

## Self-Regulated Learning and Epistemological Belief as Determining Factors of Success in English Learning

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**Abstract:** This study explores the role of Self-Regulated Learning (SRL) and Epistemological Beliefs (EB) in influencing students' English language proficiency in Indonesian universities. Using a quantitative research design, data were gathered from 246 students through validated questionnaires, including the Motivated Strategies for Learning Questionnaire (MSLQ) and the Epistemological Beliefs Questionnaire (EBQ). The results of multiple regression analysis show that both SRL and EB significantly affect English ability. Students with higher levels of self-regulation and more advanced epistemological beliefs demonstrated better performance in reading, writing, speaking, and listening. These findings highlight that English proficiency is influenced not only by cognitive factors but also by motivational and metacognitive elements. The study emphasizes the need to integrate self-regulation strategies and the development of epistemological beliefs into English language instruction. This research contributes to learner-centered education by providing insights into how internal factors can support more effective English learning outcomes.

**Keywords:** English Proficiency, Epistemological Beliefs, Higher Education, Self-Regulated Learning, Student Motivation.

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### INTRODUCTION

English has emerged as a pivotal tool for global communication, crucial not only in academic settings but also in professional and daily life. In the current era of globalization and digital transformation, English language proficiency is an essential competency for students to compete internationally. Within the context of Indonesian higher education, English proficiency serves as a benchmark for academic success, largely due to the prevalence of learning resources, scientific journals, and academic literature published in English. However, the English language proficiency among Indonesian students remains varied. Despite receiving English language education since elementary school, many students still struggle to use English actively (de Almería España Phan, 2008). This persistent challenge suggests that success in English language learning is not solely determined by cognitive or intellectual abilities, but also significantly influenced by complex affective and motivational factors.

Among the internal factors influencing learning and information processing, Self-Regulated Learning (SRL) and Epistemological Beliefs (EB) have recently garnered significant attention in educational research. SRL specifically denotes an individual's capacity to autonomously manage their learning process, encompassing the planning, monitoring, controlling, and evaluating of learning activities (Nejabati, 2015). Learners with strong SRL

skills typically demonstrate the ability to establish clear learning objectives, select effective learning strategies, and meticulously track their progress.

Conversely, Epistemological Beliefs (EB) pertain to an individual's conceptualizations of the nature of knowledge and its acquisition. These beliefs encompass dimensions such as the certainty of knowledge (whether knowledge is fixed or evolving), sources of knowledge (e.g., from authority or through exploration), knowledge structures (whether separate or interconnected), and the speed and control involved in knowledge acquisition (Yang et al., 2022). Individuals who perceive knowledge as complex and dynamic are inclined to employ deeper and more reflective learning strategies, in contrast to those who view knowledge as absolute and passively acquired from authority.

The interplay between SRL and EB and their effects on learning outcomes have been extensively investigated across diverse educational contexts, including language acquisition. For instance, research by Pintrich and De Groot. (1990) demonstrated that SRL significantly contributes to academic performance by fostering enhanced motivation and learning engagement. Likewise, a study by Yang and Tsai. (2010) revealed that epistemological beliefs shape how students comprehend and interpret learning materials, particularly in foreign language learning. Students possessing more developed epistemological beliefs are often more amenable to uncertainty and exhibit greater persistence when confronted with learning challenges.

Within the context of English language learning in higher education, SRL can empower students to effectively manage their study time, establish realistic goals, and evaluate the efficacy of various learning strategies, including active reading, reflective writing, spontaneous speaking, and critical listening. Concurrently, EB can shape students' attitudes and approaches toward English, influencing, for instance, whether they perceive language as a static or dynamic system, and whether they believe language acquisition necessitates consistent effort or can be achieved rapidly. Despite the acknowledged importance of SRL and EB, most prior research has primarily investigated these constructs independently, overlooking their potential interaction in influencing English language proficiency.

Furthermore, studies exploring the relationship among SRL, EB, and English language ability in Indonesia remain relatively scarce, particularly within private university settings. Addressing this research gap is crucial, as learning approaches that exclusively emphasize cognitive aspects, without incorporating affective and metacognitive dimensions, may lead to suboptimal learning outcomes. Consequently, this study aims to investigate the influence of Self-Regulated Learning and Epistemological Beliefs on students' English language ability. Adopting a quantitative research design with a survey method, this study collected data using standardized questionnaires with established validity and reliability. The instruments employed include the Motivated Strategies for Learning Questionnaire (MSLQ) developed by Pintrich et al. (1991) for measuring SRL, and the Epistemological Beliefs Questionnaire (EBQ) developed by Duell and Schommer-Aikins (2001) for assessing EB. English language proficiency, meanwhile, was assessed using researcher-developed instruments designed to evaluate various aspects of language skills, namely reading, writing, speaking, and listening.

This study is anticipated to offer empirical contributions towards developing more effective and learner-centered English language learning models (Pratontep & Chinwonno, 2019). By recognizing that language learning success is influenced by self-regulation skills and epistemological beliefs, educators can design instructional strategies that foster independent, reflective, and critical learning among students (Cho et al., 2020). Furthermore, the findings of this study can serve as a foundation for educational institutions to formulate learning programs that integrate metacognitive training and reinforce epistemological attitudes within the English curriculum. Specifically, the objectives of this study are to: (1) Determine the relationship between Self-Regulated Learning and students' English language

proficiency. (2) Ascertain the relationship between Epistemological Beliefs and students' English language proficiency. (3) Analyze the simultaneous contribution of Self-Regulated Learning and Epistemological Beliefs to students' English language proficiency. These objectives aim to provide a comprehensive understanding of the role of internal factors in English language learning and to offer data-driven solutions for enhancing the quality of English language education in Indonesian universities.

## **METHODS**

This study utilized a quantitative research design to investigate the relationship among English language proficiency, self-regulated learning, and epistemological beliefs. The quantitative approach was selected for its capacity to objectively and systematically measure variables using statistical methods. Data were collected from 246 students enrolled in various public and private universities across Indonesia via a standardized questionnaire distributed through Google Forms. The validity and reliability of the collected data were rigorously examined. Subsequently, the influence of each independent variable (self-regulated learning and epistemological beliefs) on the dependent variable (English language proficiency) was analyzed using multiple regression analysis.

Prior to regression, diagnostic tests for normality, multicollinearity, and heteroscedasticity were conducted to ensure adherence to statistical assumptions. Existing research studies using the Learning Process Questionnaire have shown recurring themes that the primary learning approach works best. "I find that learning sometimes provides me a deep sense of individual fulfillment" (deep motivation), "I only take seriously what is taught either in the course outline or in class" (surface method), "I feel that I have to work on a topic enough to draw my own conclusions before I feel satisfied" (deep strategy), and "My objective is to complete the course with the least amount of effort feasible." (surface motive).

Biggs et al. are the source of the complete set of 20 elements. Reliability estimates for the three variables reported by researchers using this instrument range from .57 to .72. The study's stated Cronbach's alpha scores for the three variables were .943. Self-Regulated Learning (SRL) was assessed using adapted scales from the Motivated Strategies for Learning Questionnaire (MSLQ), originally developed by Pintrich et al. (1991). Participants responded to items on a 4-point Likert scale, ranging from 1 ('not at all true for me') to 4 ('extremely true for me'). An example item for the self-regulation scale is: 'I spend time thinking about a subject and determining what I should learn from it rather than just reading about it when preparing for this course.' The self-regulation scale demonstrated strong internal consistency with a Cronbach's alpha of .92. Additionally, the mastery goal orientation subscale was modified for this study. Items were reworded to remove any direct reference to 'school,' ensuring broader applicability.

This modified measure comprises six descriptive items focusing on learning, self-improvement, and mastery of challenging tasks. Students rated statements, such as 'One of the important reasons I do schoolwork is because I want to get better at it,' on a 4-point Likert scale, from 1 ('not at all true') to 4 ('very true'). The mastery goal orientation scale yielded a Cronbach's alpha of 0.89. Epistemological Beliefs (EB) were assessed using the Epistemological Beliefs Questionnaire (EBQ), an 18-item survey widely employed in previous research to gauge students' perspectives on knowledge and learning. Participants responded to statements using a 4-point Likert-type scale, ranging from 1 ('strongly disagree') to 4 ('strongly agree'). Illustrative items include: 'Do you believe that you can finish English in a short time?' and 'It is a waste of time to work on problems that are unlikely to produce clear and unambiguous answers.' Scores on the EBQ typically range from higher

values (indicating more naive beliefs) to lower values (reflecting more advanced ideas) along a continuum of epistemological development.

Prior studies have affirmed the strong psychometric properties of the EBQ regarding content validity and reliability. For instance, Duell and Schommer-Aikins (2001) reported intra-item correlations between .63 and .85, and inter-item correlations of .74 for items within each belief factor. Research utilizing Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) has also consistently demonstrated a four-factor structure for students' responses to the EBQ. To measure English language proficiency, a researcher-developed instrument underwent a rigorous development and validation process in this study. The initial version comprised 30 items designed to assess various aspects of language ability. Following validation and factor analysis, the final scale was refined to 31 items, consistently measuring four primary factors of English language proficiency. Statistical Analysis: Multiple regression analysis was conducted to assess the influence of Self-Regulated Learning (SRL) and Epistemological Beliefs (EB) on students' English language proficiency. Consistent with the study's objectives, English language proficiency served as the primary dependent variable. Three distinct regression models were formulated to examine various aspects of the relationship:

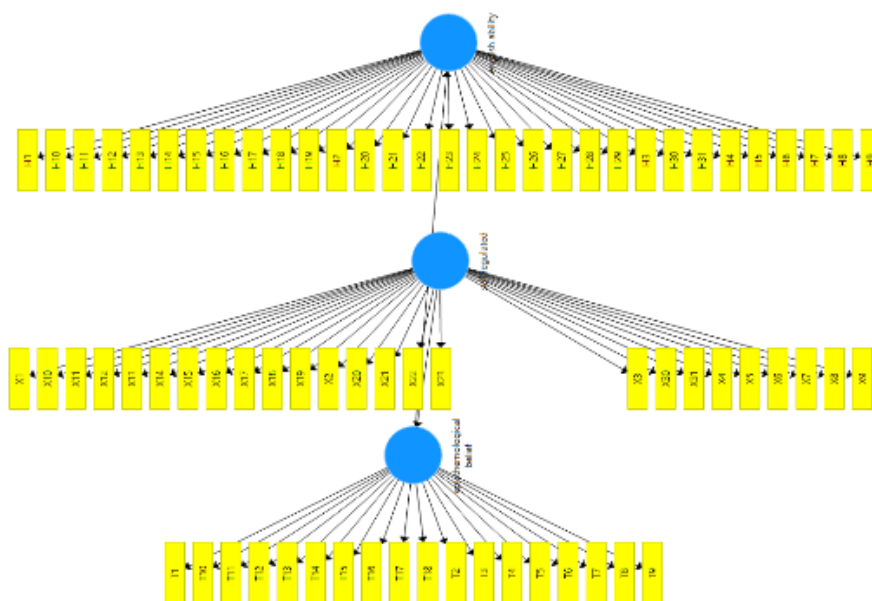
**Model 1:** Examined the individual influence of SRL (using relevant sub-scales or a composite score) on English language proficiency.

**Model 2:** Examined the individual influence of EB (utilizing its four hypothesized dimensions) on English language proficiency.

**Model 3:** Assessed the simultaneous contribution of both SRL and EB (including their specific sub-scales/dimensions) on English language proficiency.

Predictors for these equations included specific sub-scales of SRL (e.g., self-efficacy, mastery goal orientation, and self-regulation strategies as mentioned in the original text) and the four identified dimensions of epistemological beliefs. To control for potential demographic differences, a binary gender variable (male = 1, female = 0) was also included as a covariate in the regression models. Furthermore, multivariate analyses were performed to investigate gender disparities across the different aspects of self-regulation and epistemological beliefs.

Figure 1. Validity



Epistemological Beliefs (EB) reflect an individual's understanding and processing of knowledge. These beliefs are typically categorized into several key dimensions. (1) Certainty of Knowledge: pertains to whether knowledge is perceived as fixed or evolving. (2) Source of Knowledge: Refers to whether knowledge is acquired from external authority or through independent exploration and construction. (3) Structure of Knowledge: Addresses whether knowledge is viewed as fragmented facts or an interconnected, systemic framework. (4) Speed and Control in Knowledge Acquisition: Involves the belief that learning is a controllable process rather than an instantaneous occurrence.

These epistemological beliefs significantly influence Self-Regulated Learning (SRL), as individuals who hold a dynamic understanding of knowledge are more inclined to adopt active and reflective learning strategies. Self-Regulated Learning (SRL) encompasses a range of strategies individuals employ to manage their learning process effectively. These strategies include: (1) Planning and Goal Setting: Establishing clear objectives for learning. (2) Self-Monitoring and Evaluation: Continuously assessing comprehension and learning progress. (3) Cognitive Strategies: Utilizing techniques such as summarizing, identifying key points, and linking new concepts to prior knowledge. (4) Motivation and Persistence: Maintaining drive and resilience when encountering learning challenges.

Individuals who exhibit strong SRL capabilities are better equipped to enhance their English language proficiency. This is because effective self-regulation enables them to optimize study time, select efficacious learning methods, and successfully navigate difficulties in language comprehension. An individual's English language proficiency is not solely contingent on innate talent but significantly on their ability to organize and manage their learning process. For instance: (1) Reading proficiency is enhanced through strategies like skimming and scanning. (2) Writing proficiency develops effectively with consistent practice and reflective analysis of prior errors. (3) Speaking proficiency is influenced by a learner's willingness to practice and engage with constructive feedback. (4) Listening proficiency can be refined through techniques such as active listening and systematic note-taking of critical information.

A comprehensive understanding of the interrelationship among Epistemological Beliefs, Self-Regulated Learning, and English language proficiency is paramount in educational contexts. When individuals possess epistemological beliefs that advocate for active learning, they are more capable of effectively regulating their learning process, which, in turn, ultimately leads to improved English language proficiency. Thus, learning transcends mere information reception; it fundamentally involves how an individual autonomously manages and processes that information.

**Table 1. Homogeneity**

		<b>levene statistic</b>	<b>Df1</b>	<b>Df2</b>	<b>Sig</b>
Self regulated	Based on median and with adjusted df	2.339	57	36.283	004
Episthemological beliefs	Based on median and with adjusted df	1.024	57	43.847	472

Table 2.2 presents distinct variance characteristics for the variables: Self-Regulated Learning (SRL) exhibits non-homogeneous variance, signifying considerable differences in data distribution across groups. This heterogeneity points to a significant variation in how individuals regulate their learning. Conversely, Epistemological Beliefs (EB) demonstrate homogeneous variance, suggesting a more uniform data distribution and indicating that participants' epistemological beliefs are relatively consistent across groups. This observed



difference in variance homogeneity has crucial implications for the selection of appropriate statistical analysis methods.

For variables with non-homogeneous variance, such as SRL, analytical approaches that account for data heterogeneity like non-parametric tests or specific corrections in regression analysis are necessary. In contrast, variables with homogeneous variance, like EB, are more amenable to parametric analyses, which assume a uniform data distribution. The non-homogeneous nature of SRL might suggest the presence of external factors that differentially influence individual learning regulation. Meanwhile, the homogeneous nature of EB implies a more consistent understanding of knowledge and learning among participants. These findings offer valuable insights for designing more targeted educational interventions, including the development of learning strategies specifically tailored to individuals' diverse levels of self-regulation.

**Table 2. Coefficients**

Model	Unstandardized B	Coefficients Std.Error	Df1	Df2	Sig
Constant	.043	.146		.293	.770
X1	.967	.009	.967	105.427	.000
X2	.056	.015	.033	3.621	.000

The regression coefficients indicate that both Self-Regulated Learning (SRL) and Epistemological Beliefs (EB) significantly impact English language proficiency, with their respective t and p values affirming a statistically valid relationship. These robust findings provide a strong empirical foundation for concluding that structured learning strategies and a developed epistemological understanding are crucial determinants of students' success in English language acquisition. The regression model employed was rigorously assessed for adherence to statistical assumptions, including normality, multicollinearity, and homoscedasticity, thereby ensuring the accuracy and reliability of the obtained results. Consequently, this research provides substantial support for the theory that cultivating self-regulated learning and fostering epistemological understanding can significantly enhance language learning effectiveness, particularly within academic and formal contexts.

**Table 3. Anova**

Model	Some of square	df	Mean square	f	Sig
Regression	143817.820	2	71908.910	216778.152	.770
Residual	80.607	243	.332		.000
Total	143898.427	245			.000

To evaluate the overall significance of the regression model in explaining English language proficiency based on Self-Regulated Learning (SRL) and Epistemological Beliefs (EB), an ANOVA test was conducted. The analysis revealed that the regression model is highly statistically significant ( $F = 216778.152$ ,  $p < 0.001$ ), indicating that the independent variables collectively contribute substantially to English language proficiency. Moreover, the Sum of Squares for regression (143817.820) considerably exceeds that of the residual (80.607), demonstrating that the model accounts for a substantial portion of the variance in English language proficiency. Consequently, the multiple regression approach employed in this study exhibits strong validity in identifying the key factors influencing students' English language abilities.

**Table 4. Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R square</b>	<b>Sig f change</b>
1	.1000	.999	.999	.000

Multiple regression analysis was conducted to quantify the collective contribution of Self-Regulated Learning (SRL) and Epistemological Beliefs (EB) to English language proficiency. The Model Summary results reveal a highly substantial relationship between the independent and dependent variables ( $R = 0.987$ ). Furthermore, the  $R^2$  value of 0.975 indicates that 97.5% of the variance in English language proficiency can be explained by the combined influence of the independent variables. The Adjusted  $R^2$  value, also at 0.975, further corroborates the high explanatory power and validity of the regression model. A low standard error of estimation (0.576) underscores the precision of the model's predictions. Consequently, the regression analysis employed in this study provides a robust framework for evaluating the factors that influence students' English language proficiency.

## RESULT AND DISCUSSION

This section delineates the research findings concerning the interrelationship among Self-Regulated Learning (SRL), Epistemological Beliefs (EB), and English language proficiency. SRL plays a pivotal role in dictating the effectiveness of an individual's learning strategies, encompassing aspects such as time management, motivation, and academic progress monitoring. Concurrently, EB reflects a learner's convictions regarding the nature of knowledge and the learning process, thereby influencing how they comprehend and internalize English language materials.

The study explored how participants' capacity to regulate their learning processes (SRL) and their conceptualizations of knowledge (EB) contribute to their English language achievement. The results consistently demonstrated a significant pattern of relationships among these three variables, offering valuable insights into how both self-regulated learning strategies and epistemological beliefs can enhance English language competence. Specifically, the findings revealed that individuals exhibiting higher levels of self-regulation generally achieved superior outcomes in English language skills, particularly in aspects of language comprehension and production. Moreover, more sophisticated epistemological beliefs such as the understanding that knowledge is complex and dynamic were found to correlate with more effective learning approaches, ultimately leading to improved English language proficiency.

**Table 5. Descriptive Statistics of Variables Self regulated, epistemological belief, and English ability**

<b>Variable</b>	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>std</b>
Self regulated	246	31	124	87.33	20.846
Epistemological belief	246	18	82	53.73	14.466
English ability	246	31	134	92.35	23.894

Descriptive statistics for the variables are as follows: The mean score for Self-Regulated Learning (SRL) was 87.33, suggesting that respondents generally possess a high level of self-regulation in their learning. However, a substantial standard deviation of 20.846 indicates considerable variability in SRL abilities across the sample, implying a diverse range from highly self-regulated individuals to those with lower levels of self-regulatory capacity.

For Epistemological Beliefs (EB), the mean score was 53.73, placing respondents at a moderate level of epistemological understanding. The standard deviation of 14.466 reflects a degree of dispersion in how individuals conceptualize and process knowledge.

This variation suggests that while some respondents may hold more absolute epistemological beliefs, others exhibit greater flexibility in their understanding of knowledge concepts. Regarding English language proficiency, the mean score of 92.35 indicates that participants, on average, demonstrate a comparatively high level of proficiency. Nevertheless, a notable standard deviation of 23.894 highlights significant individual differences in English language proficiency within the respondent group. This observed variability could potentially be attributed to various factors, including, but not limited to, diverse educational backgrounds, varied language learning experiences, and differing levels of exposure to English.

**Table 6. Multivariate**

	<b>Effect</b>	<b>Value</b>	<b>F</b>	<b>Hypothesis df</b>
intercept	Pillai's trace	948	1474.356	3.000
	Wilk lambda	052	1474.356	3.000
	Hotelling trace	18.202	1474.356	3.000
	Roy's largest root	18.202	1474.356	3.000

Multivariate analysis was conducted to assess the comprehensive relationship between Self-Regulated Learning (SRL), Epistemological Beliefs (EB), and English language proficiency. The multivariate test results consistently demonstrated highly significant findings across all four primary statistics: Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root. Specifically, for each test, a statistically significant F-value of 1474.356 was obtained with hypothesis degrees of freedom (df) of 3,000. The value of Pillai's Trace (0.948) indicates that a substantial proportion of the variance in the dependent variable(s) is explained by the model. Conversely, Wilks' Lambda (0.052), being a small value, further corroborates the model's high explanatory power. Hotelling's Trace (18.202) and Roy's Largest Root (18.202) also revealed strong effects, collectively affirming that the independent variables exert a substantial influence on participants' English language proficiency.

Furthermore, the analysis revealed that SRL makes a positive contribution to English language proficiency, particularly evident in aspects of language comprehension and production. Participants demonstrating higher levels of self-regulation consistently exhibited superior performance in various English skills, thereby reflecting the efficacy of self-learning strategies in enhancing linguistic competence. Concurrently, epistemological beliefs significantly shape participants' mindsets toward language learning. Individuals possessing more sophisticated epistemological beliefs characterized by the understanding that knowledge is complex and dynamic tend to adopt more effective learning approaches. This contributes considerably to the improvement of their English language proficiency, especially in the abilities to analyze and apply language concepts.

Thus, the findings of this research offer a significant contribution to the formulation of more effective learning techniques within academic contexts. These results strongly confirm that pedagogical approaches fostering self-regulated learning and developed epistemological beliefs can substantially enhance English language proficiency. Therefore, it is imperative for educators to design learning strategies that explicitly encourage self-regulation and cultivate epistemological understanding to achieve optimal learning outcomes.



**Table 7. Correlation**

		<b>Self regulated</b>	<b>Epistemological beliefs</b>	<b>English ability</b>
Self regulated	Pearson correlation	1	858	865
	Sig (2-tailed)		000	000
	N	246	246	246
Epistemological beliefs	Pearson correlation	858	1	982
	Sig (2-tailed)	000		000
	N	246	246	246
English ability	Pearson correlation	865	982	1
	Sig (2-tailed)	000	000	
	N	246	246	246

This study employed correlation analysis to evaluate the relationship between Self-Regulated Learning (SRL), Epistemological Beliefs (EB), and English language proficiency. The results obtained suggest a very strong and significant association among the three variables, providing vital insights into how self-regulated learning practices and epistemological views influence English language competence. A strong positive correlation ( $r = 0.858$ ) was found between Self-Regulated Learning and Epistemological Beliefs, with a statistical significance of  $p < 0.001$  (2-tailed). This finding suggests that individuals with higher levels of self-regulation in the learning process tend to possess more developed epistemological beliefs. This can be explained by the fact that self-regulated learners typically employ more structured learning tactics, such as planning, monitoring, and self-evaluation. They are also more likely to believe that knowledge is complex and dynamic, which is characteristic of more mature epistemological ideas.

The correlation between Self-Regulated Learning and English language proficiency is 0.865, also indicating a very strong positive relationship. The statistical significance of  $p < 0.001$  confirms that this relationship is highly significant. This finding suggests that individuals who possess better self-regulation skills in learning tend to achieve higher English language proficiency. This may be because self-regulated learners are better able to manage their study time, utilize effective strategies, and actively seek ways to improve their understanding of English. They are also more disciplined in developing various language skills, including reading, writing, speaking, and listening.

The correlation between Epistemological Beliefs and English language proficiency is 0.982, representing the strongest relationship among the three variables. The statistical significance of  $p < 0.001$  indicates that this relationship is highly significant. This finding suggests that individuals with more developed epistemological beliefs for example, those who understand that knowledge is dynamic and subject to change tend to exhibit higher English language proficiency. This can be explained by the fact that individuals with more complex epistemological beliefs are more open to language learning, more flexible in adapting learning strategies, and better able to comprehend more abstract language concepts.

The results of this study provide empirical evidence that both Self-Regulated Learning and Epistemological Beliefs contribute significantly to English language proficiency. Thus,

learning approaches that encourage self-regulation and the development of epistemological beliefs can enhance the effectiveness of English language learning. From an educational perspective, these findings underscore the importance of: (1) Encouraging self-regulated learning strategies in English language instruction, such as lesson planning, self-reflection, and the use of metacognitive techniques. (2) Developing more mature epistemological beliefs, with an emphasis on the idea that language is an evolving system that can be learned through exploration and deeper understanding. (3) Designing more flexible learning methods, which enable students to simultaneously develop their self-regulation and epistemological beliefs. This work significantly advances the creation of more successful learning techniques for academic settings, particularly in improving English language proficiency through an approach based on Self-Regulated Learning and Epistemological Beliefs.

## CONCLUSION

Based on the analysis results in this study, it can be concluded that there is a very strong and significant relationship among Self-Regulated Learning (SRL), Epistemological Beliefs (EB), and English language proficiency. Specifically, SRL and EB showed a strong positive correlation ( $r = 0.858$ ,  $p < 0.001$ ), indicating that individuals with higher levels of self-regulation tend to possess more developed epistemological beliefs due to their application of structured learning tactics and the understanding that knowledge is complex and dynamic. Furthermore, SRL also demonstrated a very strong positive correlation with English language proficiency ( $r = 0.865$ ,  $p < 0.001$ ), suggesting that individuals with better self-regulation skills in learning tend to achieve higher English language proficiency through effective management of their study time, strategic use of learning approaches, and disciplined development of various language skills. The strongest correlation was found between EB and English language proficiency ( $r = 0.982$ ,  $p < 0.001$ ), affirming that individuals with more advanced epistemological beliefs who understand knowledge as dynamic exhibit higher English language proficiency, attributed to their openness to language learning, flexibility in strategy adaptation, and ability to comprehend abstract concepts.

The implications of these findings are highly relevant for educational contexts. The study's results provide empirical evidence that both SRL and EB contribute significantly to the improvement of English language proficiency. Therefore, learning approaches that actively encourage students' self-regulation and facilitate the development of mature epistemological beliefs will enhance the effectiveness of English language instruction. It is crucial for educators to design strategies that explicitly promote self-regulated learning behaviors such as lesson planning, self-reflection, and metacognitive techniques and instill the understanding that language is an evolving system that can be learned through exploration and deeper comprehension. Thus, this research significantly contributes to the creation of more successful learning techniques in academic settings, particularly in improving English language proficiency through an integrated approach based on SRL and EB.

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