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The Mind-Machine Duality in Carving Meaning: ChatGPT and Self Regulated Learning in Arabic Research

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Abstract

This study investigates the dual influence of ChatGPT and Self-Regulated Learning (SRL) strategies on the academic writing performance of students in Arabic Language Education programs. With the increasing integration of artificial intelligence tools in higher education, it is essential to understand how these technologies interact with traditional learning strategies, particularly in writing scholarly theses in Arabic—a language that presents unique structural and stylistic challenges. The primary objective of this study is to evaluate the extent to which ChatGPT and SRL affect students' ability to produce well-structured and linguistically accurate Arabic bachelor's theses. A quantitative survey method was employed, involving 56 students across three academic semesters. Data analysis was conducted using SmartPLS 4.0 to measure the impact of both variables. The findings indicate that both ChatGPT and SRL significantly enhance students' thesis writing skills. Notably, ChatGPT has a slightly greater influence, particularly in the areas of idea development, content organization, and advanced language use. Meanwhile, SRL remains crucial for time management, intrinsic motivation, and

reflective evaluation. These results underscore the complementary roles of AI assistance and self-regulated strategies in academic writing. The study contributes to the growing discourse on the ethical and pedagogical implications of AI in education, particularly in the context of Arabic language scholarship. It recommends a balanced pedagogical model that integrates AI tools like ChatGPT with structured SRL frameworks to optimize student performance and uphold academic integrity.

Abstrak

Kata Kunci: *ChatGPT, Self-Regulated Learning, Penulisan Akademik Arab, Pengembangan Skripsi, AI dalam Pendidikan*

Penelitian ini mengkaji pengaruh ganda antara ChatGPT dan strategi Self-Regulated Learning (SRL) terhadap kemampuan penulisan akademik mahasiswa Program Studi Pendidikan Bahasa Arab. Seiring dengan meningkatnya integrasi alat kecerdasan buatan dalam pendidikan tinggi, penting untuk memahami bagaimana teknologi ini berinteraksi dengan strategi pembelajaran tradisional, khususnya dalam penulisan skripsi ilmiah berbahasa Arab yang memiliki tantangan struktural dan stilistika tersendiri. Tujuan utama penelitian ini adalah untuk mengevaluasi sejauh mana ChatGPT dan SRL memengaruhi kemampuan mahasiswa dalam menghasilkan skripsi sarjana berbahasa Arab yang terstruktur dan akurat secara linguistik. Penelitian ini menggunakan metode survei kuantitatif dengan melibatkan 56 mahasiswa selama tiga semester akademik. Analisis data dilakukan menggunakan SmartPLS 4.0 untuk mengukur pengaruh kedua variabel tersebut. Hasil penelitian menunjukkan bahwa baik ChatGPT maupun SRL memberikan kontribusi signifikan dalam meningkatkan keterampilan menulis skripsi mahasiswa. ChatGPT menunjukkan pengaruh yang sedikit lebih besar, terutama dalam pengembangan ide, pengorganisasian konten, dan penggunaan bahasa yang lebih maju. Sementara itu, SRL tetap berperan penting dalam manajemen waktu, motivasi intrinsik, dan evaluasi diri. Temuan ini menekankan peran saling melengkapi antara bantuan AI dan strategi pembelajaran mandiri dalam konteks penulisan akademik. Penelitian ini berkontribusi pada wacana yang berkembang tentang implikasi etis dan pedagogis penggunaan AI dalam pendidikan, khususnya dalam ranah keilmuan berbahasa Arab. Studi ini merekomendasikan model pedagogis yang seimbang antara pemanfaatan alat AI seperti ChatGPT dengan kerangka kerja SRL yang terstruktur untuk mengoptimalkan kinerja akademik mahasiswa dan menjaga integritas ilmiah.

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Introduction

Arabic is a language that has long historical roots and is one of the main pillars in the treasures of Islamic science(Farhan Mubarok Lubis, 2024). As explained in Surah Yusuf verse 2(Pera Aprizal, 2021), Arabic was chosen as a revelation because of its depth and clarity of meaning.(Holmes et al., 2019) In the context of Islamic education, this language is not only a means of communication, but a means of thinking and understanding the sources of Islamic teachings, including the Qur'an and hadith(Pera Aprizal, 2021). Therefore, the mastery of Arabic language skills, especially writing (*maharah al-kitābah*), is an essential aspect in the development of students' intellect.

Arabic thesis writing skills require mastery of complex syntactic structures, scientific vocabulary, and academic reasoning. (Rahayu Balai Diklat Keagamaan Ambon & Laksdya Leo Wattimena, 2024) Along with the increasing interest of students to take the Arabic Language Education study program, various challenges also arise in the thesis preparation process. (Subiyantoro et al., 2023) Students often face obstacles in organizing ideas, using the right Arabic sentence structure, and composing scientific arguments in a sequential manner. This problem is exacerbated by the lack of a systematic learning strategy and the limited number of academic references in Arabic. (Nurdianto & Ismail, 2020)

In recent years, the development of artificial intelligence (AI) has significantly impacted the educational landscape.(Aidah Novianti Putri & Moh. Abdul Kholiq Hasan, 2023) ChatGPT, as a language learning medium developed by OpenAI, has emerged as a digital assistant that is widely used by students for academic purposes, including writing aids. (Patty & Que, 2023) In line with technological developments, various Artificial Intelligence (AI)-based tools such as ChatGPT have begun to be used to support academic processes.(Shao et al., 2022) This technology is able to provide support in scientific writing, such as grammatical improvement, paragraph preparation suggestions, and reference search.(Hamdy & Ningsih, 2022b) However, this kind of technology also raises concerns about student dependency(Rahayu Balai

Diklat Keagamaan Ambon & Laksdya Leo Wattimena, 2024) and weakening critical thinking skills and originality of ideas. Therefore, synergy between the use of technology and effective learning strategies is needed so that students are not just passive users, but are able to manage and evaluate their learning process independently.

It is in this context that *the Self-Regulated Learning* (SRL) strategy becomes relevant. (Indrayanto, n.d.) The SRL theory developed by Barry Zimmerman emphasizes the importance of self-regulation in learning, which includes the phases of planning (*forethought*), implementation (*performance*), and self-reflection (*self-reflection*). (Zhang et al., 2024) The application of SRL in writing learning, especially Arabic thesis, can help students in designing learning goals, managing time, and evaluating their work on an ongoing basis. At the same time, Self-Regulated Learning (SRL) continues to be recognized as a key strategy that empowers students to manage their own learning process, (Theobald, 2021) especially in complex tasks such as writing a thesis in Arabic. A language that requires mastery of grammar, vocabulary, and rhetorical structure.

However, the real challenges in the field show that many students have not implemented this strategy optimally. Most of them do not have full awareness of the importance of time management and self-control in completing their thesis. (Irwandi Setiawan, 2020) Based on initial observations and several survey findings, students still have difficulty in compiling coherent paragraphs, choosing academic diction, and placing harakat and i'rab correctly.

Previous studies, such as those conducted by Muslihatul Inayah at Gadjah Mada University, show that ChatGPT is starting to be used by students as a quick and efficient reference search tool. (Inayah et al., 2024) In fact, the survey results show that this platform is one of the main means of compiling academic writing, side by side with various tools such as Research Rabbit, Gemini, Perplexity, and Connected Papers.(Maulidiya et al., 2024) However, the

study also emphasizes that the use of AI needs to be accompanied by critical literacy skills and deep learning strategies.

In higher education, especially in the context of learning Arabic, integrative efforts between technology and cognitive strategies are inevitable. This kind of approach is in line with constructivist learning theory that places students as active subjects in the learning process.(Zuhri et al., 2024) They not only receive information, but also build understanding through reflection, evaluation, and learning decision-making. Therefore, this study focuses on two important variables, namely the use of ChatGPT as a learning technology and *the Self-Regulated Learning* strategy as a cognitive approach, both of which are measured against its influence on Arabic thesis writing skills.(Allifia Sri cahyani et al., 2023) This research is also based on several study results that state that the integration of technology into writing learning can improve the efficiency and quality of student writing. However, technology is just a tool.(Abdelali et al., 2022) Without adequate learning strategies, students will still have difficulty organizing ideas and structuring scientific arguments logically. Thus, the development of thesis writing skills in Arabic is not enough just by utilizing technological media, but also requires strengthening students' internal strategies in organizing and controlling the learning process.

Another problem that is of concern is the low confidence of Arabic Language Education students in writing thesis. This is not only due to the weak mastery of grammar and sentence structure, but also due to a less supportive academic environment.(Hamdy & Ningsih, 2022a) Lack of opportunities for intensive tutoring, limited Arabic references, and academic administrative burdens often hinder the writing process.

The indicators of writing skills in this study include the ability to compose sentences from translations, improve the structure of nahwu and sharaf, place harakat correctly, and arrange paragraphs logically in an Arabic academic style.(Inayah et al., 2024) These indicators were developed based on the thinking framework of experts such as Helaluddin, Syahid Robbani,

Subiyantoro, and Munawarah who emphasized the importance of integration between learning strategies, the use of technology, and critical thinking skills in learning foreign languages.

Within this framework, this study tries to answer the following questions: (1) To what extent does ChatGPT influence the skill of writing a thesis in Arabic? (2) How does *the Self-Regulated Learning* strategy affect the writing skills? (3) Is there a combined role of the two in improving students' thesis writing skills?

The main purpose of this study is to measure and analyze the influence of ChatGPT and SRL on the Arabic thesis writing skills of Arabic Language Education students at UIN Raden Intan Lampung. This research is also expected to make a theoretical contribution to the development of technology-based Arabic learning models and cognitive strategies, as well as provide practical insights for educators in designing learning interventions that are in accordance with the needs of the current digital era.

In general, this research is expected to fill the literature gap regarding the integration of learning strategies and AI technology in the development of Arabic thesis writing skills. The results will provide important recommendations for educational institutions in designing adaptive learning strategies, as well as encourage students to become scientific writers who are not only resilient but also more productive.

Method

This study uses a quantitative approach with an associative survey design. The goal is to analyze the relationship between two independent variables, namely the use of ChatGPT media and the Self-Regulated Learning (SRL) strategy, to the bound variable, namely thesis writing skills in Arabic. The selection of this design was based on the objective of empirically and objectively testing the causal influence between variables through numerical data processing. Data analysis was carried out using the Partial Least Squares –

Structural Equation Modeling (PLS-SEM) method through SmartPLS 4.0 software. This method allows researchers to test the structural relationships between latent variables and indicators simultaneously. The design of this study represents a deductive approach, where existing theories are used as a basis for hypothesis preparation and then statistically tested using field data.

The population in this study is all students of the Arabic Language Education Study Program who are actively registered and have or are undergoing the thesis writing process. For efficiency purposes, the researcher used a purposive sampling technique, with the sample criteria being 4th, 6th, and 8th semester students who were willing to fill out the questionnaire completely and accurately. The number of respondents who were successfully collected was 56 students, consisting of various batches representing three semester levels.

Result and Discussion

This study aims to empirically examine the influence of the use of **ChatGPT** (X_1) and **the Self-Regulated Learning (SRL)** (X_2) strategy on **students' Arabic (Y) thesis writing skills**. Data was obtained from 56 respondents of the Arabic Language Education Study Program of UIN Raden Intan Lampung semesters 4, 6, and 8 through a structured questionnaire based on a five-point Likert scale. This questionnaire is designed to explore students' perceptions of the use of ChatGPT, the application of SRL strategies (especially time management), and their level of skill in writing a thesis in Arabic. The validity and reliability of the instruments were tested through convergent and discriminant analysis using SmartPLS version 4.0, and showed results that met the academic criteria suggested by Hair et al. (2019).

Before testing the hypothesis, all data is first analyzed to ensure the quality and feasibility of the instrument. Based on the results of processing using the SmartPLS 4.0 application, all constructs in the model meet the criteria of validity and reliability. The **outer loading** values for the ChatGPT variable

indicator (X_1), the Self-Regulated Learning (X_2) strategy, and the thesis writing skill (Y) ranged from **0.707 to 0.854**, which indicates that the indicators are convergently valid (Hair et al., 2019). The **overall Average Variance Extracted (AVE)** value was > 0.5 and **the Composite Reliability** and **Cronbach's Alpha** were above 0.8, indicating that the research instrument was consistent and reliable. In addition, **the VIF** value in all regression pathways was < 3.3 and **the SRMR value was 0.134**, which means that the model is in decent condition and does not experience multicollinearity or model incompatibility.

This section presents the main findings of the research on the influence of the use of ChatGPT media and the Self-Regulated Learning (SRL) strategy on students' Arabic thesis writing skills. The data that has been obtained through a structured questionnaire is analyzed using the Structural Equation Modeling method through SmartPLS 4.0 software. The results of this analysis include testing the validity and reliability of the instrument, model fit, and hypothesis tests that show the significance of the relationship between variables.

The discussion was carried out in stages, starting from the results of the analysis of the influence of each independent variable (X_1: ChatGPT and X_2: SRL) on the bound variable (Y: Arabic thesis writing skills) partially, then continued with simultaneous regression model testing. Each finding will be discussed by relating the statistical results obtained to relevant theories, as well as showing how these results contribute to the development of technology-based Arabic academic learning and learning independence.

The Influence of ChatGPT on Arabic Thesis Writing Skills

The results of the partial regression test showed that the use of ChatGPT media (X_1) had a positive and significant influence on Arabic (Y) thesis writing skills. This is evidenced by the **path coefficient value of 0.802** and the **value of p = 0.000**, which means that the influence is significant at the level of 5%. Meanwhile, the **R square value of 0.643** shows that **64.3% of the variation in thesis writing skills** can be explained by the variable of ChatGPT use, with a value **of F square = 1.798** which indicates a large influence (strong category).

These findings confirm that ChatGPT is very helpful for students in designing paragraph structures, enriching vocabulary, and improving academic Arabic grammar. However, even though ChatGPT is able to provide text output quickly and diversely, the results of the analysis show that students still face obstacles in **generating original ideas**, as the process is still highly dependent on personal initiative, reading experience, and the critical reasoning of each individual.

Figure 1. SmartPLS path model of the influence of ChatGPT (X1) on Arabic thesis writing skills (Y)

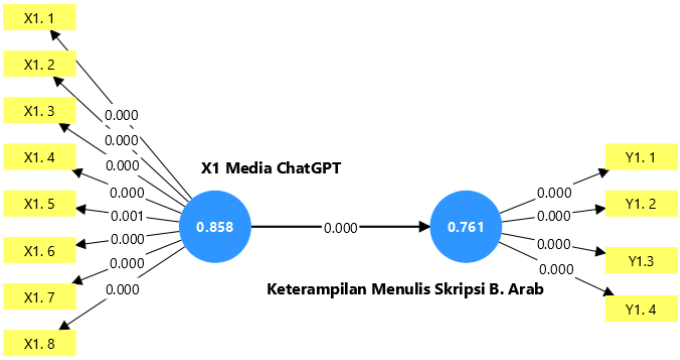


Table 1. Bootstrapping Results X1 to Y

Test Table **The Use of ChatGPT Media > Arabic Thesis Writing Skills**						
Multicolliniarity (VIF)	*R Square*	*Adjusted R Square*	*Goodness of Fit (SRMR)*	*F Square*	*Path Coefficient*	*P Values*
1.000	0,643	0,636	0,134	1,798	0,802	0,000
a. Predicors (constant) variable: media ChatGPT						
b. Dependent Variable: Arabic Thesis Writing Skills						

Source: Analysis using the Smart-PLS.4.0 application

Based on the results of the analysis using SmartPLS 4, it was obtained that the ChatGPT Media variable (X1) had a significant effect on Arabic (Y) Thesis Writing Skills. This is evidenced by the path coefficient value of 0.802 which indicates a positive and quite strong direction of influence. The statistical t-value of 3,200 is greater than the critical value of 1.96, and the p-value is 0.001 < 0.05, which means that the effect is statistically significant.

Mmmmm An R-Square value of 0.636 indicates that 64.3% of variations in Arabic thesis writing skills can be explained by ChatGPT media variables. According to Hair(Hair et al., 2019) R^2 value above 0.60 falls under the category **strong**, which indicates that the model has high predictive power over dependent variables. And the results of SRMR or *Goodnes Of Fit* shows a result of

The Influence of SRL on Arabic Thesis Writing Skills

Furthermore, the test results of the Self-Regulated Learning (X_2) strategy variable also showed a positive and significant influence on thesis writing skills. The **path coefficient value is 0.788** with **p-value = 0.000**, indicating that the SRL strategy is able to significantly improve students' writing skills. The values **of R square = 0.620** and **F square = 1.633** showed a very large contribution, especially in the aspects of time management, self-evaluation, and strengthening learning motivation.

However, the effectiveness of SRL is also influenced by students' internal ability to set goals, discipline in the study schedule, and experience in managing academic pressure. These findings show that **SRL is not effective for students** who have not been systematically trained in the formation of independent learning habits, especially for those who have challenges in consistency or focus on long-term goals of thesis writing.

Figure 2. SRL Strategy (X2) Smart-PLS Path Model for Arabic Thesis Writing Skills (Y)

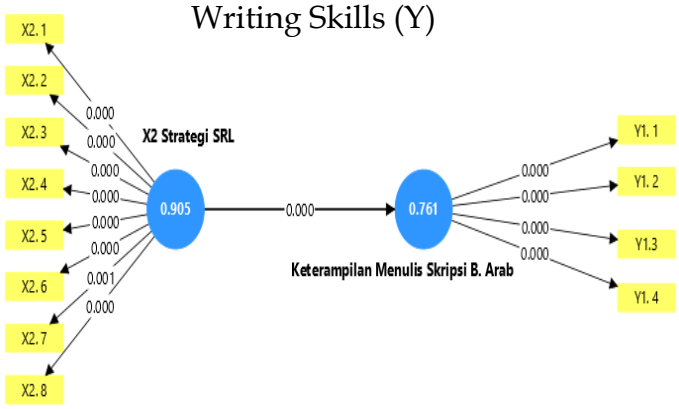


Table. 2 test bootstrapping X2 to Y

Test Table **Self Regulated Learning Strategies > Arabic Thesis Writing Skills**						
Multicolliniarity (VIF)	*R Square*	*Adjusted R Square*	*Goodness of Fit (SRMR)*	*F Square*	*Path Coefficient*	*P Values*
1.000	0,620	0,613	0,095	1,633	0,788	0,000
a. Predicors (constant) variable: Strategi Self Regulated Learning						
b. Dependent Variable: Arabic Thesis Writing Skills						

The test results showed that the Variance Inflation Factor (VIF) value was 1,000, which means that there was no multicollinearity problem in the model. According to Hair(Hair et al., 2019) in his journal "*How to use PLS-SEM*", the VIF value below 3.3 indicates that the free variables do not overlap each other linearly and their contribution can be considered independent in explaining the dependent variables. The model also shows an R Square value of 0.620, which means that 62.0% of the variation in Arabic thesis writing skills can be explained by the SRL strategy. This value is classified as strong, considering that the R Square value ≥ 0.35 is considered to have substantial predictive power.

The Adjusted R Square value of 0.613 also supports the strength of the model after adjusting for the number of variables analyzed. This shows that the

model remains stable despite its complexity being taken into account. Furthermore, the model also showed a Goodness of Fit (SRMR) value of 0.095, which means that the model's conformity with empirical data is still acceptable, as it is below the maximum threshold or <0.10 suggested by Hair et al. (2021). This shows that the model's predictions do not deviate much from the actual data, so it can be relied upon to explain the relationship between SRL strategy and thesis writing skills.

The F Square value of 1.633 shows that the influence of SRL's strategy on thesis writing skills is very strong, because it far exceeds the threshold of 0.35. This indicates that SRL makes a large and important contribution in explaining variations in dependent variables. Furthermore, a path coefficient value of 0.788 shows a positive and strong relationship between SRL and thesis writing skills, while a p-value of 0.000 proves that this relationship is statistically significant at a confidence level of 95% ($p < 0.05$).

An R Square value of 0.620 indicates that 62.0% of the variation in Arabic thesis writing skills can be explained by the Self Regulated Learning Strategy variable. According to Hair et al. (2021), the value of R^2 >0.35 falls into the category **strong**, which indicates that the model has high predictive power over dependent variables. In terms of indicator validity, the outer loading value for all variable X2 (SRL) indicators ranges from 0.420 to 0.876, and for indicator Y ranges from 0.608 to 0.854. This suggests that the indicators in this model can be considered valid, as the majority have loads above 0.7 (Hair et al., 2019), although some are still acceptable above the minimum threshold of 0.5. Thus, it can be concluded that the Self-Regulated Learning Strategy has a strong, significant, and positive effect on students' Arabic thesis writing skills.

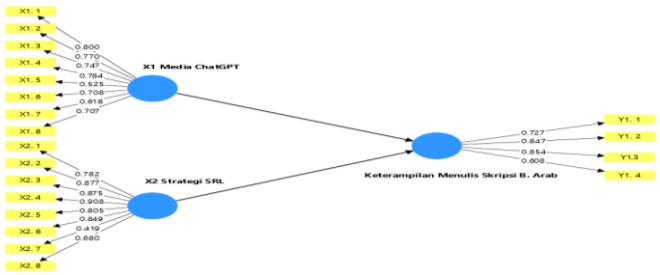
The Simultaneous Influence of ChatGPT and SRL on Arabic Thesis Writing Skills

Simultaneous regression tests between ChatGPT (X_1) and SRL (X_2) on thesis writing skills (Y) resulted in an **R square value of 0.682** and **an Adjusted R^2 value of 0.671**, which means that the two variables together were able to

explain **68.2%** of the variation in students' Arabic thesis writing skills. This shows that the integration between AI-based technology and self-learning strategies has a complementary impact.

Although ChatGPT excels at providing language assistance, and SRL is strong at building internal cognitive structures, the data indicates that **both still have partial weaknesses**: ChatGPT is less likely to trigger critical thinking skills and originality, whereas SRL is less effective in college students who do not have established learning patterns. Therefore, the combination of the two can be optimized to improve the quality of academic writing more holistically.

Figure 3. SmartPLS path model of the influence of ChatGPT (X1) and SRL Strategy (X2) on Arabic thesis writing skills (Y)



Test Table

ChatGPT Media & Self Regulated Learning Strategies > Arabic Thesis Writing Skills

Multicolliniarity (VIVID)	*R Square*	*Adjusted R Square*	*Goodness of Fit (SRMR)*	*F Square*	*Path Coefficient*	*P Values*
2,045	0,727	0,717	0,112	1,633	0,761	0,001

a. Predicors (constant) variable: Strategi Self Regulated Learning

b. Dependent Variable: Arabic Thesis Writing Skills

Simultaneously, the use of ChatGPT and the SRL strategy was able to explain **72.9%** variation in students' Arabic thesis writing skills (R^2 = 0.729), with **an Adjusted R^2 of 0.717**. The **F-Square** value of **1.633** for ChatGPT and **0.715** for SRL strengthens the argument that these two variables have a large influence according to the strong influence criteria in the regression model Hair

et al. (2019). No multicollinearity problem was found because **the VIF value** for each variable was below 5, and the **SRMR value = 0.089** indicated the model had a good match with the data.

These results show that **ChatGPT plays a very effective role as a technological tool** in developing writing structures, enriching vocabulary, and improving the quality of students' academic language. However, partial analysis shows that ChatGPT has **limitations** in helping students come up with original ideas, as these abilities are still determined by **the students' own personal initiative and critical thinking**. Meanwhile, **the Self-Regulated Learning strategy** has been proven to provide a strong foundation in building **learning independence**. Students who are used to planning, managing time, and conducting self-reflection and evaluation tend to be more disciplined in preparing thesis. However, the weakness of SRL lies in its **reliance on initial training**, as students who are not familiar with this strategy tend to have difficulty setting goals and managing time consistently.

The research instruments used were developed conceptually and operationally to measure the three variables. ChatGPT's instrument includes five key indicators: frequency of use, features used, ease of access, perception of benefits, and ethical awareness. The SRL instrument was developed from Zimmerman's theory (2002), with a focus on the indicators of planning, monitoring, control, evaluation, and self-strengthening. Meanwhile, Arabic thesis writing skills are measured based on aspects: the ability to compile systematic structures, mastery of linguistic rules (nahwu, sharaf, tarkib), logic of thinking, the use of Arabic references, and the originality of the paper.

Overall, these findings support the importance of **integration between AI technologies such as ChatGPT and SRL's self-learning strategies**. This combinatorial model has been proven to be able to increase the effectiveness of the complex and challenging Arabic thesis writing process, both from a technical and cognitive perspective. The results of this result data are an important reference for education policy makers and thesis supervisors, in

order to direct students to use technology wisely and guide them in developing self-regulation skills in a sustainable manner.

From the perspective of partial regression testing, SmartPLS analysis also reveals minor limitations. ChatGPT does not significantly improve students' ability to generate original ideas, which remains dependent on personal initiative and critical thinking. Likewise, SRL is less effective for students who have no prior training in goal setting and time allocation.

SRL provides a solid mental and cognitive foundation to complete academic tasks that require perseverance and systematic thinking, such as thesis writing. Although both showed positive influences, the study also revealed some limitations. ChatGPT has not been fully able to drive the development of original ideas, as it remains dependent on initiative and critical thinking of users. Meanwhile, the effectiveness of SRL depends on the individual's initial experience and readiness in implementing independent learning strategies. Therefore, an integrative approach between technology support and the development of independent learning strategies is highly recommended to be applied in the thesis guidance process in the higher education environment. The implications of these findings point to the importance of educators' role in directing the ethical and effective use of ChatGPT, while instilling awareness of sustainable self-regulation strategies in students. The combination of the two is believed to be able to form students who are not only technically productive, but also reflective and independent in thinking and responsible academically.

Semester	**Test Type**	**ChatGPT Media Results→Writing Skills**	**SRL Results → Writing Skills**	**Combining ChatGPT & SRL → Writing Skills**
4, 6, 8	Indicator Validity	Majority between	Majority	All

(Combined)	(Item clarity value)	**0.655–0.854** (Eligible)	between **0.524–0.800** (Eligible)	indicators are valid
	Reliability of Measuring Instruments (Consistency)	0.887 (Excellent)	0.878 (Excellent)	Consistent and reliable
	Normality & Homogeneity	Normal and uniform **data**	Normal and uniform **data**	Suitable for use in regression analysis
	Relationships Between Independent Variables (Multicollinearity)	**No overlapping symptoms were found** between variables (VIF value = 1,000)	Same	Combination is still safe (VIF ≤ 3.3)
	Explanatory Power Model (R Square)	**64.3**% of writing skills are explained by ChatGPT	**62.0**% explained by SRL	**72.9**% explained by the two together
	Model Adjustment (Adjusted R^2)	63,6%	61,3%	72,0%
	Model Fit (SRMR)	0.134 (Fairly suitable)	0.095 (Match)	0.068 (Perfectly suitable)
	Magnitude of Influence (F Square)	1,798 (Very strong)	1,633 (Very strong)	-
	Direction & Magnitude of Influence	0.802 (Very strong and positive)	0.788 (Very strong and positive)	ChatGPT: 0.423SRL: 0.402

	(Coefficient)			
	Significance Rate (P Value)	0.000 (**Very significant**)	0.000 (**Very significant**)	0.000 (**Very significant**)

Based on the results of this study, it is recommended to students not to use ChatGPT passively or only as an answerer, but as a critical thinking partner in writing a thesis. ChatGPT can be used with the assistance of a supervisor so that the output produced remains in accordance with academic guidelines and Arabic language rules.(Rosyad, 2022) Students are also advised to filter and develop their abilities independently so that thesis writing results from ChatGPT can be developed even better and become scientific works with authentic and quality value.

Educational institutions, especially the Arabic Language Education Study Program, are advised to integrate the Self Regulated Learning (SRL) strategy in the thesis curriculum. This strategy can be strengthened by providing self-paced tutoring such as reflective classes, time management assistance, and self-evaluation training in the writing process. The combination of the use of ChatGPT and the systematic application of SRL can be an innovative solution in improving students' thesis writing skills, especially in terms of structure, linguistic rules, and clarity of academic arguments.

Conclusion

The study concluded that ChatGPT and Self-Regulated Learning significantly affected students' ability to write Arabic theses, with ChatGPT offering a slightly higher influence. While ChatGPT provides technological support for language accuracy and structure, SRL offers cognitive and motivational roles. Therefore, educators are encouraged to integrate the two approaches, guiding students to not only utilize digital tools but also develop self-discipline in academic writing. Future studies should explore the longitudinal effects of both variables and consider qualitative insights to enrich the creation of quantitative work.

This study concludes that both the use of **ChatGPT** and the application of **the Self-Regulated Learning (SRL)** strategy make a significant contribution to improving students' Arabic thesis writing skills. Through PLS-SEM-based quantitative analysis, it was found that ChatGPT has a statistically higher influence than SRL in terms of helping students structure writing, correcting grammar, and improving the quality of written academic presentations. These findings show that AI-based technology has become an effective and practical auxiliary tool in the academic writing process, especially in the context of complex Arabic languages. However, SRL's strategy still has a fundamental role in shaping student learning independence. The ability to manage time, plan writing activities, evaluate achievements, and develop self-reflection has been proven to be positively correlated with the quality of students' scientific writing.

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