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The Relationship Between Engagement Levels of EFL Learners and Their Academic Achievement: A Comparison Across Proficiency Levels

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Abstract

Engagement has emerged as a determinant of success in second language acquisition research. However, its relationship with achievement across distinct skill areas and proficiency levels remains insufficiently understood in intensive EFL contexts. This study examined the relationship between multidimensional learner engagement and academic achievement in Turkish EFL classes and investigated whether this relationship varied across English proficiency levels. A quantitative correlational design was employed with 296 university-level English preparatory students. Engagement data were collected via an EFL engagement scale, while academic achievement was operationalized through institutional records comprising overall achievement scores and separate speaking, writing, and participation scores. Pearson product-moment correlation analyses and one-way ANOVAs were conducted to examine engagement-achievement associations and proficiency-level differences, respectively. Overall engagement was positively correlated with academic achievement. Sub-dimension analyses revealed that self-confidence and motivation were significant correlates of speaking performance, while problem-solving was the sole significant predictor of writing. Participation demonstrated the broadest pattern of significant associations, co-occurring with metacognitive, critical thinking, problem-solving, and motivational engagement. Writing showed the strongest relationship with composite achievement. ANOVAs indicated no significant proficiency-level differences for overall engagement or most sub-dimensions. However, self-confidence differed significantly across proficiency groups, with A2 learners reporting lower self-confidence than B1 and B2 peers. The findings suggest that engagement-achievement associations are skill-specific rather than uniform, and that proficiency level exerts a selective effect, primarily on self-confidence. These results highlight the importance of differentiated instructional strategies that target relevant engagement dimensions in high-stakes EFL programs.

Keywords

Academic achievement
English proficiency
Learner engagement
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About Article

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Introduction

In the contemporary landscape of second language acquisition (SLA) and educational psychology, the focus has shifted from viewing learners as passive recipients of input to recognizing them as active agents whose psychological and behavioral investments fundamentally shape their learning outcomes. Thus, in the realm of SLA, student engagement has gained prominence as a critical determinant of academic success (Alzahrani, 2025; Hiver, Al-Hoorie, Vitta, & Wu, 2024; Wang, Wang, & Li, 2023). Research in diverse educational contexts has consistently demonstrated that engaged learners not only persist longer in challenging tasks but also achieve superior outcomes across multiple performance indicators (Fredricks, Blumenfeld, & Paris, 2004; Skinner & Pitzer, 2012). Defined as a multidimensional construct encompassing a learner's active involvement, effort, and focused interactions with language tasks, engagement is often described as "energized, directed, and sustained actions" (Skinner, Kindermann, & Furrer, 2009). Though occasionally used interchangeably in educational settings, engagement as an affective construct is distinct from motivation. While motivation represents the intention to act, engagement is the action itself (Reschly & Christenson, 2022). In this regard, engagement represents the outward manifestation of motivation. This conceptual distinction is particularly important in educational research, as it allows researchers to examine not merely what students intend to do, but what they actually do in learning contexts (Christenson, Reschly, & Wiley, 2012).

Recent literature consistently positions engagement as a malleable, teacher-friendly quality that can be enhanced to improve educational outcomes (Mercer & Dörnyei, 2020). Within the context of English as a Foreign Language (EFL), engagement, which encompasses cognitive, behavioral, emotional, and agentic dimensions, is increasingly recognized not merely as a desirable classroom state but as a robust predictor of academic achievement and linguistic proficiency (Hiver et al., 2024). Higher engagement levels are consistently linked to improved academic outcomes (Li, 2024; Luan, Jing, Hong, & Lin, 2025; Shang & Ma, 2024), with engaged learners more likely to exhibit persistence, utilize self-regulatory strategies, and ultimately achieve higher proficiency levels (Li, King, & Wang, 2022). This connection is further reinforced by evidence that supportive classroom environments, growth-oriented language mindsets, and learner grit can significantly enhance engagement, thereby fostering better performance in EFL contexts (Li, 2024; Sadoughi & Hejazi, 2021).

While the engagement–achievement link is well established, the role of English proficiency level as a potential determinant in this relationship remains less clear. Some studies suggest that proficiency, whether measured through standardized tests, course grades, or self-assessment, can influence academic success directly (Waluyo & Panmei, 2021) and may shape how engagement translates into achievement. For example, English course grades have been shown to strongly predict overall GPA, whereas self-rated proficiency has demonstrated a weaker mediating effect between entrance exam scores and academic performance (Chakiso, Bushisho, & Wanna, 2025). Similarly, in technology-mediated learning environments, proficiency appears to be a less influential mediator compared to factors such as learning styles and individual needs (Qu, 2025). The complexity of this role becomes more pronounced when considering low-to-mid proficiency learners, for whom psychological resources, such as a growth mindset, grit, and resilience, can offset proficiency-related disadvantages (Fan, Yang, Kong, & Zhang, 2024). Moreover, academic emotions like enjoyment, anxiety, and boredom have been found to interact with both engagement and proficiency, further influencing achievement outcomes (He, 2025; Zhou & Wang, 2024). These findings suggest that proficiency level may not operate in isolation but rather in conjunction with motivational, emotional, and contextual factors.

In this regard, this study seeks to explore the relationship between EFL learners' engagement and their academic achievement, with a particular focus on proficiency level as a determining variable. By examining this interplay, the research aims to clarify whether proficiency amplifies, diminishes, or has minimal impact on the benefits of engagement, and to identify the conditions under which this effect is most pronounced. Such insights have the potential to inform targeted pedagogical strategies that optimize learning outcomes for students across varying proficiency levels.

Theoretical Framework and Literature Review

Understanding student engagement in language learning requires a comprehensive theoretical framework that accounts for both the multidimensional nature of the construct and its dynamic relationship with learning outcomes. The present study draws upon Self-Determination Theory (Deci & Ryan, 2000) and the Control-Value Theory of Achievement Emotions (Pekrun, 2006), which are discussed in detail in the following section, to understand how learners' psychological needs and emotional experiences translate into engaged learning behaviors and, ultimately, academic achievement.

Theoretical Underpinnings of Engagement in EFL Contexts

The conceptualization of learner engagement in the present study is grounded in two complementary theoretical perspectives: Self-Determination Theory (SDT; Deci & Ryan, 2000) and the Control-Value Theory of Achievement Emotions (CVT; Pekrun, 2006). These frameworks provide a comprehensive account of how motivational and emotional processes jointly shape learners' active involvement in language learning.

Self-Determination Theory posits that human motivation is driven by the fulfillment of three basic psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 2000). When these needs are satisfied, learners are more likely to develop intrinsic motivation and engage more actively in learning tasks. In the context of EFL learning, autonomy-supportive environments, opportunities to experience competence in language use, and meaningful social interactions can foster higher levels of behavioral, cognitive, and emotional engagement. From an SDT perspective, engagement can thus be understood as the behavioral manifestation of underlying motivational processes, linking internal dispositions to observable learning actions.

Complementing this view, the Control-Value Theory of Achievement Emotions explains how learners' perceptions of control over learning activities and the value they assign to these activities give rise to specific emotional experiences, such as enjoyment, anxiety, or boredom (Pekrun, 2006). These emotions, in turn, influence the quality and intensity of engagement. For example, learners who perceive high control and high value are more likely to experience positive emotions, which facilitate deeper cognitive engagement and sustained behavioral participation. Conversely, low control or low value may lead to disengagement through negative emotional states.

Taken together, SDT and CVT offer a unified framework for understanding engagement as a multidimensional construct shaped by both motivational and emotional mechanisms. While SDT accounts for the motivational antecedents of engagement, CVT elucidates the emotional pathways through which engagement influences academic outcomes. Within this integrated perspective, engagement serves as a proximal predictor of academic achievement, translating learners' internal motivational and emotional states into observable learning behaviors. This theoretical integration provides a strong foundation for examining how different dimensions of engagement relate to achievement outcomes in EFL contexts and how these relationships may vary across proficiency levels.

The Multidimensional Nature of Learner Engagement

Educational literature has conceptualized engagement as a meta-construct comprising distinct but interrelated dimensions: behavioral, emotional, cognitive and agentic engagement (Li et al., 2022; Sadoughi & Hejazi, 2021). Each dimension captures unique aspects of the learning experience while contributing synergistically to overall engagement. Behavioral engagement refers to the quantity and quality of a student's participation, including attendance, effort, and persistence in academic tasks (Fredricks et al., 2004). It involves positive conduct, such as following rules and avoiding disruptive behavior, as well as active involvement in learning tasks (Alshammari & Alrashidi, 2024). Behavioral engagement represents the most observable and measurable aspect of student involvement, making it particularly accessible to teachers and researchers (Finn & Zimmer, 2012). As another dimension, emotional (affective) engagement involves students' affective reactions to the classroom environment, teachers, and peers. It includes positive reactions such as interest, enjoyment, and a sense of belonging, as well as negative reactions like anxiety, boredom, and frustration (Mercer, 2019; Skinner & Belmont, 1993). Emotional engagement is often seen as the fuel for behavioral and cognitive engagement (Skinner & Pitzer, 2012). Research in positive psychology suggests that emotional engagement not only

facilitates learning but also contributes to students' overall well-being and persistence in the face of challenges (Seligman, Ernst, Gillham, Reivich, & Linkins, 2009). Cognitive engagement pertains to the mental effort and psychological investment students dedicate to mastering complex skills (Li et al., 2022). It is characterized by the use of deep processing strategies, self-regulation, and the desire to go beyond minimal requirements (Fredricks, 2015). Cognitive engagement distinguishes surface-level compliance from genuine intellectual involvement, representing the quality rather than merely the quantity of student effort (Greene, 2015). Lastly, the agentic dimension of engagement, defined as "students' constructive contribution to the flow of the instruction they receive" (Reeve & Tseng, 2011, p. 258), is manifested through students' various contributions, including posing questions, articulating preferences, providing suggestions, and seeking clarification, achieved by the deliberate personalization of instructional materials and conditions. This dimension reflects students' proactive attempts to personalize and enrich their learning experiences, representing a shift from passive recipients to active co-constructors of knowledge (Reeve, 2013).

The Relationship Between Engagement and Academic Achievement

A robust body of empirical research indicates a significant positive relationship between learner engagement and academic achievement in EFL settings (Zou & Wang, 2024). However, the nature and strength of this relationship varies considerably depending on contextual factors, measurement approaches, and the specific dimensions of engagement examined. Numerous studies confirm that highly engaged students achieve better learning outcomes. For example, in a study of Saudi EFL preparatory year students, Alzahrani (2025) found a statistically significant positive relationship between students' general L2 engagement (including behavioral, emotional, and cognitive domains) and their learning success scores. Similarly, research on Iraqi college students revealed positive correlations between cognitive, affective, and behavioral engagement and academic achievement (Al-Bahadli, 2020). In a Chinese blended learning context, Li (2024) reported that higher engagement levels led to improvements in language achievement as measured by end-of-term exams. Furthermore, longitudinal studies and weekly diary studies have shown that fluctuations in engagement are positively related to objective performance measures (Rodríguez-Muñoz, Antino, Ruiz-Zorrilla, & Ortega, 2021). These findings align with meta-analytic evidence demonstrating moderate to strong effect sizes for the engagement-achievement relationship across diverse educational contexts (Lei, Cui, & Zhou, 2018).

While student engagement is consistently linked to academic achievement, it functions as a multidimensional construct where the predictive power of specific components varies across contexts. Cognitive engagement is frequently cited as a primary driver of success, particularly in environments requiring higher-order thinking, such as online EFL courses and high school settings (Alshammari & Alrashidi, 2024; Wei, 2024). Cognitively engaged learners are found to show more discerning, careful, and constant attention to finalizing learning objectives or tasks (Hiver et al., 2024).

Similarly, behavioral engagement, which is manifested through tangible actions like attendance and task completion, strongly correlates with achievement (Al-Bahadli, 2020), though recent scholarship suggests that mere physical participation is insufficient without concurrent cognitive investment (Tong & Singh, 2025). In contrast, the impact of emotional engagement appears more variable. While some studies rank it as a vital predictor (Alshammari & Alrashidi, 2024), others find it less significant than cognitive or behavioral factors (Wei, 2024), a discrepancy likely attributable to methodological differences in operationalization or cultural variations in how emotional involvement is valued.

In addition to its determining role in achievement, engagement has recently been positioned as a critical mediator between internal learner variables, such as emotions or motivation and academic outcomes. To exemplify, Wang et al. (2023) found that engagement mediated the relationships between emotions (FLE, foreign language classroom anxiety, and boredom) and English achievement. Specifically, while positive emotions like enjoyment facilitate engagement and subsequent achievement, negative emotions like boredom reduce engagement, thereby indirectly lowering achievement (Wang, Zhao, & Ma, 2024; Zhai, 2025). As for motivation, engagement functions as the behavioral pathway through which motivational processes contribute to learning and grades (Jang, Reeve, & Deci, 2010).

Alzaanin (2023) also suggests that positive motivation and engagement significantly influence achievement, whereas negative motivation (e.g., anxiety, failure avoidance) has a deleterious effect.

To capture the complex interplay between learner engagement, academic emotions, and achievement, recent research has increasingly extended its scope beyond single educational settings to encompass diverse institutional contexts. In primary education, studies have demonstrated that academic emotions such as boredom negatively predict language achievement, while behavioral engagement can mediate academic success (Li et al., 2022; Li, Feng, & Li, 2025). In secondary and high school contexts, both emotional and cognitive dimensions of engagement have been identified as significant predictors of academic performance (Li & Wei, 2023; Wei, 2024). At the undergraduate level, research has further highlighted the role of multidimensional engagement, with emotional and cognitive engagement emerging as key contributors to achievement in EFL contexts (Liu et al., 2023). Taken together, these findings suggest that engagement is a context-sensitive construct whose relationship with achievement varies across educational levels and learning environments (Mercer, 2019).

Within the Turkish EFL context, a growing body of research has begun to explore the role of engagement and related affective variables across different institutional settings. For example, studies conducted with Turkish university learners have shown that agentic and emotional engagement can significantly predict language achievement, although the relative contribution of different engagement dimensions appears to vary depending on contextual and methodological factors (Dincer et al., 2019; Eren & Rakıcıoğlu-Söylemez, 2023). In preparatory school contexts, research has also emphasized the importance of academic emotions in shaping learners' classroom experiences (Yukselir & Harputlu, 2014). These findings indicate that while engagement is consistently linked to achievement, its specific manifestations and predictive strength may differ within the Turkish educational system.

Despite this growing body of research, important gaps remain. First, much of the existing literature treats engagement as a global construct, overlooking the possibility that different engagement dimensions may relate differently to specific language skills, such as speaking, writing, and classroom participation. Besides, relatively few studies have examined the engagement–achievement relationship using multiple, skill-based indicators of academic performance within the same institutional context. Lastly, although proficiency level is frequently acknowledged as an important learner variable, its role in shaping engagement–achievement dynamics remains underexplored, particularly in intensive EFL programs. Addressing these gaps, the present study adopts a multidimensional perspective on engagement and examines its relationship with multiple achievement indicators in a Turkish higher education preparatory context, while also exploring whether these relationships vary across proficiency levels.

The Present Study

Despite the abundance of studies establishing a positive correlation between the engagement dimensions and academic achievement, the relationship between these constructs is complex and context-dependent. While many studies report linear positive associations, others suggest that the predictive power of specific engagement dimensions varies. For example, while Liu et al. (2023) found emotional engagement to be the strongest predictor of achievement among non-English majors, Tong and Singh (2025) argued that behavioral participation alone is insufficient without cognitive investment. Furthermore, some research indicates that in certain contexts, engagement may not directly predict grades if the assessment does not align with the nature of the engagement or if other variables intervene (Zhang et al., 2025). These inconsistencies highlight the necessity of examining engagement within specific educational and cultural contexts to understand its nuances fully.

The context of Turkish higher education preparatory classes presents a unique and critical setting for such an investigation. Similar to the intensive English programs described in Saudi Arabia (Alzahrani, 2025), Turkish preparatory schools function as high-stakes environments designed to bridge the gap between secondary education and English-medium departmental studies. This "pressure-cooker" environment may alter how engagement dimensions affect academic achievement. Moreover, given that engagement is culturally situated (Mercer, 2019), findings from collectivist cultures like China, where behavioral compliance is often high (Li et al., 2022), may not perfectly mirror the dynamics in Türkiye.

Investigating this relationship in the Turkish context is essential to determine whether global theoretical models of engagement hold true in this specific educational milieu.

Therefore, this study aims to examine the relationship between the engagement levels of EFL learners and their academic achievement within Turkish higher education preparatory classes. By utilizing objective achievement tests as the measure of academic success, this research seeks to clarify which dimensions of engagement are most predictive of linguistic competence in this setting. The findings will not only contribute to the global discourse on L2 engagement but also provide practical insights for educators aiming to enhance student outcomes in intensive EFL programs. To this end, the following research questions guide the present study:

1. What is the relationship between multidimensional student engagement and academic achievement in Turkish EFL preparatory classes?

2. Does the relationship between student engagement and academic achievement vary across proficiency levels in Turkish EFL preparatory classes?

3. Which dimensions of student engagement are most strongly associated with academic achievement across different proficiency levels in Turkish EFL preparatory classes?

Method

Research Design

The present study employed a quantitative correlational research design to investigate the relationship between English as a Foreign Language (EFL) learners' engagement levels and their academic achievement. Additionally, it incorporated a comparative component to examine potential differences across proficiency levels, allowing for a more nuanced understanding of how engagement patterns may vary among learner groups. This combined approach enabled the researchers to explore both relational and group-based dynamics within the same dataset. The study did not involve any instructional intervention or experimental manipulation; instead, naturally occurring differences in student engagement and achievement were examined using statistical analyses. Lastly, the study explored whether engagement patterns differ across proficiency groups, requiring both correlational and comparative analytical approaches.

Study Group

The participants consisted of 296 students enrolled in the English Preparatory Program at a state university in Türkiye. The sample included students from three proficiency levels: A2 (n = 18), B1 (n = 199), and B2 (n = 79), as determined by the institutional placement and progression system. The distribution reflects typical enrollment patterns in Turkish preparatory programs, where the majority of students perform at intermediate levels. All participants were receiving compulsory English instruction at the time of data collection. Participation was voluntary, and students provided informed consent prior to data collection. The sample represented diverse academic majors, including engineering, social sciences, and natural sciences, though all participants shared the common requirement of achieving English proficiency to continue their studies.

The participants were selected using a convenience sampling procedure, as they were readily accessible within the institutional context in which the study was conducted. The English Preparatory Program in which the study took place is an intensive language program designed to prepare students for English-medium instruction in their respective departments. Students receive 25 hours of English instruction per week, covering integrated language skills, including reading, writing, listening, and speaking. Assessment in the program is continuous and multifaceted, incorporating quizzes, midterm and final examinations, as well as performance-based components such as speaking and classroom participation. These structural features create a high-stakes learning environment in which academic achievement is closely tied to students' progression into their departmental studies.

Data Collection Tools

Student Engagement Measure

Data on student engagement were collected using the Student Engagement in English Classes Scale developed by Ceylan (2022). The scale conceptualizes engagement as a multidimensional construct and incorporates components related to 21st-century skills. It measures learners' engagement in English classes through 6 sub-dimensions, including critical thinking, metacognitive, self-confidential, creative and collaborative, problem solving, and motivational aspects of engagement. The scale consists of 25 items measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Ceylan (2022) reported satisfactory reliability and validity evidence for the scale, including a Cronbach's alpha coefficient of .917 and confirmatory factor analysis results supporting the proposed dimensional structure. In the present study, the scale demonstrated a good fit to the established model ($\chi 2/df$= 2.089, RMSEA= .051, TLI= .91, CFI= .93).

Academic Achievement Measures

Academic achievement data were obtained from institutional records, including students' overall achievement scores, as well as speaking, writing, and participation scores, which are integral components of assessment in the English Preparatory Program. The overall achievement score represents a composite of multiple assessment components, including mid-term examinations, final examinations, quizzes, and continuous assessment measures. Speaking scores are derived from structured oral proficiency assessments conducted by trained instructors using standardized rubrics. Participation scores reflect students' consistent involvement in classroom activities, homework completion, and attendance throughout the academic term. These multiple indicators of achievement provide a comprehensive assessment of student performance across different skill areas and assessment formats (Brown, 2010).

Data Collection Procedure

The engagement scale was administered towards the end of the academic year, after students had completed the majority of their instructional period in the English Preparatory Program. This timing was considered appropriate as it allowed participants to reflect on their cumulative engagement experiences, thereby increasing the reliability of their responses (Boekaerts, 2016). The data were collected during regular class hours under the supervision of EFL instructors, ensuring a standardized administration process. Prior to data collection, participants were informed about the purpose of the study, and their voluntary participation was secured through informed consent procedures.

Following the administration of the engagement scale, academic achievement data corresponding to the same academic term were obtained from institutional records. These records were matched with engagement data using anonymized identification codes to ensure both data integrity and participant confidentiality. This matching process enabled the researchers to directly examine the relationship between engagement and multiple indicators of academic achievement within the same timeframe.

Data Analysis

The data were analyzed using IBM SPSS statistical analysis software (v. 23). Prior to the main analyses, preliminary data screening procedures were conducted to ensure the suitability of the data for parametric testing. These procedures included checks for missing data, normality, and linearity. Skewness and kurtosis values were examined and found to fall within acceptable ranges, indicating that the assumption of normality was met.

To address the first research question, Pearson product–moment correlation analysis was employed to examine the relationships between engagement dimensions and various indicators of academic achievement. In line with conventional guidelines, correlation coefficients were interpreted in terms of both statistical significance and effect size. To answer the second research question, one-way Analysis of Variance (ANOVA) was conducted to determine whether engagement levels differed significantly across proficiency groups (A2, B1, and B2). When significant differences were identified, post-hoc comparisons using Tukey's HSD test were performed to identify the specific group differences.

Finally, sub-dimension level analyses were conducted to identify which aspects of engagement were most strongly associated with different achievement indicators. This multi-step analytical approach allowed for a comprehensive examination of both overall and dimension-specific engagement patterns.

Findings

The findings of the study are presented in three stages in line with the research questions. First, the relationships between multidimensional engagement and academic achievement indicators are examined through correlation analyses. Second, differences in engagement levels across proficiency groups (A2, B1, and B2) are explored using one-way ANOVA. Finally, the interrelationships among different components of academic achievement (speaking, writing, participation, and overall scores) are analyzed to provide a more comprehensive understanding of performance patterns.

To address the first research question, Pearson product–moment correlation analyses were conducted to examine the relationships between participants' engagement levels and their academic achievement scores (Table 1).

Table 1. Correlations between engagement dimensions and EFL achievement

		Critical Thinking	Metacg.	Self-Conf.	Creativity & Collab.	Problem Solving	Motiv.	Overall Engagement
Speaking	r	.063	.076	.153**	.031	.077	.168**	.137*
	p	.283	.194	.009	.592	.186	.004	.018
Writing	r	.041	.032	.046	.025	.131*	.054	.075
	p	.482	.582	.433	.664	.024	.351	.200
Participation	r	.123*	.278**	.040	.091	.212**	.121*	.187**
	p	.034	.000	.494	.119	.000	.037	.001
Overall Achievement	r	.098	.054	.114*	.081	.105	.104	.129*
	p	.091	.354	.050	.166	.071	.075	.027

As presented in Table 1, several statistically significant, albeit generally small, positive correlations were observed between engagement dimensions and different indicators of academic achievement. There was a significant positive correlation between the speaking scores of the participants and their overall engagement scores ($r(294) = .137$, $p = .018$), motivation ($r(294) = .168$, $p = .004$), and self-confidence subscale scores ($r(294) = .153$, $p = .009$) while there was no significant correlation between their speaking scores and critical thinking, metacognitive, creativity & collaboration and problem-solving subscale scores.

In addition, the writing scores of the participants correlated positively with their problem-solving subscale scores ($r(294) = .131$, $p = .024$). On the other hand, there was no significant correlation between participants' writing scores and critical thinking, metacognitive, self-confidence, creativity & collaboration subscale and overall engagement scores.

Furthermore, except for self-confidence and creativity & collaboration subscale scores, participation scores also correlated positively with the participants' critical thinking subscale scores ($r(294) = .123$, $p = .034$), metacognitive subscale scores ($r(294) = .278$, $p < .001$), problem-solving subscale scores ($r(294) = .212$, $p < .001$), motivation subscale scores ($r(294) = .121$, $p = .037$) and overall engagement scores ($r(294) = .187$, $p = .001$).

Finally, the overall achievement scores of the participants showed a significant positive correlation with their self-confidence subscale ($r(294) = .114$, $p = .050$) and overall engagement scores ($r(294) = .129$, $p = .027$). In contrast, there was no significant correlation with the critical thinking, metacognitive, creativity & collaboration, problem-solving and motivation subscale scores.

While these findings provide insight into the relationships between engagement and achievement, further analyses were conducted to examine whether engagement levels differ across proficiency groups.

Table 2. One-way ANOVA results by English proficiency level

		SS	df	MS	F	p	
Engagement Total	Between	454.683	2	227.342	1.001	.369	
	Within	66564.232	293	227.182			
	Total	67018.916	295				
Critical Thinking	Between	2.779	2	1.389	.118	.889	
	Within	3450.759	293	11.777			
	Total	3453.537	295				
Metacognitive	Between	20.791	2	10.396	1.451	.236	
	Within	2099.206	293	7.165			
	Total	2119.997	295				
Self-Confidence	Between	96.108	2	48.054	4.173	.016	A2 - B1 A2 - B2
	Within	3373.78	293	11.515			
	Total	3469.889	295				
Creativity & Collaboration	Between	27.168	2	13.584	1.305	.273	
	Within	3049.792	293	10.409			
	Total	3076.959	295				
Problem Solving	Between	9.742	2	4.871	.506	.604	
	Within	2822.204	293	9.632			
	Total	2831.946	295				
Motivation	Between	80.216	2	40.108	1.85	.159	
	Within	6353.244	293	21.683			
	Total	6433.459	295				

To address the second research question, a series of one-way analyses of variance (ANOVAs) were conducted to examine whether learners' proficiency levels (A2, B1, and B2) differed significantly in terms of engagement dimensions (Table 2). Descriptive statistics were followed by inferential analyses, with proficiency level entered as the independent variable.

The results indicated that self-confidence differed significantly across proficiency levels, $F(2, 293) = 4.17$, $p = .016$. Where ANOVA indicated significant differences, Tukey's HSD post-hoc test was employed to identify which groups differed significantly. Post-hoc comparisons revealed significant differences between A2–B1 and A2–B2 proficiency groups, suggesting that learners at higher proficiency levels reported greater self-confidence than those at the A2 level. In contrast, no statistically significant differences were found across proficiency levels for engagement, $F(2, 293) = 1.00$, $p = .369$; critical thinking, $F(2, 293) = 0.12$, $p = .889$; metacognitive skills, $F(2, 293) = 1.45$, $p = .236$; creativity and collaboration, $F(2, 293) = 1.31$, $p = .273$; problem-solving skills, $F(2, 293) = 0.51$, $p = .604$; or motivation, $F(2, 293) = 1.85$, $p = .159$.

Overall, these findings suggest that while most cognitive, behavioral, and motivational constructs remain relatively stable across proficiency levels, self-confidence increases significantly as learners progress from lower to higher proficiency levels, highlighting its sensitivity to language development.

In addition to group-based comparisons, further analyses were conducted to explore how different components of academic achievement relate to one another.

Table 3. Pearson correlation matrix for speaking, writing, participation, and overall achievement

		Speaking	Writing	Participation	Overall
Speaking	r	1			
	p				
Writing	r	.124*	1		
	p	.032			
Participation	r	.119*	.137*	1	
	p	.041	.018		
Overall	r	.257**	.558**	.250**	1
	p	.000	.000	.000	

In line with the third research question, Pearson product–moment correlation analyses were conducted to examine the relationships among speaking, writing, participation, and overall performance (Table 3). The results revealed several statistically significant, albeit small to moderate, positive associations among the variables.

Speaking was positively correlated with writing ($r = .12$, $p = .032$) and participation ($r = .12$, $p = .041$), indicating that learners who performed better in speaking tended to demonstrate slightly higher levels of writing performance and classroom participation. Speaking also showed a moderate positive correlation with overall performance ($r = .26$, $p < .001$). Writing exhibited a small but significant positive relationship with participation ($r = .14$, $p = .018$) and a strong positive correlation with overall performance ($r = .56$, $p < .001$), suggesting that writing contributed substantially to the total performance score. Similarly, participation was positively associated with overall performance ($r = .25$, $p < .001$), indicating that increased engagement in classroom activities was linked to higher total scores.

Taken together, these findings suggest that while speaking, writing, and participation are modestly interrelated, writing emerges as the strongest correlate of overall performance, underscoring its central role in shaping learners' academic outcomes in this context.

Discussion, Conclusion and Suggestions

The present study examined the relationship between multidimensional student engagement and academic achievement in Turkish EFL preparatory classes, with particular attention to differences across proficiency levels. Overall, the findings indicate that the engagement–achievement relationship is positive but not uniform, varying systematically across both engagement dimensions and specific language skills. This pattern not only corroborates previous research but also extends the literature by demonstrating that engagement operates as a differentiated construct whose impact is contingent on the cognitive and communicative demands of specific performance domains.

The Relationship Between Engagement and Academic Achievement

The results revealed a positive but selective pattern of associations between engagement dimensions and achievement outcomes. Specifically, overall engagement demonstrated a statistically significant, albeit modest, positive correlation with the overall achievement score, providing empirical support for the engagement-achievement hypothesis in the Turkish higher education context. This finding is consistent with previous research demonstrating a positive relationship between L2 engagement and academic success across diverse educational settings (Alzahrani, 2025; Al-Bahadli, 2020; Lei et al., 2018). However, the modest effect size aligns with the observation made by Hiver et al. (2024) that engagement-achievement correlations in naturalistic educational settings tend to be moderate, as the influence of engagement on performance is inevitably mediated by a range of contextual and instructional variables.

A particularly salient finding is the differential contribution of specific engagement sub-dimensions across skill areas. Self-confidence and motivation emerged as the primary correlates of speaking performance, whereas problem-solving was the only significant predictor of writing scores. Participation, in turn, showed the broadest pattern of associations, correlating significantly with critical

thinking, metacognitive skills, problem-solving, motivation, and overall engagement. These differentiated patterns suggest that engagement does not operate uniformly across language skills, a conclusion consistent with the argument that the predictive validity of engagement dimensions is highly context- and task-dependent (Tong & Singh, 2025; Wei, 2024).

The relationship between self-confidence and speaking performance is theoretically coherent and aligns well with established models in the SLA literature. Self-confidence, as a component of language anxiety and self-efficacy, is widely recognized as a critical affective determinant of oral performance (MacIntyre & Gregersen, 2012). Learners who possess greater self-confidence in their linguistic abilities are more likely to take interactional risks, produce output, and persist through communicative challenges, behaviors that directly contribute to superior speaking outcomes. The association between motivation and speaking further corroborates the view that affective engagement dimensions function as behavioral catalysts in oral skill development (Alzaanin, 2023; Jang et al., 2010), a finding aligned with Self-Determination Theory (Deci & Ryan, 2000) in its proposition that intrinsic motivational states energize effortful action.

The significant association between problem-solving and writing performance is noteworthy and merits theoretical elaboration. Writing in a foreign language is a cognitively demanding process requiring learners to simultaneously manage rhetorical organization, lexical selection, grammatical accuracy, and coherent argumentation. From a cognitive engagement perspective (Fredricks et al., 2004; Greene, 2015), learners who engage problem-solving strategies, including planning, monitoring, and revision, are better equipped to navigate these demands. This finding suggests that the kind of deep-processing engagement captured by the problem-solving dimension may be particularly salient in written production tasks, where there is more time for deliberate metacognitive regulation compared to spontaneous oral interaction.

The strongest and broadest engagement correlate across achievement measures was participation. Classroom participation correlated significantly with metacognitive skills, problem-solving, critical thinking, motivation, and overall engagement. While the relationship between participation and overall achievement score was modest, its consistent co-occurrence with multiple cognitive and motivational engagement dimensions suggests that active classroom involvement functions as a behavioral expression of deeper psychological investment. This interpretation is consistent with Reeve and Tseng's (2011) formulation of agentic engagement, wherein students who actively contribute to instructional processes simultaneously exercise and develop higher-order cognitive resources. Similarly, Fredricks et al. (2004) argued that behavioral engagement, including participation, serves as an observable proxy for underlying cognitive and emotional engagement processes.

The Predominance of Writing in Overall Academic Achievement

The Pearson correlation matrix among achievement measures revealed that writing demonstrated the strongest positive correlation with overall performance, substantially exceeding the contributions of speaking and participation. While speaking and participation showed small but significant inter-correlations with each other and with writing, writing emerged as the dominant predictor of composite achievement. This finding has both methodological and substantive implications. Methodologically, it suggests that the overall achievement score in this preparatory program is heavily weighted toward written assessment components (Li et al., 2022), reflecting a common characteristic of EFL evaluation systems in Turkish higher education. Substantively, it underscores writing as a complex, integrated skill that draws upon and reflects learners' broader linguistic competence, consistent with Brown's (2010) conceptualization of achievement assessment.

The Role of Language Proficiency Level

The one-way ANOVA results yielded a nuanced picture regarding the role of English proficiency. Contrary to initial expectations derived from the SLA literature suggesting that proficiency interacts with engagement to produce differential achievement outcomes (Fan et al., 2024; Waluyo & Panmei, 2021), the present study found no statistically significant differences across proficiency groups (A2, B1, B2) in terms of overall engagement, critical thinking, metacognitive skills, creativity and collaboration, problem-solving, or motivation. These null findings suggest that, within the context of a

Turkish EFL preparatory program, the psychological and cognitive engagement dispositions of learners remain relatively stable across proficiency levels.

This stability may be attributable to the structural characteristics of preparatory programs. As highly regulated institutional environments with standardized curricula, attendance requirements, and continuous assessment, such programs may impose a degree of behavioral homogeneity that constrains variance in engagement across proficiency groups. The pressure-cooker quality of Turkish preparatory programs, as noted in the present study contextual framing, may function as a leveling mechanism that motivates learners across proficiency levels to engage at broadly comparable rates, regardless of their linguistic starting point. This interpretation aligns with evidence from collectivist educational cultures suggesting that contextual demands and social compliance norms can override individual differences in engagement propensity (Li et al., 2022; Mercer, 2019). An alternative interpretation is that proficiency level may not directly shape engagement, but rather influences specific affective mediators such as self-confidence, which in turn relate to performance. This indirect pattern may explain why only self-confidence, among all engagement dimensions, exhibited sensitivity to proficiency differences. Such a finding suggests that the role of proficiency in engagement research may be more nuanced than previously assumed, operating through selective psychological pathways rather than as a broad differentiating factor.

However, the one exception to this pattern is theoretically significant: self-confidence differed significantly across proficiency groups, with post-hoc analyses indicating that A2-level learners reported significantly lower self-confidence than both B1 and B2 learners. This finding is consistent with established relationships between linguistic proficiency and self-efficacy beliefs in SLA. As learners develop greater linguistic competence, they accumulate communicative successes that reinforce positive self-efficacy appraisals (Bandura, 1997), thereby elevating their self-confidence as language users. The differential sensitivity of self-confidence, but not other engagement dimensions, to proficiency level suggests that this affective variable may occupy a unique position at the intersection of linguistic ability and engagement, functioning as both a product of proficiency development and a driver of further achievement gains. This interpretation resonates with Sadoughi and Hejazi's (2021) argument that supportive classroom environments can enhance engagement, particularly for lower-proficiency learners whose self-confidence is most susceptible to contextual influences.

The absence of proficiency-level differences in overall engagement parallels findings from Chakiso et al. (2025), who reported that self-rated proficiency exerted a weaker mediating effect on achievement than course grades, and from Qu (2025), who found that in technology-mediated learning environments, proficiency was a less influential factor than individual learning styles and psychological characteristics. Similarly, the findings are consistent with the observation that psychological resources such as growth mindset, grit, and resilience can compensate for proficiency-related disadvantages (Fan et al., 2024), suggesting that engagement may function as a relatively proficiency-independent psychological resource, at least within the intermediate-to-upper-intermediate range represented by the majority of participants (B1 and B2).

Theoretical Implications

Taken together, the findings provide support for an integrated interpretation based on both Self-Determination Theory (Deci & Ryan, 2000) and Control-Value Theory (Pekrun, 2006). While SDT helps explain how motivational resources such as self-confidence and intrinsic motivation energize engagement, CVT offers insight into how learners' perceptions of control shape emotional experiences that facilitate or constrain performance. The present findings suggest that these motivational and emotional mechanisms do not operate uniformly but interact with task-specific demands, thereby producing differentiated engagement patterns across skill domains.

The present findings contribute to theoretical debates about the mechanisms through which engagement influences achievement. The selective associations observed between specific engagement sub-dimensions and distinct achievement outcomes, such as self-confidence and motivation with speaking, problem-solving with writing, and metacognition, critical thinking, and problem-solving with participation, suggest that the engagement-achievement relationship is not monolithic but rather differentiated by the cognitive demands of specific language skills. This finding is theoretically

congruent with the Control-Value Theory of Achievement Emotions (Pekrun, 2006), which posits that learners' appraisals of task demands and their perceived control over those demands produce distinct affective and motivational states that differentially influence engagement and performance.

Moreover, the robust association between participation and multiple cognitive engagement dimensions (metacognition, critical thinking, problem-solving) supports the view that behavioral engagement functions as an observable window into learners' deeper cognitive investment (Hiver et al., 2024; Tong & Singh, 2025). This has important implications for pedagogical monitoring: teachers who observe active classroom participation may reasonably infer that learners are concurrently deploying higher-order thinking processes, even when these internal states are not directly observable.

The finding that overall engagement correlated significantly with speaking and participation but not with writing supports the argument advanced by Wang et al. (2023) that engagement mediates the relationship between affective states and achievement, and that this mediation is skill-specific. Writing, as a more private and autonomous activity, may be more susceptible to individual cognitive variables, such as problem-solving and self-regulatory strategies, than to the social and affective dimensions that drive oral participation. These nuanced patterns underscore the importance of examining engagement not only at the construct level but at the sub-dimension level and in relation to specific achievement modalities.

Practical Implications

The findings carry several meaningful implications for practitioners in Turkish EFL preparatory programs and broader intensive EFL contexts. First, given that self-confidence emerged as both a significant correlate of speaking achievement and a differentiator across proficiency groups, targeted interventions aimed at bolstering lower-proficiency learners' communicative confidence are warranted. Such interventions could include structured low-stakes speaking activities, peer feedback protocols, and explicit instruction in positive self-talk and risk-taking strategies. As engagement is characterized as a malleable, teacher-friendly quality (Mercer & Dörnyei, 2020), fostering self-confidence represents an accessible pedagogical lever with demonstrable performance implications.

Second, the centrality of writing to overall academic achievement suggests that preparatory programs should invest substantially in writing instruction that develops the metacognitive and problem-solving skills shown to be associated with written production. Writing-as-process approaches, portfolio assessments, and explicit strategy training may be particularly effective in fostering the kind of engaged writing behavior associated with higher investment and performance (Brown, 2010; Tong & Singh, 2025). Third, the association between classroom participation and multiple higher-order cognitive skills suggests that participation-rich classroom designs, featuring collaborative tasks, discussion-based activities, and inquiry-oriented instruction, may simultaneously enhance engagement, cognitive skill development, and academic outcomes. This aligns with the agentic engagement framework (Reeve, 2013; Reeve & Tseng, 2011), in which student participation is conceptualized not as passive compliance but as active co-construction of the instructional process.

Limitations and Directions for Future Research

Several limitations of the present study should be acknowledged. First, the cross-sectional correlational design precludes causal inferences about the direction of the engagement-achievement relationship. Longitudinal designs would be better equipped to trace the temporal dynamics of engagement and to determine whether changes in engagement precede, co-occur with, or follow changes in achievement (Rodriguez-Muñoz et al., 2021). Second, the considerable imbalance in group sizes across proficiency levels, with A2 learners constituting only 6% of the sample, may have constrained the statistical power of ANOVA comparisons involving this group. Future studies should seek more balanced sampling across proficiency levels, or employ alternative analytical strategies, such as propensity score matching, to address this limitation.

Third, the engagement measure employed (Ceylan, 2022) incorporates 21st-century skills components that, while theoretically enriching, diverge somewhat from the classic four-dimensional engagement model (behavioral, emotional, cognitive, agentic) that dominates the international SLA literature. Future studies might employ instruments more closely aligned with this canonical framework

to facilitate direct comparisons with the global evidence base. Fourth, the reliance on institutional records for achievement measurement, while providing ecological validity, means that the composite achievement score reflects the specific assessment weighting of the participating institution. Studies employing standardized proficiency assessments would offer greater comparability across contexts. Finally, the study did not collect data on potentially influential variables such as foreign language enjoyment, anxiety, or mindset, constructs known to interact with engagement in shaping achievement (Fan et al., 2024; He, 2025; Wang et al., 2023). Incorporating these variables in future research would allow for more comprehensive structural models of the engagement-achievement relationship. Future research may also benefit from employing more advanced analytical approaches, such as structural equation modeling or longitudinal designs, to examine potential indirect or interaction effects among engagement, proficiency, and achievement variables.

Conclusion

The present study contributes to the growing body of research on L2 learner engagement by providing evidence from a Turkish higher education preparatory context that engagement is positively, yet selectively, associated with academic achievement. The findings demonstrate that the engagement–achievement relationship is not uniform but varies across both language skills and specific engagement dimensions. In particular, self-confidence and motivation emerged as the most relevant correlates of speaking performance, while problem-solving was uniquely associated with writing. Classroom participation, as a behavioral manifestation of deeper cognitive and motivational engagement, showed the broadest pattern of associations with both engagement dimensions and achievement outcomes.

With respect to proficiency level, the findings indicate that engagement dimensions remain largely stable across groups, while self-confidence shows significant differences across proficiency levels, with higher-level learners reporting stronger self-confidence. This suggests that proficiency may not directly shape engagement as a whole, but rather influences specific affective components that are closely tied to performance.

The study offers several important theoretical and practical implications. Theoretically, it supports a differentiated view of engagement, highlighting the importance of examining sub-dimensions of engagement in relation to specific task demands. Practically, the findings suggest that instructional practices should move beyond generalized attempts to increase engagement and instead target specific engagement dimensions aligned with particular language skills. For instance, confidence-building interventions may be especially beneficial for speaking development, whereas cognitively oriented strategies such as problem-solving and metacognitive regulation may better support writing performance. Specifically, for lower-proficiency learners (A2), practitioners should implement affective scaffolding strategies during speaking activities. Instead of focusing solely on grammatical accuracy, instructors can design low-stakes, repetitive tasks that prioritize “success experiences,” thereby building the self-confidence necessary to bridge the gap toward higher proficiency levels.

Finally, the study opens several avenues for future research. Longitudinal and experimental designs are needed to better understand the causal and dynamic nature of engagement–achievement relationships. In addition, future studies may incorporate a broader range of affective and psychological variables, such as anxiety, enjoyment, and mindset, to develop more comprehensive explanatory models. Expanding research across different institutional contexts and proficiency distributions would further enhance the generalizability of findings.

Overall, the study underscores the importance of adopting a nuanced, skill-sensitive perspective on learner engagement, offering both theoretical insights and practical guidance for optimizing academic outcomes in high-stakes EFL learning environments.

References

Al-Bahadli, K. H. (2020). The correlation between Iraqi EFL college students’ engagement and their academic achievement. *International Journal of Research in Social Sciences and Humanities*, *10*(2), 231–240. https://doi.org/10.37648/ijrssh.v10i02.021

Alshammari, S. H., & Alrashidi, O. (2024). The effect of students' engagement on their learning achievement in EFL online courses: A structural equation modelling approach. *International Journal of Online Pedagogy and Course Design*, *14*(1), 1–17. https://doi.org/10.4018/IJOPCD.357875

Alzaanin, E. I. (2023). Using the Motivation and Engagement Wheel to examine the interplay between learner engagement, motivation, year level, and academic achievement in an EFL tertiary context. *Journal of Language Teaching and Research*, *14*(3), 767–779. https://doi.org/10.17507/jltr.1403.25

Alzahrani, I. H. (2025). The relationship between students' L2 engagement and learning success. *Journal of Language Teaching and Research*, *16*(1), 266–273. https://doi.org/10.17507/jltr.1601.27

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York, NY: W. H. Freeman.

Boekaerts, M. (2016). Engagement as an inherent aspect of the learning process. *Learning and Instruction*, *43*, 76-83. https://doi.org/10.1016/j.learninstruc.2016.02.001

Brown, H. D. (2010). *Language assessment: Principles and classroom practices.* White Plains, NY: Pearson Education / Longman.

Ceylan, A. (2022). *The impact of action research on EFL learners' engagement*. Manisa: Turkuazkey Academic Publishing.

Chakiso, Z. T., Bushisso, E. W., & Wanna, W. (2025). Unveiling predictive validity of English language exam on student achievement: mediated by self-rated English proficiency. *Language Testing in Asia*, *15*(1), 26. https://doi.org/10.1186/s40468-025-00356-x

Christenson, S. L., Reschly, A. L., & Wiley, C. (2012). Preface. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *The handbook of research on student engagement* (pp. v-ix). NY: Springer.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01

Dincer, A., Yeşilyurt, S., Noels, K. A., & Vargas Lascano, D. I. (2019). Self-determination and classroom engagement of EFL learners: A mixed-methods study of the self-system model of motivational development. *Sage Open*, *9*(2), 2158244019853913. https://doi.org/10.1177/2158244019853913

Eren, A., & Rakıcıoğlu-Söylemez, A. (2023). Language mindsets, perceived instrumentality, engagement and graded performance in English as a foreign language students. *Language Teaching Research*, *27*(3), 544-574. https://doi.org/10.1177/1362168820958400

Fan, N., Yang, C., Kong, F., & Zhang, Y. (2024). Low-to mid-level high school first-year EFL learners' growth language mindset, grit, burnout, and engagement: Using serial mediation models to explore their relationships. *System*, *125*, 103397. https://doi.org/10.1016/j.system.2024.103397

Finn, J. D., & Zimmer, K. S. (2012). Student engagement: What is it? Why does it matter?. In *Handbook of research on student engagement* (pp. 97-131). Boston, MA: Springer US.

Fredricks, J. A. (2015). Academic engagement. In J. D. Wright (Ed.), *International encyclopedia of the social & behavioral sciences* (Vol. 2, pp. 31–36). Abingdon, UK: Routledge.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59–109. https://doi.org/10.3102/00346543074001059

Greene, B. A. (2015). Measuring cognitive engagement with self-report scales: Reflections from over 20 years of research. *Educational Psychologist*, *50*(1), 14-30. https://doi.org/10.1080/00461520.2014.989230

He, H. (2025). Investigating the roles of academic emotions in the relationship between agentic engagement and EFL achievement among Chinese undergraduate students. *Frontiers in Psychology*, *16*, 1661196. https://doi.org/10.3389/fpsyg.2025.1661196

Hiver, P., Al-Hoorie, A. H., Vitta, J. P., & Wu, J. (2024). Engagement in language learning: A systematic review of 20 years of research methods and definitions. *Language Teaching Research*, *28*(1), 201-230. https://doi.org/10.1177/13621688211001289

Jang, H., Reeve, J., & Deci, E. L. (2010). Engaging students in learning activities: It is not autonomy support or structure but autonomy support and structure. *Journal of Educational Psychology, 102*(3), 588–600. https://doi.org/10.1037/a0019682

Lei, H., Cui, Y., & Zhou, W. (2018). Relationships between student engagement and academic achievement: A meta-analysis. *Social Behavior and Personality*, *46*(3), 517–528. https://doi.org/10.2224/sbp.7054

Li, J. (2024). Exploring the relationship between learner engagement and language achievement in blended learning context. *International Journal of Learning and Development*, *14*(4), 30–47. https://doi.org/10.5296/ijld.v14i4.22245

Li, C., Feng, E., & Li, S. (2025). Boredom and achievement in L2 learning: a meta-analysis. *Applied Linguistics Review*, *16*(5), 2373-2399.

Li, J., King, R. B., & Wang, C. (2022). Profiles of motivation and engagement in foreign language learning: Associations with emotional factors, academic achievement, and demographic features. *System*, *108*, 102820. https://doi.org/10.1016/j.system.2022.102820

Li, C., & Wei, L. (2023). Anxiety, enjoyment, and boredom in language learning amongst junior secondary students in rural China: How do they contribute to L2 achievement? *Studies in Second Language Acquisition*, *45*(1), 93–108. https://doi.org/10.1017/S0272263122000031

Liu, M., Noordin, N., Ismail, L., & Abdrahim, N. A. (2023). Relationship between student engagement and academic achievement in college English education for non-English majors in China. *International Journal of Learning, Teaching and Educational Research*, *22*(8), 203–232. https://doi.org/10.26803/ijlter.22.8.12

Luan, L., Jing, B., Hong, J. C., & Lin, P. H. (2025). The mediating effects of online learning engagement on the relationship between Chinese university students' L2 grit and their English language achievement. *System*, *131*, 103689. https://doi.org/10.1016/j.system.2025.103689

MacIntyre, P., & Gregersen, T. (2012). Affect: The role of language anxiety and other emotions in language learning. In *Psychology for language learning: Insights from research, theory and practice* (pp. 103-118). London: Palgrave Macmillan UK.

Mercer, S. (2019). Language learner engagement: Setting the scene. In Gao, X. (Ed.), *Second Handbook of English Language Teaching* (pp. 643–660). Springer International Handbooks of Education. https://doi.org/10.1007/978-3-030-02899-2_40

Mercer, S., & Dörnyei, Z. (2020). *Engaging language learners in contemporary classrooms*. Cambridge, UK: Cambridge University Press.

Pekrun, R. (2006). The control-value theory of achievement emotions: Assumptions, corollaries, and implications for educational research and practice. *Educational Psychology Review*, *18*(4), 315-341. https://doi.org/10.1007/s10648-006-9029-9

Qu, M. (2025). Future of language learning: unveiling the power of AI-driven adaptive platforms to tailor language learning based on learners' needs, proficiency and learning styles. *European Journal of Education*, *60*(2), e70116. https://doi.org/10.1111/ejed.70116

Reeve, J. (2013). How students create motivationally supportive learning environments for themselves: The concept of agentic engagement. *Journal of Educational Psychology*, *105*(3), 579-595. https://doi.org/10.1037/a0032690

Reeve, J., & Tseng, C. M. (2011). Agency as a fourth aspect of students' engagement during learning activities. *Contemporary Educational Psychology*, *36*(4), 257-267. https://doi.org/10.1016/j.cedpsych.2011.05.002

Reschly, A. L., & Christenson, S. L. (Eds.). (2022). *Handbook of research on student engagement* (pp. 3-24). New York: Springer.

Rodríguez-Muñoz, A., Antino, M., Ruiz-Zorrilla, P., & Ortega, E. (2021). Positive emotions, engagement, and objective academic performance: A weekly diary study. *Learning and Individual Differences*, *92*, 102087. https://doi.org/10.1016/j.lindif.2021.102087

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*, 101060. https://doi.org/10.1016/j.stueduc.2021.101060

Seligman, M. E., Ernst, R. M., Gillham, J., Reivich, K., & Linkins, M. (2009). Positive education: Positive psychology and classroom interventions. *Oxford Review of Education*, *35*(3), 293-311. https://doi.org/10.1080/03054980902934563

Shang, Y., & Ma, L. (2024). Classroom anxiety, learning motivation, and English achievement of Chinese college students: The mediating role of self-efficacy. *Acta Psychologica*, *251*, 104550. https://doi.org/10.1016/j.actpsy.2024.104550

Skinner, E. A., & Belmont, M. J. (1993). Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year. *Journal of Educational Psychology, 85*(4), 571–581. https://doi.org/10.1037/0022-0663.85.4.571

Skinner, E. A., & Pitzer, J. (2012). Developmental dynamics of student engagement, coping, and everyday resilience. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 21–44). New York, NY: Springer.

Skinner, E. A., Kindermann, T. A., & Furrer, C. J. (2009). A motivational perspective on engagement and disaffection: Conceptualization and assessment of children's behavioral and emotional participation in academic activities in the classroom. *Educational and Psychological Measurement*, *69*(3), 493-525. https://doi.org/10.1177/0013164408323233

Tong, Y., & Singh, B. S. M. (2025). The interaction between learning engagement and academic achievement in second language acquisition: A multivariate analysis. *Forum for Linguistic Studies*, *7*(7), 386–401. https://doi.org/10.30564/fls.v7i7.10142

Wang, H., Wang, Y., & Li, S. (2023). Unpacking the relationships between emotions and achievement of EFL learners in China: Engagement as a mediator. *Frontiers in Psychology*, *14*, 1098916. https://doi.org/10.3389/fpsyg.2023.1098916

Wang, Z., Zhao, Q., & Ma, Y. (2024). Exploring the relationship between achievement emotions, student engagement, and foreign language achievement among Chinese L3 learners. *System*, *127*, 103548. https://doi.org/10.1016/j.system.2024.103548

Wei, Y. (2024). The relationship between Chinese high school English learners' classroom engagement and English academic achievement: A case study of English learners in a high school in Henan China. *Journal of Education, Humanities and Social Sciences*, *26*, 691–697. https://doi.org/10.54097/efe05v10

Waluyo, B., & Panmei, B. (2021). English proficiency and academic achievement: Can students' grades in English courses predict their academic achievement?. *Mextesol Journal*, *45*(4), n4. https://doi.org/10.61871/mj.v45n4-17

Yukselir, C., & Harputlu, L. (2014). An investigation into EFL prep-class students' academic emotions. *Journal of Language and Linguistic Studies*, *10*(2), 100-119. https://izlik.org/JA55DT83KK

Zhai, K. (2025). Exploring the relationships between academic buoyancy, engagement, and achievement in English reading among EFL learners. *SAGE Open*, *15*(3), 1–13. https://doi.org/10.1177/21582440251357156

Zhang, X., Li, F., Liu, W., & Wu, P. (2025). The impact of foreign language enjoyment and engagement on students' learning outcome. *Journal of Infrastructure, Policy and Development*, *9*(1), 10529. https://doi.org/10.24294/jipd10529

Zhou M, & Wang, X. (2024). The influence of enjoyment, boredom, and burnout on EFL achievement: Based on latent moderated structural equation modeling. *PLoS ONE 19*(9): e0310281. https://doi.org/10.1371/journal.pone.0310281

Zou, Y., & Wang, H. (2024). Exploring the relationship between value belief, behavioral engagement, and academic achievement in the Chinese EFL learning context. *Studies in Linguistics and Literature*, *8*(4), 89–109. https://doi.org/10.22158/sll.v8n4p89