



The impacts of self-regulation and language learning anxiety on the English competence of university students in Aceh, Indonesia

ABSTRACT - Previous research has established that self-regulation plays a critical role in successful language acquisition. In parallel, language learning anxiety has been widely examined, though its influence is often understood through its negative relationship with self-regulatory abilities, suggesting that anxious learners struggle to deploy effective learning strategies. However, the direct and interactive effects of these two psychological constructs on English language achievement remain underexplored, particularly within Indonesian higher education contexts. To address this gap, the present study investigated the nature and extent to which language learning anxiety and self-regulation influence English language learning achievement among Indonesian EFL learners. Participants were 151 first-year university students from three faculties at Universitas Serambi Mekkah, Aceh, Indonesia, selected through cluster sampling. Data were collected using three instruments: (1) a validated self-regulation questionnaire, (2) a validated English language learning anxiety scale, and (3) a standardized test measuring general English competence. Regression analyses were employed to examine the predictive relationships among these variables. The findings showed that neither self-regulation nor language learning anxiety significantly predicted overall English competence. However, self-regulation showed a slightly greater contribution to English achievement than language learning anxiety, although neither effect was statistically significant. Notably, language learning anxiety significantly predicted self-regulation scores, indicating that anxious learners may struggle with self-regulatory capacity. Additionally, a weak positive correlation emerged between language learning anxiety and reading performance. These findings suggest that language learning anxiety does not directly determine competence success or failure; rather, it functions as a significant predictor of self-regulatory capacity and selectively influences specific language sub-skills such as reading comprehension.

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1. Introduction

Self-regulation, defined as the capacity to control one's thoughts, emotions, and behaviors in pursuit of long-term goals, has been identified as a critical factor influencing learning achievement across diverse educational contexts (Zimmerman, 2000). Research in educational psychology consistently highlights the integral role of self-regulatory processes in determining students' academic success and performance outcomes (Boekaerts, 1999). Through self-regulation, individuals employ metacognitive strategies, including goal setting, planning, monitoring, and reflecting on learning progress, which substantially enhance learning outcomes (Zimmerman & Schunk, 2011).

According to Watkins (2022), fostering relatedness and autonomy in language classrooms creates low-anxiety learning environments and promotes enjoyment, thereby increasing learners' intrinsic motivation. In a comparative study of Hungarian EFL students with low versus high anxiety during conversations with native speakers, Tóth (2017) reported that low-anxiety students perceived the conversation as communicative interaction, whereas high-anxiety students viewed it as personally consequential, resulting in self-centered responses characterized by embarrassment and anxiety. Rubio-Alcalá (2017) found that language anxiety correlates negatively with self-esteem levels; as anxiety increases, self-esteem decreases. He recommended that teachers adopt facilitator roles to mitigate language learning anxiety by remaining attentive to students' affective states and responding accordingly (p. 209).

1.1. Self-regulation, language learning anxiety, and English language competence

Self-regulation constitutes a fundamental factor in shaping students' ability to control and manage behaviors and emotions, thereby enhancing learning outcomes (Zimmerman & Schunk, 2001). Concurrently, anxiety plays a significant role in determining language learning success, as elevated anxiety levels can impede effective performance in language acquisition (Özdemir & Seçkin, 2025). The interplay among these three components warrants systematic investigation, as self-regulation and language learning anxiety are theorized to significantly influence EFL students' linguistic competence (Apridayani et al., 2023). Consequently, scholarly attention has increasingly shifted toward examining affective dimensions including emotion, motivation, and self-regulatory capacity in relation to EFL learning outcomes.

Previous studies have examined how self-regulated learning and language learning anxiety relate to English language competence in different educational contexts. For instance, Li et al. (2024) employed the CVT cognitive-motivational model to examine the role of self-regulation and its relationship with students' affective dimensions. Their findings indicated that students' emotional states influence academic performance through self-regulated learning. Similarly, Tareen et al. (2023) confirmed that fostering self-regulated learning enhances EFL students' language competence. Furthermore, Su et al. (2023) noted that self-regulation represents a significant determinant of EFL students' language competence. Additionally, Aydin et al. (2025) emphasized the importance of positive student-teacher interactions in online learning environments, which promote higher SRL levels and reduce learning anxiety. Istikharoh and Utami (2024) argued that EFL students can improve language competence through

autonomous learning, as it enables them to manage and control the learning process to achieve their objectives.

Conversely, Alamer and Lee (2024) found that language competence influences students' language anxiety, not vice versa. They further noted that well-prepared students tend to exhibit lower anxiety levels. Consequently, teachers must develop strategies to mitigate students' learning anxiety to create effective learning atmosphere.

Overall, while the benefits of self-regulated learning are well established, the role of language anxiety in language learning remains ambiguous. Although anxiety is frequently linked to lower self-esteem, its direct impact on language learning achievement has not been consistently demonstrated. In contrast, anxiety appears to be determined by language competence, with higher competence associated with lower anxiety. Therefore, further research is needed to determine whether anxiety predicts language achievement and to clarify the direction of this relationship.

1.2. Self-regulation and language learning anxiety in Indonesian educational contexts

Learning contexts, including school settings and cultural environments, significantly affect students' psychological states, particularly their anxiety and self-regulation levels. Consistent with international findings, Indonesia's educational context demonstrates the positive contribution of self-regulation to academic achievement. Sumintono and Subekti (2017) reported that Indonesian high school students employ nuanced self-regulatory strategies, including goal setting, time management, and self-monitoring, to effectively navigate academic responsibilities. However, Suryadi (2018) suggested that socioeconomic status and parental involvement significantly shape children's self-regulatory abilities, highlighting the importance of contextual factors in understanding self-regulation within Indonesian education.

Cultural factors substantially influence anxiety experienced by Indonesian EFL learners. In Indonesian society, norms such as respect for authority and failure avoidance may heighten learners' fear of making mistakes or receiving negative evaluations (Alwasilah, 2002). This cultural concern is reinforced in educational settings, where students may worry about criticism from teachers or parents (McKay & Wong, 1996). Additionally, the societal importance placed on English competence for academic and career advancement further exacerbates anxiety levels among Indonesian EFL learners. English is frequently perceived as a gateway to higher education opportunities and improved employment prospects both domestically and internationally (Fauziati, 2016). Consequently, pressure to achieve high English competence can generate significant stress and anxiety, particularly when learners perceive their language skills as inadequate. Thus, measuring the extent to which anxiety levels negatively contribute to language learning achievement remains essential.

Based on the reviewed literature, both self-regulation and language learning anxiety play significant roles in determining students' language learning outcomes. However, studies specifically examining the interplay between these factors remain limited, particularly in contexts where both self-regulated learning and learning anxiety are increasingly prevalent among Indonesian students. Therefore, this study aims to determine which specific factor-

regulation or language learning anxiety most strongly influences students' language learning performance. The research question guiding this investigation is as follows: To what extent do self-regulatory skills and language learning anxiety influence the English language competence of first-year students at Universitas Serambi Mekkah?

2. Literature review

2.1. The notion of self-regulation and language learning anxiety

The concept of self-regulation has been extensively discussed across various disciplines. In educational contexts, self-regulation plays a pivotal role in shaping academic success (Greene, 2017). Self-regulation in language learning can be defined as students' ability to autonomously manage cognitive, emotional, and motivational aspects during language acquisition (Bandura, 1991; Baumeister & Vohs, 2007). Through self-regulation strategies, students can control their learning processes and manage their approaches to achieving objectives (Yuksel et al., 2023). Self-regulation is considered a non-cognitive factor that governs individuals' commitment to achieving their goals (Morosanova et al., 2022).

Akcayoglu and Ozer (2023) confirmed a strong correlation between self-efficacy, self-regulated learning, and language acquisition, arguing that these three aspects have significant implications for foreign language teaching and learning processes. Furthermore, Wang (2021) claimed that learners' success is determined not only by cognitive skills but also by non-cognitive skills, including strong goal-directed desire.

Meanwhile, language learning anxiety refers to individuals' emotional responses that impede language learning or acquisition (Alnuzaili & Uddin, 2020). Language learning anxiety manifests in various forms, including fear and nervousness (Bhatti & Memon, 2016).

2.2. Self-regulation in language learning

The language learning process is complex, requiring both linguistic capability and self-regulation skills. Social cognitive theory highlights reciprocal interactions among cognitive, behavioral, and environmental factors (Rumjaun & Narod, 2020). In language learning contexts, learners' behaviors affect their linguistic development processes. Learners demonstrating strong self-regulation skills are more likely to persist in language tasks and achieve higher competence levels. Accordingly, this study is underpinned by Bandura's social cognitive theory.

Multiple studies consistently underscore positive correlations between self-regulation and language competence. Tsuda and Nakata (2013) revealed that through self-regulation, learners can explore intrinsic factors such as learning strategies and motivation, which facilitate English competence acquisition. Similarly, Teng and Zhang (2022) asserted that self-regulation principles provide substantial foundations for enhancing language learning, including second and foreign language learning. Erdogan (2017) investigated 860 students from various departments at Turkish state universities, confirming a medium positive correlation between self-regulation and language learning strategies. Zahidi and Ong (2023) examined self-efficacy and self-regulated learning strategies in Malaysian ESL contexts, indicating relationships among self-efficacy, self-regulated learning strategies, and English language competence. Furthermore,

Canbay (2020) suggested that self-regulation strategies should be taught at early ages to support students' language learning development.

As stated by Erdogan (2017), self-regulation and language learning strategies are two components that play pivotal roles in determining language learning success. In language learning contexts, self-regulation can be defined as the ability to direct cognitive, emotional, and motivational aspects to shape the language learning process (Huang, 2022). Seker (2016) investigated the role of self-regulation strategies in 222 foreign language learners' achievement, finding that self-regulated learning strategies enhance autonomous learning. Additionally, children with early self-regulation abilities demonstrate higher literacy skills and language mastery compared to those with later self-regulation development (Skibbe et al., 2019).

Moreover, abundant studies have demonstrated correlations between self-regulation and English competence. Abe et al. (2021) investigated this relationship through flipped classrooms involving undergraduate students from Japan and Malaysia, revealing that self-regulation skills improve English competence. Maghsoudi et al. (2022) also proved a significant relationship between self-regulation and English competence.

Based on the evidence examined, self-regulation plays a significant role in influencing students' language competence. Therefore, it can be concluded that self-regulation has a strong relationship with language mastery, including English competence.

2.3. Self-regulation, language learning anxiety, and English competence

As noted earlier, self-regulation positively influences language learning processes. Language learning anxiety is conceptualized as an indirect factor affecting language learning that can be modified through self-regulatory training, although some studies have reported its insignificant role in language learning success. Recently, numerous studies have extensively examined the interplay among language anxiety, self-regulatory ability, and language achievement.

Martirossian and Hartoonian (2015) involved 100 Iranian university students majoring in TEFL and found negative but significant correlations between foreign language anxiety levels, including communication apprehension, test anxiety, and fear of negative evaluation, and cognitive strategy use and self-regulation. Lee and Ko (2023) identified the effects of self-regulation and goal orientation in reducing speaking anxiety, indicating that both factors can manage students' speaking anxiety, thereby improving speaking performance. This finding is supported by Sari (2022), who conducted an experimental study investigating speaking anxiety symptoms in 20 senior high school students, demonstrating that self-regulation training positively impacted speaking ability improvement. Piechurska-Kuciel (2011) found that students with higher teacher support levels experience lower language anxiety compared to peers with lower teacher support.

Language anxiety has also been reported to impact language skills differentially, with oral subskills such as speaking requiring lower anxiety levels. A significant, high correlation was found between classroom anxiety and speaking anxiety (Gkonou, 2011). Additionally, several studies reported negative, significant correlations between foreign language speaking skills and

language learning anxiety (Liu, 2006; Wilson, 2006; Woodrow, 2006; Kitano, 2001; MacIntyre et al., 1997; Piechurska-Kuciel, 2008; Szyszka, 2011). Conversely, a study involving Chinese students found that more than half generally did not feel anxious when reading English and were confident and satisfied with their English reading competence (Lu & Liu, 2015), suggesting lower anxiety in print-based language activities.

Nevertheless, the effect of language learning anxiety on language learning achievement was reported as absent in studies by Apridayani et al. (2023) and Jin et al. (2015), presenting different perspectives. The first study, employing mixed-method design with Thai EFL learners, found that language learning anxiety is not a crucial predictor of language learning outcomes (Apridayani et al., 2023). The latter reported an interesting perspective on language anxiety and competence level. In a longitudinal study investigating anxiety stability over time among Chinese university students learning English and Japanese, the study found a negative yet significant and weak correlation between anxiety level and increased competence, with no correlation when competence remained low.

Subsequently, Shih (2019) reported that L2 anxiety has a negative but significant impact on self-efficacy, self-regulatory strategies, goal-setting processes, and learning achievement. To date, this remains the only study demonstrating negative contributions of language anxiety to learning achievement.

In conclusion, self-regulation and language learning anxiety represent integral dimensions in language learning contexts, offering insights into multifaceted language acquisition processes. Interestingly, while numerous studies have provided substantial evidence regarding self-regulation's influence, research on the independent role of language learning anxiety remains scarce. Investigating the type and degree of contribution each factor makes to language competence is essential for deepening understanding of educational psychology, particularly regarding language learning.

3. Method

This study employed regression analysis as its primary analytical approach to determine which of the two psychological factors more strongly predicts English learning success.

3.1. Participants

The participants comprised 151 male and female university students studying various subjects at Universitas Serambi Mekkah, Aceh Province, Indonesia. The sample included 27 male and 124 female students selected through cluster sampling technique. All participants were first-year students from two data collection batches conducted in September 2023 and February 2024. Students represented majors in Economics, Education, and Public Health.

3.2. Instruments

Two questionnaires and one English skills test were administered to participants. The first and second questionnaires were adopted from Yuksel et al. (2023), selected because their validity had been established through Confirmatory Factor Analysis (CFA) (Yuksel et al., 2023, pp. 409-

410). The reliability of both measures was also tested using Cronbach's Alpha ($\alpha = 0.91$ and 0.96 respectively) (Yuksel et al., 2023, pp. 409-410), indicating very high internal consistency.

Specifically, the first questionnaire, the Self-Regulation Scale developed by Yuksel et al. (2023), consists of eight items measuring self-regulation skills. The scale demonstrated high reliability in the present study, with a Cronbach's Alpha of .887. The second questionnaire, the Language Learning Anxiety Scale, also developed by Yuksel et al. (2023), contains 12 items assessing language learning anxiety. This questionnaire showed very high internal consistency (Cronbach's Alpha = .930). Lastly, the English Competence Test was adopted from the Cambridge Four Corner Level 1 digital textbook (2019). The test consisted of three sections—Listening, Reading, and Grammar—administered via pen-and-paper method. This test was selected for its ease of delivery and because it measures competence in using English rather than declarative knowledge about the language.

3.3. Data analysis

The present study employed IBM SPSS Statistics 25 for data analysis. Data analysis procedures were conducted through several systematic steps. First, data for each variable were rated and labeled. Second, descriptive statistics were computed to summarize the distribution and central tendencies of each variable. Third, prominent results from questionnaire items were discussed to provide deeper insights into the studied variables. Fourth, Pearson correlation analyses were performed to explore relationships among sub-data. Finally, regression analyses were conducted, with independent variables tested individually against the dependent variable, followed by comparative analysis to identify factors that strongly predicted students' English language competence.

4. Findings

Prior to addressing the extent to which self-regulation and language learning anxiety contribute to students' English competence, the descriptive statistics for all studied variables and the elaboration of questionnaire items are presented.

4.1. Descriptive statistics

Table 1 presents the descriptive statistics (Mean and Standard Deviation) for English Overall score, Self-Regulation, and Language Learning Anxiety.

Table 1

Descriptive statistics of English competence, self-regulation, and LLAS.

Variable	N	Minimum	Maximum	Mean	Std. Deviation
English Competence	144	.00	32.00	14.6944	4.92216
Self-Regulation	145	.00	60.00	20.5241	11.81341
LLAS	151	.00	38.00	18.8278	10.59922
Valid N (listwise)	138				

Table 1 demonstrates the mean, minimum, maximum, and standard deviation of each variable. The mean English competence score was 14.7 (SD = 4.9), with a minimum of zero and maximum of 32. The mean Self-Regulation score was 20.5 (SD = 11.8), ranging from 0 to 60. The mean LLAS score was 18.8 (SD = 10.6), ranging from 0 to 38. Overall, participants demonstrated relatively low English test scores, relatively low self-regulation scores on average, and moderate language learning anxiety levels.

As illustrated in Figure 1, students rated themselves highest on two self-regulatory aspects: methods for increasing vocabulary (Item 6) and personal techniques for making boring learning activities engaging (Item 8). Conversely, they rated themselves lowest on two aspects: initiative to seek assistance from others regarding unfamiliar content and effort to find opportunities for practicing English skills (Items 2 and 3, respectively). These findings suggest that participants struggle with self-regulatory behaviors requiring others' involvement while finding individual-mode learning more manageable.

Regarding language learning anxiety (Figure 2), students found language classes more intimidating compared to other classes (Item 6) and felt reluctant to volunteer answers during classroom discussions, considering such situations embarrassing (Item 5). Meanwhile, tests and requirements for unprepared speaking were identified as least anxiety-triggering (Items 4 and 8). These findings suggest that participants perceive the learning environment—rather than academic consequences—as the primary source of anxiety.

The following table 2 presents descriptive statistics for students' English sub-skills. The findings indicate that speaking skills generated the highest anxiety levels among learners, followed by listening and writing, while reading appeared to be the least anxiety-provoking skill. This pattern reinforces the notion that real-time performance demands and social evaluation in interactive language use contribute more to learner anxiety than individual comprehension tasks.

Table 2

Descriptive statistics of English sub-skills.

	N	Minimum	Maximum	Mean	Std. Deviation
Listening (15)	141	0	11	5.28	2.054
Reading (15)	141	0	11	5.41	2.312
Grammar (20)	141	0	12	4.45	1.969
Valid N (listwise)	141				

Table 2 clearly shows participants' low English competence levels, as mean scores for all three sub-skills were less than half of the maximum possible scores. The highest attained scores were 11 out of 15 for Listening and Reading, and 12 out of 20 for Grammar.

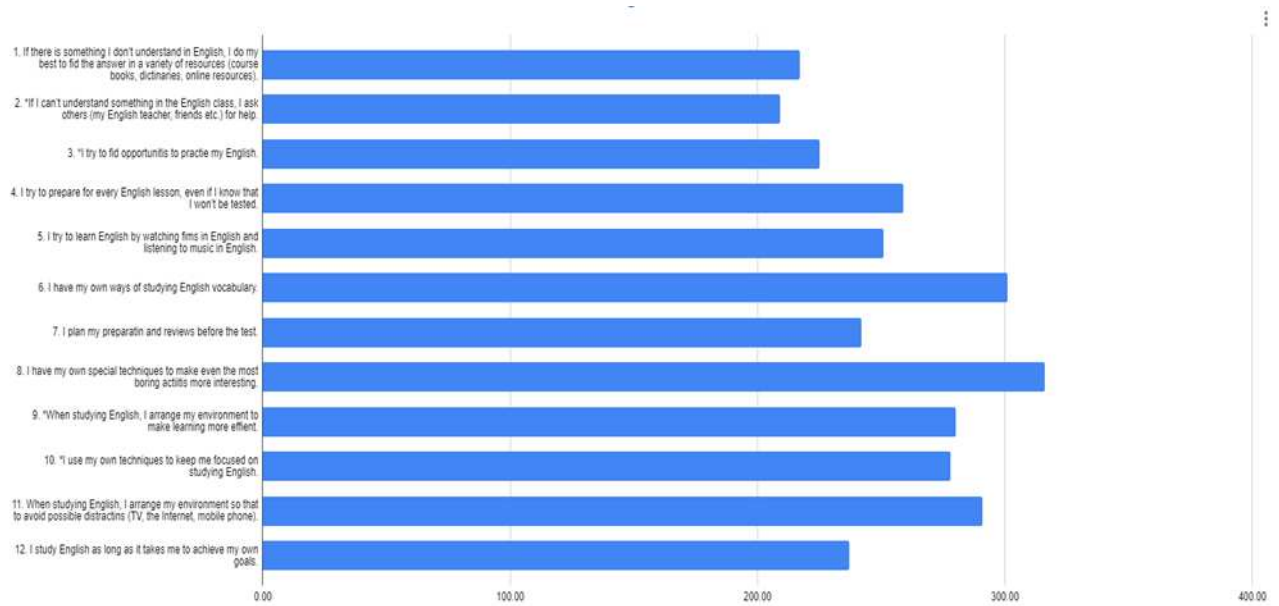


Figure 1. The likert-scale of self-rated self-regulatory

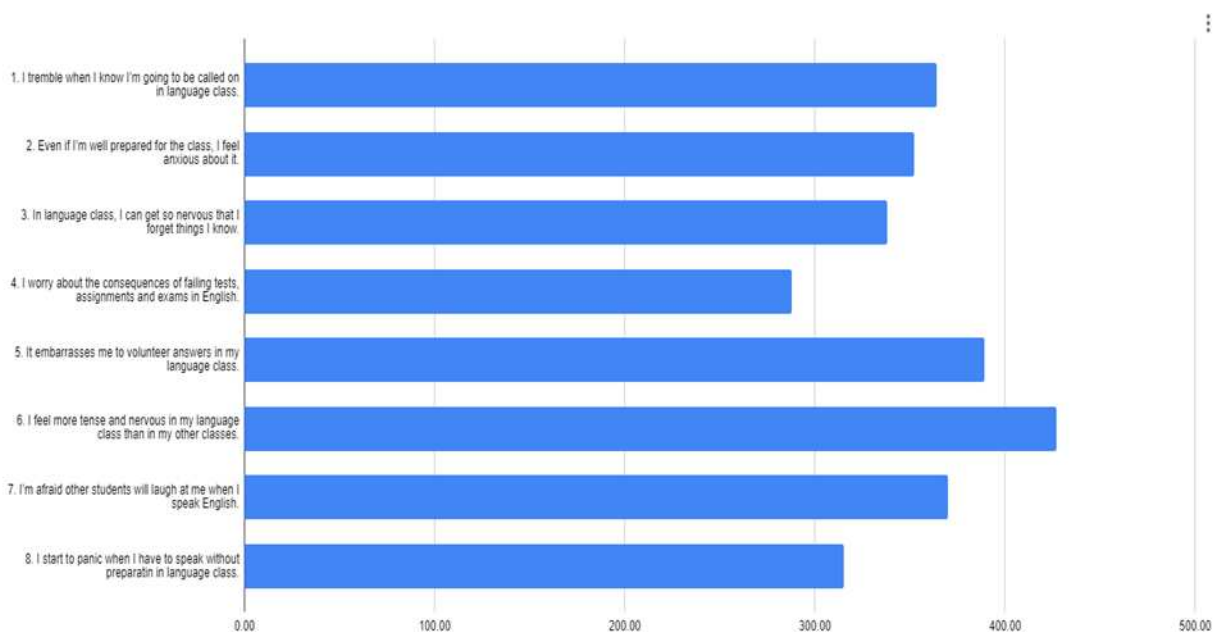


Figure 2. The Likert-scale of language-learning anxiety

4.1.1. The correlation between English competence and students' language learning anxiety and self-regulation skill

Table 3

Pearson correlation analysis of variables (N= 141).

	English Competence	Listening	Reading	Grammar	Self-Regulation	LLAS
English	1.000	.618	.716	.556	.080	.007

Competence	.	.000**	.000**	.000**	.174	.468
Listening	.618 .000**	1.000 .	.303 .000**	.064 .226	.077 .183	.018 .418
Reading	.716 .000**	.303 .000**	1.000 .	.184 .015*	.055 .260	.124 .072*
Grammar	.556 .000**	.064 .226	.184 .015*	1.000 .	.059 .242	-.061 .238
Self-Regulation	.080 .174	.077 .183	.055 .260	.059 .242	1.000 .	.308 .000**
LLAS	.007 .468	.018 .418	.124 .072	-.061 .238	.308 .000**	1.000 .

** Significance level at 0.001

* Significance level at 0.05

Pearson correlation tests revealed no statistically significant correlations between English competence and either self-regulation or language learning anxiety ($p = .174$ and $p = .468$, respectively, both $> .05$). However, statistically significant correlations emerged across English sub-scores and between psychological factors. Reading skill correlated most strongly with Listening ($r = .303$, $p < .001$) and moderately with Grammar ($r = .184$, $p = .015$). Grammar skill correlated moderately but non-significantly with Listening ($r = .064$, $p = .226$). These findings indicate that students with higher English reading skills tend to possess higher listening comprehension and grammar competence.

Notably, the correlation between LLAS and Self-Regulation was statistically significant ($p < .001$) with moderate strength ($r = .308$). This result indicates a positive association between language learning anxiety and self-regulation in this sample. However, the direction and meaning of this relationship require cautious interpretation.

4.1.2. Regression analyses

To determine which factor more strongly predicts English competence, regression analyses were conducted using Self-Regulation score as the predictor, followed by LLAS.

a. The extent and the significance of self-regulatory skill as the predicting factor

Table 4

Self-regulation as the predictor for English competence (Significance level).

	Sum of Squares	df	Mean Square	F	Sig.
Regression	33.281	1	33.281	1.377	.243
Residual	3431.274	142	24.164		
Total	3464.556	143			

The regression analysis using Self-Regulation as predictor yielded $p = .243$ ($> .05$), indicating non-significant prediction of English competence, $F(1, 142) = 1.377$, $p = .243$. Only

1.0% (R Square = .010) of variance in English competence was explained by Self-Regulation levels.

Table 5

Self-regulation as the predictor for English competence (Percentage of Contribution).

R	R Square	Adjusted Square	R Std. Error of the Estimate	Durbin-Watson
.098	.010	.003	4.916	1.822

Table 5 informs that only as much as the 1.0 % (R Square = 0.010) variance in the level of English Competence is explained by the level of Self-Regulatory skills.

b. The extent and the significance of self-regulatory skill as the predicting factor

Table 6

LLAS as the predictor for English competence (Significance level).

	Sum of Squares	df	Mean Square	F	Sig.
Regression	15.621	1	15.621	.643	.424
Residual	3448.935	142	24.288		
Total	3464.556	143			

Regarding the power and the level of significance of the LLAS factor in determining the university students' English language competence, the result of the regression analysis (demonstrated by Tables 5 & 6) shows that the LLAS has a positive but a not statistically significant portion in determining the students' English competence score (p-value = 0.424, with the significance level on 0.05 or lower).

Table 7

LLAS as the predictor for English competence (Percentage of Contribution).

R	R Square	Adjusted R Square	R Std. Error of the Estimate	Durbin-Watson
.067	.005	-.003	4.928	1.879

The R square value is at 0.005, which means that only 0.5% of the variance in the English Language Competence is determined by the language learning anxiety factor. Lastly, the other regression analysis was carried out to see if the LLAS predict Self-regulation score. The result of the significance level is shown to be significant at p = 0.003 (See Table 8).

Table 8

LLAS as the predictor for self-regulation (Significance level).

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1252.295	1	1252.295	8.893	.003*
Residual	20982.725	149	140.824		
Total	22235.020	150			

LLAS explained 5.6% of the variance in self-regulation ($R^2 = .056$), as shown in Table 9.

Table 9

LLAS as the predictor for Self-Regulation (Percentage of Contribution).

R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
.237	.056	.050	11.867	1.809

LLAS significantly predicted Self-Regulation scores positively ($p = .003$), explaining 5.6% of variance ($R \text{ Square} = .056$).

5. Discussion

Overall, the data indicate that English language competence among Acehnese university students is not significantly predicted by either language anxiety or self-regulatory scores. The significant role of self-regulation in determining language competence reported in previous studies (Erdogan, 2017; Tsuda & Nakata, 2013; Skibbe et al., 2019; Teng & Zhang, 2022; Zahidi & Ong, 2023) was not demonstrated in the present investigation. This discrepancy may be attributed to the lack of English high achievers and high self-regulation scorers in the sampled population. With mean self-regulation scores of only 20.1 out of 60, most participants exhibited relatively low self-regulation skills. Had the data included more dynamic values, the likelihood of detecting significant roles of self-regulation in English competence would have been higher.

Despite non-significance, the contribution strength from analyses revealed that anxiety factors have weaker impact compared to self-regulation. This indicates that students' ability to regulate their learning is more important than anxiety levels for language learning achievement. This finding aligns with Guo & Liu (2018) and Sari (2022), who underscored the importance of self-regulating ability over anxiety levels. It also confirms reports from Liu (2006), Wilson (2006), Woodrow (2006), Kitano (2001), MacIntyre et al. (1997), Piechurska-Kuciel (2008), and Szyszka (2011) regarding the minimal and insignificant role of anxiety in language learning achievement.

Moreover, confirming studies reporting partial roles of anxiety in language competence, the present study found a thought-provoking medium-strength significant relationship between Reading scores and language learning anxiety. However, unlike the Chinese context where reading is considered less anxiety-provoking (Lu & Liu, 2015), the present study found that reading scores were higher among high-anxiety students. This suggests that among Indonesian students, high-anxiety students may function effectively as passive language users. This finding

is consistent with item analyses of self-regulatory and LLAS questionnaires, which identified active classroom participation as the primary anxiety source and simultaneously the most challenging area for self-regulatory development.

Finally, a noteworthy sub-finding is the positive, statistically significant correlation between language learning anxiety and self-regulation levels. Contrary to previous studies reporting negative influences of anxiety on self-regulatory ability, the present study found the opposite effect. Again, this may be attributed to participants' relatively low self-regulation and low English competence. This low competence indeed makes a difference, as reported in the longitudinal study by Apridayani et al. (2023), who found an increasingly negative yet significant and weak effect of anxiety on language competence. From these findings, another potential nature of anxiety emerges. The positive, significant relationship with self-regulation skills suggests that language learning anxiety relates to emotion (Alnuzaili & Uddin, 2020). Higher anxiety may imply stronger underlying emotion. Higher emotion, when properly governed, may result in greater motivation and self-determination compared to weaker emotion. In other words, this study suggests that high-anxiety students also possess higher determination to self-regulate. Further evidence supporting this implication is needed.

6. Conclusion

In summary, the role of language learning anxiety in English language competence is weaker than that of self-regulatory ability, consistent with numerous previous studies. However, anxiety levels correlated significantly with self-regulation levels, whereby higher anxiety was associated with higher self-regulation. This finding suggests the possibility of conceptualizing anxiety as a learning potential rather than solely an impediment. With appropriate support, students can manage anxiety and transform it into a facilitative factor rather than an obstacle hindering learning. Reading subskills also correlated significantly and positively with anxiety levels, confirming that anxiety is influenced by classroom activity types. In the present study context, oral classroom interaction proved more anxiety-triggering, whereas other contexts (typically those using the target language as secondary communication tool) may find reading-writing or test-related activities more anxiety-provoking. While this study focused exclusively on one private university's students, future research should seek larger, more diverse participant samples to obtain more comprehensive findings. Furthermore, the discrepancy between the present findings and several previous studies suggests the need for more in-depth investigation of the interplay between self-regulation and language learning anxiety and their associated factors in language learning.

Declaration on the use of AI

The authors used Grammarly AI to improve the linguistic clarity of the manuscript and verify the consistency between in-text citations and the reference list. The final content was reviewed and edited by the authors, who take full responsibility for the accuracy of the work.

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