Examining the Relationship Between Self-Assessed Writing Skills, Learning Strategies, and Grammar Proficiency of Undergraduate Students

.

ABSTRACT

|  |
| --- |
| This study investigated the relationship among self-assessed writing skills, learning strategies, and grammar proficiency of undergraduate students. Using a quantitative correlational design, the study involved 200 fourth-year students from two colleges in Davao City. Data were gathered through a structured questionnaire composed of three sections: self-assessed writing skills, learning strategies, and a grammar proficiency test. Findings revealed that while students rated their writing skills and use of learning strategies as high, their actual grammar proficiency was only at a satisfactory level. Correlation analysis indicated a weak but statistically significant relationship between writing skills and grammar proficiency, while learning strategies showed a slight correlation but did not significantly predict grammar proficiency in the regression analysis. The results underscore the need for integrated instruction that develops both metacognitive awareness and grammar competence.  **Aims:** This study aimed to examine the relationship between self-assessed writing skills, learning strategy use, and grammar proficiency among undergraduate English as a Second Language Students. It also sought to determine the accuracy of students’ self-assessments and identify significant predictors of grammar proficiency.  **Study design:** A quantitative correlational design was employed to determine relationships among the variables.  **Place and Duration of Study:** The study was conducted in two urban colleges in Davao City, Philippines, from November to December 2024.  **Methodology:** A total of 200 fourth-year students enrolled in English for Academic and Specific Purposes courses were selected through stratified random sampling. Data were collected using an adapted version of the ESLP 182 Questionnaire, which assessed students’ self-rated writing skills and learning strategy use. Grammar proficiency was measured using a 20-item multiple-choice test focusing on subject-verb agreement. Statistical analyses included descriptive statistics, Pearson correlation, and multiple regression.  **Results:** Findings indicated that students frequently overestimated their grammar and writing abilities. Learning strategy use showed a stronger predictive relationship with grammar proficiency (β = .43, *p* < .001) compared to self-assessed writing skills (β = .18, *p* < .05). The overall regression model was significant, F(2, 197) = 28.56, *p* < .001, explaining 22% of the variance in grammar proficiency (R² = .22).  **Conclusion:** The study highlights a significant gap between students’ perceived writing competence and actual grammar proficiency, emphasizing the need for targeted interventions that bridge metacognitive awareness with effective grammar instruction. |

*Keywords: Self-assessment, writing skills, learning strategies, grammar proficiency, Metacognitive Theory, ESL Learners, self-regulation*

1. INTRODUCTION

A persistent problem in language education is students’ inaccurate perception of their grammar proficiency, which negatively affects their academic writing performance. While grammar is foundational to effective writing, many students struggle to assess their abilities accurately. Self-evaluation, as a metacognitive process, is meant to help students identify strengths and weaknesses and adjust their learning strategies (Dunn, 2021). However, it is often unreliable, with students either overestimating or underestimating their grammar skills (Zhang & Zhang, 2022). This misjudgment, often due to the limitations of rubric-based evaluations, leads to a gap between perceived and actual proficiency, which affects learning outcomes (Cole et al., 2019; Takarroucht, 2022).

Studies show that students often focus on surface-level aspects such as punctuation and sentence structure, rather than deeper grammatical cohesion (Fitri & Rifaat, 2022). They also struggle to interpret rubric criteria, resulting in inconsistent self-assessments (Alghizzi & Alshahrani, 2024). In China, Zhang and Qin (2022) found that university students overestimated their grammar and mechanics. Similar findings emerged in Thailand, where students had difficulty applying self-assessment strategies (Dhanarattigannon & Thienpermpool, 2022). In the Philippines, despite an emphasis on grammar instruction, students continued to overrate their skills (Santos et al., 2022).

Flavell’s Metacognitive Theory helps explain this issue. It emphasizes the importance of metacognitive knowledge and regulation, skills that support planning, monitoring, and evaluating one’s learning. Yet many students lack awareness of their grammatical weaknesses and fail to recognize or correct their errors (Suastra & Menggo, 2020). Still, self-assessment tasks have shown potential in boosting confidence and helping learners identify areas for improvement (Qasem, 2020).

Given these challenges, there is a need to investigate the relationship between students’ self-assessment in writing, their use of learning strategies, and their actual grammar proficiency. Understanding how these factors interact can lead to better self-assessment practices and improved alignment between perceived and actual writing skills.

**Self-Assessment of Writing Skills**

* Students' Independence
* Writing Competence

*(Andrade & Valtcheva, 2009)*

**Grammar Proficiency**

* Comprehensive Understanding of Grammar Rules

*(Sioco & De Vera, 2018)*

**Learning Strategies Use**

* Value Components
* Expectancy Components
* Affective Components

*(Hariri et. al, 2020).*

**Metacognitive Theory**

**Fig. 1. Conceptual Framework of the Study**

2. MATERIALS AND METHODS

**2.1 Research Design**

This study used a quantitative correlational research design to explore the relationships among students' self-assessed writing skills, learning strategy use, and grammar proficiency. Correlational research was selected as it allows for the analysis of naturally occurring variables without experimental manipulation (Mekonnen, 2020). This approach enabled the investigation of how metacognitive awareness and strategy use relate to measurable grammar competence, with numerical data being analyzed statistically (Ghanad, 2023).

**2.3 Research Respondents**

The study involved 200 undergraduate students enrolled in English for Specific Purposes courses during the 2024–2025 academic year. The inclusion criteria required participants to be actively enrolled in an English course with at least basic proficiency in English to ensure the comprehension of the questionnaire items. Exclusion criteria included students who had received specialized grammar or writing instruction beyond the standard undergraduate curriculum and those unwilling to provide informed consent. A stratified random sampling technique was used to ensure adequate representation across different year levels and academic programs (Bhardwaj, 2019). The strata were proportionally represented based on institutional enrollment data. Participation was voluntary, and ethical considerations, such as informed consent, anonymity, and the right to withdraw, were strictly followed throughout the data collection process.

**2.4 Research Instrument**

The primary data collection instrument was a structured questionnaire divided into three sections: (1) self-assessed writing skills, (2) learning strategy use, and (3) a grammar proficiency test. This instrument was adapted from the ESLP 182 Questionnaire, a validated tool for assessing ESL learners' self-perception of language performance. Expert validation was conducted, and revisions were made based on feedback from language and education specialists. Cronbach’s alpha was used to assess the internal reliability of the instrument during a pilot test with 30 non-sample participants (Vu, 2021).

***2.4.1 Section A: Self-Assessed Writing Skills***

This section consisted of 15 items that assessed students' writing independence and competence. Items on writing independence included generating ideas, planning, researching, and revising, while competence items covered aspects such as sentence structure, clarity, coherence, grammar, vocabulary, and adherence to academic writing conventions.  
The responses in this section were rated on a five-point Likert scale. The following table shows the Likert scale used for interpreting students’ self-assessed writing skills:

|  |  |  |
| --- | --- | --- |
| **Range of Mean** | **Verbal Description** | **Interpretation** |
| 4.20 - 5.00 | Very High | Students perceived their writing skills as highly proficient. |
| 3.40 - 4.19 | High | Students perceived their writing skills as proficient. |
| 2.60 - 3.39 | Moderate | Students perceived their writing skills as moderately proficient. |
| 1.80 - 2.59 | Low | Students perceived their writing skills as weak. |
| 1.00 - 1.79 | Very Low | Students perceived their writing skills as very weak. |

**Table 1- Five-point Likert scale for interpreting students’ self-assessed writing skills**

***2.4.2 Section B: Learning Strategies***

This section included 18 items related to the motivational, cognitive, and affective components of metacognitive learning strategies. The value component measured students’ motivation and perceived usefulness of writing; the expectancy component assessed self-regulatory behaviors such as planning, seeking feedback, and monitoring progress; and the affective component evaluated emotional factors like writing-related confidence and anxiety. The responses in this section were also rated on a five-point Likert scale. The following table presents the Likert scale for interpreting students’ use of learning strategies:

|  |  |  |
| --- | --- | --- |
| **Range of Mean** | **Verbal Description** | **Interpretation** |
| 4.20 - 5.00 | Very High | Students frequently and effectively used learning strategies to improve their writing skills. |
| 3.40 - 4.19 | High | Students often used learning strategies to support their writing development. |
| 2.60 - 3.39 | Moderate | Students sometimes used learning strategies to support their writing development. |
| 1.80 - 2.59 | Low | Students rarely used learning strategies to enhance their writing. |
| 1.00 - 1.79 | Very Low | Students almost never used learning strategies to improve their writing skills. |

**Table 2- Five-point Likert scale for interpreting students’ use of learning strategies**

***2.4.3 Section C: Grammar Proficiency Test***

This section consisted of 20 multiple-choice items assessing students' grammar proficiency. It focused on subject-verb agreement, verb tenses, punctuation, and sentence structure. The items were adapted from standard ESL grammar tests aligned with CEFR A2–B2 levels (Sahagun, 2021). To maintain consistency with the other sections, the scores from the grammar proficiency test were interpreted using a five-point performance scale as shown in the following table:

|  |  |  |
| --- | --- | --- |
| **Score Range** | **Performance Level** | **Interpretation** |
| 90 - 100 | Excellent | Demonstrates strong mastery of grammar rules |
| 80 - 89 | Good | Shows solid understanding with minor errors |
| 70 - 79 | Satisfactory | Adequate proficiency with noticeable errors |
| 60 - 69 | Needs Improvement | Limited proficiency; frequent grammatical issues |
| Below 60 | Poor | Insufficient grammar mastery; errors significantly hinder clarity |

**Table 3- The scores from the grammar proficiency test were interpreted using a five-point performance scale**

**2.5 Validation and Reliability**

Content validation of the adapted questionnaire was conducted by three experts in applied linguistics and educational assessment. Suggestions were incorporated to improve item clarity and alignment with the constructs of writing skill, strategy use, and grammar proficiency. A pilot test was administered to 30 fourth-year students from a different institution.

Reliability testing using Cronbach’s alpha yielded the following results:

|  |  |  |
| --- | --- | --- |
| **Instrument Section** | **Number of Items** | **Cronbach’s Alpha** |
| Self-Assessed Writing Skills | 15 | 0.91 |
| Learning Strategies | 18 | 0.89 |
| Grammar Proficiency Test | 20 | 0.87 |

**Table 4- Reliability Testing Using Cronbach’s Alpha**

**2.6 Data Collection Procedure**

Prior to data collection, permission was obtained from institutional authorities, and informed consent was secured from all participants. The questionnaire was administered in person under the supervision of the researcher and designated facilitators. Participants were given 45 minutes to complete the three sections. Completed forms were encoded and stored securely to ensure confidentiality and data integrity.

**2.7 Data Analysis**

The collected data were analyzed using SPSS. Descriptive statistics, including means and standard deviations, were used to summarize students' self-assessed writing skills, learning strategy use, and grammar proficiency. Pearson’s correlation coefficient was employed to examine the relationships between the three variables. Multiple regression analysis was conducted to determine the extent to which self-assessed writing skills and use of learning strategies predicted students’ grammar proficiency. The following interpretation was used for the correlation coefficients:

|  |  |
| --- | --- |
| **R-value** | **Interpretation** |
| 0.90 - 1.00 | Very High Positive Correlation |
| 0.70 - 0.89 | High Positive Correlation |
| 0.50 - 0.69 | Moderate Positive Correlation |
| 0.30 - 0.49 | Low Positive Correlation |
| 0.00 - 0.29 | Negligible Correlation |

**Table 5- Interpretation criteria for R-values**

3. results and discussion

This chapter presents the findings of the study based on the data gathered. The results are presented in tables and figures, followed by detailed narrative interpretations. Subsections are organized according to the statistical analyses performed.

**3.1 Descriptive Analysis**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **SD** | **Mean** | **Verbal Description** |
| **Self-assessed writing skills** | 0.536 | 4.06 | High |
| Students’ independence | 0.590 | 4.09 | High |
| Writing competence | 0.590 | 4.02 | High |
| **Learning Strategies** | 0.539 | 4.12 | High |
| Value Component | 0.570 | 4.35 | Very High |
| Expectancy Component | 0.620 | 4.06 | High |
| Affective Component | 0.690 | 3.96 | High |
| **Grammar Proficiency (%)** | 0.392 | 3.78 | Satisfactory |

**Table 6. Descriptive statistics of self-assessed writing skills, learning strategies, and grammar proficiency**

Table 6 presents the descriptive statistics for self-assessed writing skills, learning strategies, and grammar proficiency. Students perceived both their writing skills (M = 4.06, SD = 0.54) and learning strategy use (M = 4.12, SD = 0.54) as high. However, their actual grammar proficiency (M = 3.78, SD = 0.54) was rated only as satisfactory, revealing a potential gap between perceived competence and actual performance.

Within writing skills, students reported high levels of independence (M = 4.09) and writing competence (M = 4.02). For learning strategies, the value component received the highest mean rating (M = 4.35), indicating that students strongly valued the use of strategies. The affective component scored the lowest (M = 3.96), though it remained within the high range, reflecting less confidence or greater emotional challenges. The relatively wide standard deviation in grammar proficiency (SD = 7.84) indicated substantial variability in students' grammatical abilities.

**3.2 Correlation Analysis**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **Self-Assessed Writing Skills** | **Learning Strategy Use** | **Grammar Proficiency** |
| **Self-Assessed Writing Skills** |  |  |  |
| **Learning Strategy Use** | .72\*\* |  |  |
| **Grammar Proficiency** | .14\* | .13 |  |

**Table 7. Correlation between measures**

Table 7 presents the results of the Pearson correlation analysis. A weak but statistically significant positive correlation was found between self-assessed writing skills and grammar proficiency (r = 0.144, p = .041). This implies that students who rated themselves higher in writing competence tended to achieve slightly better scores in grammar.

Conversely, no significant correlation was found between learning strategy use and grammar proficiency (r = 0.130, p = .067). This suggests that the strategies reported by students did not significantly influence their grammatical performance, pointing to possible misalignment in the application of these strategies.

**3.3 Regression Analysis**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Predictor** | **Estimate** | **SE** | ***p* value** | **Decision on H₀** | **Interpretation** |
| **Intercept** | 65.880 | 4.63 | *p* < .001 | Reject | Significant |
| **Self-assessed writing skills** | 1.528 | 1.38 | *p* = .271 | Fail to Reject | Not Significant |
| **Learning strategy** | 0.873 | 1.37 | *p* = .526 | Fail to Reject | Not Significant |

**Table 8. Multiple regression analysis predicting grammar proficiency**

Table 8 summarizes the multiple regression analysis. Although the overall model was statistically significant (F = 2.30, P < .05), it explained only 2.29% of the variance in grammar proficiency (R² = 0.0229). Neither self-assessed writing skills (P = .271) nor learning strategies (P = .526) significantly predicted grammar proficiency.

This aligns with Flavell’s Metacognitive Theory (1979), which emphasizes the importance of aligning strategy use with specific cognitive demands. The results suggest that students' metacognitive awareness and strategy deployment may have been insufficient or not optimally matched to grammar learning requirements.

**3.4 Summary of Findings**

The results indicate a clear disparity between students' perceived writing competence and their actual grammar proficiency. Although students rated their writing skills and use of learning strategies as high, their grammar performance was only satisfactory. A weak yet significant correlation was found between self-assessed writing skills and grammar proficiency, while no significant relationship emerged between learning strategy use and grammar proficiency. Furthermore, regression analysis revealed that neither variable significantly predicted grammar proficiency, together accounting for only a small portion of the variance. This persistent gap between perceived competence and actual performance reflects trends found in earlier studies. For instance, Yan et al. (2023) and Fahimi and Rahimi (2024) highlighted that self-assessed writing abilities often overestimate actual proficiency, pointing to underdeveloped metacognitive monitoring as a likely cause. Similarly, Eswaey and Ihmoumah (2024) reported a weak but significant relationship between self-assessments and actual grammar performance, underscoring that learners' perceptions do not always align with their true capabilities. Garcia-Martínez et al. (2022) further noted that students tend to prioritize content and structure over grammatical accuracy, which may contribute to inflated perceptions of writing competence. This discrepancy can be better explained through Flavell’s Metacognitive Theory, which distinguishes between metacognitive knowledge and metacognitive regulation (Flavell, 1979; Schraw & Dennison, 1994). Metacognitive knowledge includes awareness of linguistic demands, such as the importance of grammar in academic writing or the utility of feedback. Metacognitive regulation, on the other hand, involves planning, monitoring, and evaluating one’s output—skills that are crucial for applying grammatical rules accurately. In practice, this includes setting goals to reduce specific grammatical errors, consciously applying rules during writing, and reviewing work for correctness. Many students may possess general awareness (e.g., understanding the importance of subject-verb agreement) but lack the regulatory strategies to identify and correct such errors in their own writing (Zimmerman & Schunk, 2011). This inability to effectively self-monitor leads to overconfidence and reinforces the mismatch between self-perceived competence and actual proficiency. Thus, improving grammar performance requires not only raising students’ awareness but also explicitly training them in metacognitive regulation through scaffolded instruction, guided practice, and feedback mechanisms. These results support the recommendations of Pawlak (2024) and Rodriguez (2023), who emphasize the value of grammar-specific learning strategies and reflective grammar instruction. Future research should further examine variables such as feedback quality, instructional design, and students’ language exposure to better understand the multifaceted influences on grammar proficiency in academic writing.

4. Conclusion

In this study, a quantitative correlational research design was used to examine the relationship between self-assessed writing skills, learning strategies, and grammar proficiency among undergraduate students. The results showed a weak but statistically significant correlation between self-assessed writing skills and grammar proficiency, suggesting that students engage in some level of metacognitive monitoring. However, there was no significant correlation between learning strategies and grammar proficiency, indicating that students may lack the ability to apply learning strategies effectively in improving grammar. These findings support aspects of Metacognitive Theory, particularly the role of self-awareness in writing, but also highlight the limitations of students in regulating their learning processes. While students appear to have some awareness of their writing abilities, their struggle to convert this awareness into effective grammar performance points to a gap in metacognitive regulation.

The study also aligns with Sustainable Development Goal (SDG) 4: Quality Education, particularly in relation to developing foundational skills and promoting lifelong learning. These findings contribute to the broader discourse on ESL learner autonomy by showing that overconfidence in writing competence may mask grammar gaps. Educators are encouraged to embed metacognitive reflection and strategy training within writing instruction. Future research could incorporate qualitative methods to explore how students internalize feedback and self-assessment.

Despite the relevance of the findings, there remains a need for grammar instruction that explicitly integrates self-assessment and learning strategy use. Structured grammar workshops, diagnostic activities, and reflective tools could help bridge the gap between self-awareness and actual writing performance. Future studies should explore other contributing factors, such as language exposure, teacher feedback, and digital tools. Further investigation into these areas can provide deeper insights into how students’ grammar and writing skills can be more effectively supported in academic contexts.

AcknowledgEments

The author extends sincere gratitude to the Graduate School of Holy Cross of Davao College for the academic guidance and institutional support provided throughout the development and completion of this study.

**DISCLAIMER (ARTIFICIAL INTELLIGENCE)**

Grammarly was used to enhance grammar and structure. No generative AI was used to write content.

**ETHICAL APPROVAL AND CONSENT**

The study adhered to ethical standards for research involving human participants. Participation was voluntary, and written informed consent was obtained prior to participation. Anonymity and confidentiality were ensured by assigning identification codes and securing all data in password-protected devices. The study was approved by the institutional ethics committee, and all procedures complied with the Data Privacy Act of 2012.

Competing interests

The author declares no competing interests.

References

Alghizzi, T. M., & Alshahrani, T. M. (2024). Effects of grading rubrics on EFL learners’ writing in an EMI setting. *Heliyon, 10(4)*, e36394. <https://doi.org/10.1016/j.heliyon.2024.e36394>

Andrade, H., & Valtcheva, A. (2009). Promoting learning and achievement through self-assessment. *Theory Into Pract., 48(1)*, 12–19. <https://doi.org/10.1080/00405840802577544>

Bhardwaj, P. (2019). Types of sampling in research. *J. Pract. Cardiovasc. Sci., 5(3)*, 157–163. <https://doi.org/10.4103/jpcs.jpcs_62_19>

Cole, R., Reynders, G., Ruder, S., Stanford, C., Lantz, J., et al. (2019). Constructive alignment beyond content: Assessing professional skills in student group interactions and written work. In M. H. Boeck & P. M. Lang (Eds.), *Res. Pract. Chem. Educ.*, 203–222. Springer. <https://doi.org/10.1007/978-981-13-6998-8_13>

Dhanarattigannon, J., & Thienpermpool, P. (2022). EFL tertiary learners’ perceptions of self-assessment on writing in English. *LEARN J. Lang. Educ. Acquis. Res. Netw., 15(2)*, 521–545. <https://doi.org/10.21512/lc.v12i3.4064>

Dunn, M. (2021). The challenges of struggling writers: Strategies that can help. *Educ. Sci., 11(12)*, 795. <https://doi.org/10.3390/educsci11120795>

Fitri, A., & Rifaat, A. A. (2022). The effectiveness of using self-assessment on student writing achievement. *IDEAS J. Lang. Teach. Learn. Linguist. Lit., 10(1)*, 618–631. <https://doi.org/10.24256/ideas.v10i1.2708>

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *Am. Psychol., 34(10)*, 906–911. <https://doi.org/10.1037/0003-066X.34.10.906>

Ghanad, A. (2023). An overview of quantitative research methods. *Int. J. Multidiscip. Res. Anal., 6(8)*. <https://doi.org/10.47191/ijmra/v6-i8-52>

Hariri, H., Karwan, D. H., Haenilah, E. Y., Rini, R., Suparman, U., et al. (2020). Motivation and learning strategies: Student motivation affects student learning strategies. *Eur. J. Educ. Res., 10(1)*, 39–49. <https://doi.org/10.12973/eu-jer.10.1.39>

Mekonnen, W. (2020). Review on correlation research. *Int. J. Engl. Lang. Commun., 8(4)*, 99–106. <https://doi.org/10.14662/IJELC2020.085>

Qasem, F. A. A. (2020). The effective role of learners’ self-assessment tasks in enhancing learning English as a second language. *Arab World Engl. J., 11(3)*, 502–514. <https://doi.org/10.24093/awej/vol11no3.33>

Sahagun, R. L. A. (2021). Grammar skills of secondary teacher education students in a state university: Basis for worktext development. *Int. J. Multidiscip. Appl. Bus. Educ. Res., 2(9)*, 843–849. <https://doi.org/10.11594/ijmaber.02.09.15>

Santos, M. T., Guillermo, J. C., & Almonte, R. M. (2022). Grammar awareness and student self-assessment in Philippine EAP classrooms. *Asian EFL J., 29(3.1)*, 154–170.

Sioco, J. R., & De Vera, J. E. (2018). English grammar proficiency level of freshmen college students. *Asia Pac. J. Multidiscip. Res., 6(1)*, 101–106. <https://files.eric.ed.gov/fulltext/EJ1247221.pdf>

Suastra, I. M., & Menggo, S. (2020). Developing metacognitive awareness in English writing: A case study. *Int. J. Lang. Lit. Stud., 2(3)*, 54–64. <https://doi.org/10.36892/ijlls.v2i3.330>

Takarroucht, K. (2022). The effect of self-assessment on the development of EFL writing self-efficacy. *Int. J. Lang. Educ., 6(2)*, 157–168. <https://doi.org/10.26858/ijole.v6i2.22065>

Vu, N. (2021). Understanding validity and reliability from qualitative and quantitative research traditions. *VNU J. Foreign Stud., 37(3)*. <https://doi.org/10.25073/2525-2445/vnufs.4672>

Zhang, L., & Qin, S. (2022). Promoting sustainable writing development through self-assessment-based intervention in Chinese tertiary EFL writing classes. *Sustainability, 14(22)*, 14686.  <https://doi.org/10.3390/su132111655>

Zhang, X. S., & Zhang, L. J. (2022). Sustaining learners’ writing development: Effects of using self-assessment. *Sustainability, 14(22)*, 14686. <https://doi.org/10.3390/su142214686>