F (1) = 0.883, p = 0.417) both failed to demonstrate significant linearity. These findings indicate that none of the independent variables show a statistically significant linear relationship with Achievement, which suggests that non-parametric correlation tests such as Spearman's rank correlation may be more appropriate for further analysis.

Table 7

Spearman test result of interest and achievement.

Correlations			Interest	Achievement
Spearman's rho	Interest	Correlation Coefficient	1.000	-.370
		Sig. (2-tailed)	.	.131
		N	18	18
	Achievement	Correlation Coefficient	-.370	1.000
		Sig. (2-tailed)	.131	.
		N	18	18

The Spearman's rank correlation analysis was executed to examine the relationship between Interest and TOEFL short-workshop Achievement. The result showed a negative correlation with a coefficient of -0.370, indicating a weak to moderate inverse relationship between the two variables. However, the correlation was not statistically significant, as the p-value was 0.131, which is greater than the conventional alpha level of 0.05. This suggests that, although there is a tendency for higher Interest to be associated with lower Achievement scores, the relationship is not strong enough to be considered statistically meaningful based on the current sample of 18 participants. Interestingly, this weak negative correlation may suggest that participants with higher interest were possibly overconfident or relied on less effective strategies during the short, intensive test-preparation context, highlighting how situational and strategic factors may temporarily overshadow intrinsic motivation.

Table 8

Spearman test result of anxiety and achievement.

Correlations			**Anxiety**	**Achievement**
Spearman's rho	Anxiety	Correlation Coefficient	1.000	.022
		Sig. (2-tailed)	.	.931
		N	18	18
	Achievement	Correlation Coefficient	.022	1.000
		Sig. (2-tailed)	.931	.
		N	18	18

The Spearman's rank correlation analysis was executed to explore the relationship between Anxiety and TOEFL short-workshop Achievement. The analysis revealed a very weak positive correlation with a coefficient of 0.022, indicating almost no association between the two variables. Additionally, the correlation was not statistically significant, as reflected by the p-value of 0.931, which is far above the standard significance threshold of 0.05. These findings suggest that levels of anxiety have no meaningful relationship with TOEFL short-workshop achievement scores in this sample of 18 participants.

Table 9

Spearman test result of grit and achievement.

Correlations			Grit	Achievement
Spearman's rho	Grit	Correlation Coefficient	1.000	.032
		Sig. (2-tailed)	.	.899
		N	18	18
	Achievement	Correlation Coefficient	.032	1.000
		Sig. (2-tailed)	.899	.
		N	18	18

The Spearman's rank correlation analysis was executed to examine the relationship between Grit and TOEFL short-workshop Achievement. The results showed a very weak positive correlation, with a correlation coefficient of 0.032, suggesting virtually no association between the two variables. Furthermore, the relationship was not statistically significant, as indicated by a p-value of 0.899, which is substantially higher than the conventional significance level of 0.05. These findings imply that in this sample of 18 participants, grit has no meaningful or statistically significant relationship with TOEFL short-workshop achievement.

The present study aimed to examine the relationship between three psychological factors—Interest, Anxiety, and Grit—and students' academic achievement, as measured by the difference between post-test and pre-test scores. The findings, based on Spearman's rank correlation, revealed that none of the variables had a statistically significant relationship with achievement. Interest showed a weak negative correlation (ρ = -0.370, p = 0.131), while Anxiety (ρ = 0.022, p = 0.931) and Grit (ρ = 0.032, p = 0.899) demonstrated very weak positive correlations. These results indicate that, within the current sample of 18 students, psychological traits such as interest, anxiety, and grit did not meaningfully contribute to variations in students' academic improvement.

These findings contrast with much of the literature that has suggested a significant role for psychological factors in academic success. For instance, Hidi and Renninger (2006) highlighted that interest promotes deeper engagement and better learning outcomes. Pekrun (2007) found that anxiety, particularly test-related anxiety, can interfere with cognitive performance and lower academic results. Additionally,

Duckworth et al. (2007) introduced grit as a powerful predictor of long-term achievement and perseverance in learning tasks. However, while these studies emphasized the importance of internal psychological characteristics, the present study did not replicate those effects in the context of short-term academic gains, which may suggest that other factors are at play in determining achievement in this setting.

Rather than viewing these results as a contradiction to previous researches, they can be interpreted as an important contextual condition for existing theories linking psychological traits and academic performance. In the specific context of short-term, highly structured test preparation, such as the TOEFL workshop examined here, instructional and situational factors—such as the quality of test-taking strategies taught, the instructor's skill in delivering targeted training, and participants' prior knowledge—may temporarily overshadow the influence of broader psychological traits. The result suggests that in structured, time-limited learning contexts, learners' success is shaped more by the quality of instructional support and learning conditions than by persistent affective or motivational characteristics.

Importantly, the results of this study are consistent with several other findings that reported non-significant relationships between psychological variables and academic performance. Credé et al. (2017), in their meta-analysis, noted that grit had only a modest association with academic outcomes and became nonsignificant when controlling for other traits like conscientiousness. Von der Embse et al. (2018) similarly reported that the influence of test anxiety on performance can vary and is not always negative or significant. In the Indonesian context, Rahayu and Afdal (2022) found no significant relationship between students' interest and English test results in rural classrooms, suggesting that environmental, instructional, and contextual variables may override the effects of individual traits in some learning settings.

Furthermore, the absence of significant linearity between each psychological factor and achievement—as indicated by non-significant results in the linearity test ($p > 0.05$ for all variables)—supports the conclusion that regression-based models would not be suitable. Given that none of the predictors showed meaningful correlations or linear relationships with the outcome variable, there is no strong basis to proceed with multiple regression analysis. Instead, these findings highlight the need for future studies to explore additional factors such as teaching methods, student motivation, socioeconomic background, and language exposure. Expanding the sample size, employing longitudinal designs, or incorporating qualitative insights may also offer a deeper understanding of what drives achievement in EFL contexts, particularly in underserved or geographically isolated regions.

5. Conclusion

This study examined the relationship between three psychological factors—interest, anxiety, and grit—and achievement gains within a short-term TOEFL preparation workshop. Contrary to established literature indicating their significant

influence on academic performance, no statistically significant correlations were found between these variables and improvements in TOEFL scores. Spearman's correlation analysis revealed a weak negative association for interest (ρ = -0.370, p = 0.131) and negligible positive associations for both anxiety (ρ = 0.022, p = 0.931) and grit (ρ = 0.032, p = 0.899). Linearity tests further confirmed the absence of significant linear relationships, precluding the use of multiple regression analysis. These findings underscore the complexity of achievement in short-term, test-focused interventions. While psychological constructs such as interest, anxiety, and grit are influential in broader educational contexts, they may not independently predict short-term score gains—particularly within small or heterogeneous samples. Other factors, including instructional quality, baseline language proficiency, learning strategies, and external language exposure, likely play more substantive roles in shaping outcomes in condensed preparation formats. Based on these results, several directions for future research are recommended: (1) Expanding sample size and diversity across academic levels and institutions to enhance statistical power and generalizability, (2) Employing mixed-method approaches, integrating qualitative data such as interviews or reflective journals, to deepen understanding of learners' psychological experiences during test preparation, (3) Investigating additional explanatory variables, including motivation, self-efficacy, time management, prior test-taking experience, and instructional support, and (4) Adopting longitudinal designs to trace the influence of psychological factors over extended language learning periods rather than isolated short-term interventions.

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