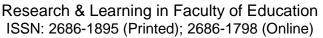
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# The Impact of Syntax-Semantics Awareness on English Writing Proficiency in Undergraduate Students

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#### **Abstrak**

UNIVERSITAS

Penelitian ini mengeksplorasi peran kesadaran sintaksis-semantik dalam meningkatkan kemahiran menulis bahasa Inggris pada mahasiswa EFL. Dengan pendekatan kualitatif, esai dan wawancara 30 mahasiswa tahun akhir dianalisis untuk mengidentifikasi tantangan umum seperti kesalahan subjek-kata kerja, penyalahgunaan struktur kalimat, dan ambiguitas semantik yang sering diperburuk oleh interferensi L1. Hasil penelitian menunjukkan adanya korelasi kuat antara kesadaran sintaksis-semantik dan kualitas tulisan, di mana mahasiswa yang menunjukkan akurasi tata bahasa dan kejelasan semantik yang lebih baik menghasilkan esai yang lebih koheren. Penelitian ini menyarankan penggunaan metode pengajaran berbasis proses, latihan analisis kontrastif, dan tugas menulis kolaboratif sebagai strategi efektif untuk meningkatkan integrasi sintaksis-semantik. Pendekatan ini dapat meningkatkan keterampilan menulis akademis mahasiswa dan membantu mengatasi kesulitan linguistik dalam konteks EFL.

**Kata Kunci:** Sintaksis-Semantic, Kemahiran Menulis, Interferensi L1, Tantangan Linguistik.

#### **Abstract**

This study explores the role of syntax-semantics awareness in improving English writing proficiency among undergraduate EFL students. Using a qualitative approach, 30 final-year students' essays and interviews were analyzed to identify common challenges such as subject-verb agreement errors, misused sentence structures, and semantic ambiguities, often exacerbated by L1 interference. The findings reveal a strong correlation between syntax-semantics awareness and writing quality, with students demonstrating better grammatical accuracy and semantic clarity producing more coherent essays. The study suggests process-oriented teaching methods, contrastive analysis exercises, and collaborative writing tasks as effective strategies to enhance syntax-semantics integration. These approaches can improve students' academic writing skills and contribute to overcoming linguistic difficulties in EFL contexts.

**Keywords:** Syntactic-semantic, writing proficiency, interferensi L1, linguistics challenges.

### INTRODUCTION

Syntax and semantics are fundamental components in language learning, forming the basis of effective communication and comprehension. The term

syntax pertains to the organization of words to form coherent sentences, whereas semantics deals with the interpretation and meaning conveyed by those sentences (Hussein & Elttayef, 2018). Together, these domains influence a learner's ability to produce grammatically correct and contextually meaningful texts. For English as a Foreign Language (EFL) learners, the interplay between syntax and semantics, also known as the syntax-semantics interface, has been highlighted as a critical area of development in academic writing. However, despite its importance, many undergraduate students face challenges in applying this interface effectively in writing, leading to errors in both structure and meaning (Al-Jarf, 2021).

Furthermore, writing is a fundamental skill that students must master, as it involves communicating ideas and opinions effectively through written language. Then, syntax plays a critical role in this process, as it focuses on sentence structure, which is essential for producing coherent and grammatically sound writing. In other words, writing and grammar are closely linked, since much of the quality of writing stems from accurate grammar (Sari, Wijaya, & Syarifhusain, 2014).

Research has consistently shown that awareness of syntax and semantics enhances writing quality by improving sentence construction and coherence. For instance, Eisenbeiss (2015) observed that learners who have a solid understanding of syntactic principles are more capable of constructing sentences that are both sophisticated and precise. Similarly, Polio and Friedman (2016) emphasized the interplay between syntax

Jand semantics in achieving clarity and precision in written communication, especially in academic contexts. They argue that writing proficiency requires not only grammatical knowledge but also the ability to construct meaning effectively. However, there is a need to further explore how these two aspects interact to influence writing proficiency among undergraduate students, particularly in non-native English-speaking contexts.

Undergraduate students often struggle to balance syntactic accuracy and semantic appropriateness in their writing. Studies by Liu and Wang (2022) highlighted that many learners prioritize grammatical correctness over semantic coherence, resulting in texts that are formally correct but lack communicative clarity. Conversely, some students focus on expressing their ideas but neglect proper syntactic structures, leading to errors that hinder comprehension (Larsen-Freeman, 2015). This imbalance underscores the need to examine how syntax-semantics awareness can be systematically developed in EFL instruction.

According to Lebkuecher and Malt (2024), not all syntactic structures at the syntax-semantics interface are equally susceptible to cross-linguistic influence. The degree of this vulnerability may depend not only on the structure's position within the interface between linguistic domains but also on the level of conflict between syntactic rules and non-syntactic features, such as semantic or conceptual aspects. This could help explain the seemingly contradictory findings in prior research on cross-linguistic influence at the syntax-semantics interface. In the context of English writing proficiency, understanding these dynamics is

crucial, as students' awareness of syntax-semantics relationships could mitigate errors caused by cross-linguistic influence, ultimately enhancing their writing skills. By recognizing how syntactic structures and their associated meanings interact, EFL learners may reduce common writing challenges such as incorrect subject-verb agreement and semantic ambiguities, which often stem from interference by their native language.

While numerous studies have examined the separate contributions of syntax and semantics to language learning, there is limited research on their combined impact on writing proficiency. For example, Cennetkuşu, Koç, & Kozcaz (2020) explored incidental vocabulary acquisition in foreign language by visual literary quotations. In other hand, studies focusing on semantic processing (Zeng et al., 2020) often overlook the syntactic structures that frame meaning. This gap highlights the need for research that integrates both syntax and semantics to understand their role in developing writing skills among EFL learners.

Another limitation in previous research is the lack of context-specific studies involving undergraduate students in non-English-speaking countries. Most studies on syntax-semantics awareness have been conducted in Western contexts, adaptation at the syntax-semantics interface provides valuable insights into vernacular structures and their linguistic patterns (Blanchette et al., 2024) where learners are exposed to English more frequently. In contrast, students in countries like Indonesia face unique challenges, including limited exposure to English and differences in syntactic and semantic structures between English and their native languages (Setyowati & Sukmawan, 2022). Addressing this gap can provide insights into the specific needs of these learners.

Academic writing requires students to construct arguments with clarity and precision, which depends heavily on their ability to navigate the syntax-semantics interface. Research by Hyland (2019) suggests that students with strong syntax-semantics awareness produce more cohesive and logically structured essays. However, traditional grammar instruction in EFL contexts often emphasizes rote memorization of rules without fostering a deeper understanding of how syntax and semantics interact to shape meaning. This pedagogical gap calls for innovative approaches to teaching the syntax-semantics interface in writing courses.

Cahyanil (2019) emphasizes that the syntax-semantics interface offers valuable insights into the analysis of verbs, especially regarding their telicity, which reflects the completion or inherent endpoint of an action. This distinction between telic verbs, characterized by clear goals, and atelic verbs, which denote ongoing or indefinite actions, underscores the role of syntax and semantics in shaping sentence construction. In the context of EFL learners, such awareness is crucial, as it aids in understanding how verb selection and sentence structure impact writing coherence. By fostering a better grasp of these linguistic elements, students can minimize errors in academic writing and achieve greater proficiency.

This study aims to investigate the impact of syntax-semantics awareness on English writing proficiency among undergraduate students. Specifically, it

seeks to identify the common syntactic and semantic challenges faced by these students, analyze the relationship between syntax-semantics awareness and writing performance, and propose strategies for integrating syntax-semantics instruction into EFL writing courses. Moreover, this research contributes to the growing body of literature on EFL writing by addressing an underexplored area: the interplay between syntax and semantics. By focusing on undergraduate students in Indonesia, it provides valuable insights into how the syntax-semantics interface can be leveraged to improve writing proficiency in similar educational contexts. Additionally, it offers practical recommendations for teachers and curriculum designers to enhance EFL instruction.

#### **METHOD**

This study employs a qualitative approach to investigate the impact of syntax-semantics awareness on the English writing proficiency of undergraduate EFL students. A qualitative design is considered suitable for examining complex phenomena, such as the interplay between syntactic and semantic knowledge in academic writing, as it facilitates an in-depth exploration and interpretation of participants' experiences and practices (Creswell & Poth, 2018). The research was conducted at a university in Medan, involving 30 final-year undergraduate students majoring in English education, who were selected through purposive sampling to ensure they had sufficient experience in academic writing. Data collection relied on two primary methods: document analysis and semi-structured interviews.

The primary data consisted of 30 academic essays written by the participants as part of their coursework, addressing topics relevant to their field of study. These essays were analyzed to identify patterns of syntactic structure and semantic coherence, with a particular focus on issues such as incorrect word order, subject-verb agreement problems, and unclear semantic connections. This method aligns with previous research highlighting the value of written texts as a source of linguistic data (Polio & Friedman, 2016). To complement the document analysis, semi-structured interviews were conducted with each participant, lasting approximately 30 to 45 minutes. These interviews explored the students' awareness of syntax-semantics integration in their writing process, including their understanding of syntactic rules, strategies for conveying meaning, and perceptions of challenges faced in academic writing. The interviews were audio-recorded and transcribed for further analysis, providing insight into the cognitive and metacognitive processes involved in their writing (Merriam & Tisdell, 2016).

The data were analyzed using thematic analysis following the framework proposed by Nowell et al. (2017). This process included several steps: familiarizing with the data through repeated readings of essays and transcripts, generating initial codes to identify recurring syntactic and semantic patterns, searching for themes related to syntax-semantics integration, reviewing and refining these themes for coherence and alignment with the data, and defining the themes to elucidate key findings such as "syntactic errors affecting coherence" and "semantic misinterpretations in complex sentences." Finally, the findings were compiled into a report linking the identified themes to the research questions and theoretical framework. This systematic approach, supported by

data triangulation from document analysis and interviews, enhanced the validity and reliability of the findings, providing a comprehensive understanding of how syntax-semantics awareness influences writing proficiency (Denzin, 2012).

### **RESULTS AND DISCUSSION**

The analysis of 30 academic essays revealed several recurring syntactic challenges. Most participants struggled with basic sentence structure, including subject-verb agreement and consistent tense usage. For instance, 73% of the essays contained errors in verb forms, such as using "he go" instead of "he goes." Additionally, complex sentence structures, such as relative clauses and conditionals, were notably problematic for 65% of students, leading to fragmented or incoherent ideas. These findings suggest a limited mastery of essential syntactic rules, particularly when constructing complex sentences.

Further analysis revealed that errors in specific grammatical structures, such as the misuse of conjunctions and misplaced modifiers, directly impacted semantic coherence. For example, participants used conjunctions such as "because" and "although" incorrectly, resulting in unclear or contradictory statements. Similarly, misplaced modifiers often led to ambiguous meanings, as in the sentence, "The professor explained the theory to the students that was unclear." These findings suggest that syntactic errors can obscure meaning, emphasizing the need for targeted instruction in these areas.

Semantic analysis of the essays indicated frequent issues with word choice and contextual meaning. Approximately 70% of students misused vocabulary, resulting in vague or ambiguous expressions. For example, a student wrote, "This statement is very important because it can give many good things," without specifying what "good things" referred to. Moreover, 58% of essays showed challenges in maintaining logical coherence, where ideas within paragraphs were semantically disjointed. These issues suggest a lack of semantic precision and awareness in conveying clear messages.

The essays demonstrated limited integration of syntax and semantics, with only 40% of participants successfully balancing grammatical accuracy and semantic clarity. Students who focused on syntactic correctness often neglected meaningful content, resulting in rigid yet unengaging texts. Conversely, those prioritizing meaning frequently produced grammatically flawed sentences. This dichotomy highlights the need for targeted instruction that addresses both syntactic and semantic dimensions simultaneously.

Statistical analysis of the essays' scores revealed a strong correlation between syntax-semantics awareness and writing proficiency. Participants with higher levels of syntax-semantics integration achieved an average score of 85 out of 100, compared to 68 for those with limited awareness. Interviews further confirmed that students who consciously applied syntactic rules and considered semantic coherence during writing demonstrated better performance. These results validate the hypothesis that syntax-semantics awareness positively influences academic writing quality.

Interviews with participants revealed their perception of challenges in balancing syntax and semantics. Most students acknowledged their struggle to simultaneously focus on grammar and meaning, with 80% attributing these

difficulties to limited practice and insufficient feedback from instructors. Additionally, students expressed a need for clearer guidance on constructing sentences that are both grammatically correct and meaningful.

When asked about their strategies, 65% of students stated that they relied on translating their ideas directly from Indonesian into English. This approach often led to syntactic errors and semantic awkwardness due to structural differences between the two languages. Others mentioned using online tools, such as grammar checkers, which improved basic accuracy but did not address deeper semantic issues. The results also highlighted significant variations in students' syntax-semantics awareness based on their academic performance. High-performing students demonstrated better integration of syntax and semantics, producing essays with minimal errors and clear arguments. In contrast, lower-performing students exhibited fragmented ideas and pervasive grammatical mistakes.

The findings of this study reveal significant challenges faced by undergraduate EFL students in integrating syntax and semantics in their academic writing. The frequent syntactic errors, such as subject-verb agreement and tense inconsistencies, suggest a gap in students' understanding of fundamental grammatical rules. These issues are consistent with previous studies, such as Polio and Friedman (2016), which found that EFL learners often struggle with grammatical accuracy due to insufficient exposure to complex sentence structures. The results highlight the importance of explicit instruction and practice in sentence construction to address these gaps.

Semantic challenges, including vague expressions and incoherent ideas, further indicate that students lack lexical precision and awareness of contextual meaning, on the critical role of vocabulary depth in achieving semantic clarity. The reliance on general terms and ambiguous phrases in students' essays suggests a need for targeted interventions that emphasize the use of specific and contextually appropriate vocabulary. Without addressing these semantic issues, students' writing may fail to effectively communicate intended meanings, even when syntactically accurate.

The observed imbalance between syntactic accuracy and semantic coherence underscores the complexity of developing writing proficiency in EFL contexts. As noted by Hyland (2019), focusing exclusively on grammar or meaning often leads to deficiencies in the other aspect. The dichotomy identified in this study, where students either prioritize grammatical correctness at the expense of meaning or vice versa, suggests the need for an integrated approach to teaching syntax and semantics. Such an approach could bridge the gap and foster a more balanced writing skill set.

The correlation between syntax-semantics awareness and writing proficiency further supports the argument that these competencies are interdependent. Students with higher levels of awareness produced essays that were both grammatically accurate and semantically coherent, achieving better scores than their peers. This finding aligns with Larsen-Freeman's (2015) assertion that grammar and meaning are interconnected components of language proficiency. The results emphasize the importance of addressing both aspects in writing instruction to improve overall performance.

Interviews with participants provided valuable insights into their perceptions of the challenges they faced. Many students reported difficulties in balancing grammatical accuracy and semantic clarity, attributing these challenges to limited practice and insufficient feedback. This finding echoes Setyowati and Sukmawan's (2022) observation that Indonesian EFL students often rely on translation from their native language, which can lead to errors due to structural differences. Encouraging students to compose directly in English through guided practice may help mitigate this issue.

The strategies currently employed by students, such as translating ideas from Indonesian to English or using grammar-checking tools, address only surface-level issues and do not promote a deeper understanding of syntax-semantics integration. While these tools can be helpful, they should be supplemented with activities that encourage critical thinking and revision, such as analyzing sentence structures and refining word choices. Without such interventions, students are unlikely to develop the skills needed to produce coherent and accurate academic writing.

Future research could expand on these findings by exploring how specific teaching interventions, such as scaffolded writing tasks or technology-assisted tools, can enhance syntax-semantics integration. Additionally, longitudinal studies tracking students' progress over an extended period would provide valuable insights into the long-term impact of integrated instruction on writing proficiency. By addressing these gaps, future studies could contribute to the development of more effective EFL writing pedagogy. These findings have important implications for EFL instruction. Teachers should adopt a process-oriented approach that emphasizes the interplay between form and meaning. Collaborative writing tasks and peer feedback sessions could provide students

## **CONCLUSION**

This study highlights the importance of syntax-semantics awareness in improving English writing proficiency among undergraduate EFL students. It identifies key challenges such as syntactic errors, semantic ambiguities, and L1 interference, which hinder students' ability to write coherent academic texts. These issues stem from gaps in grammatical knowledge, limited vocabulary, and reliance on tools like grammar checkers and direct translations. To address this, teaching strategies should focus on integrating syntax and semantics, moving beyond isolated grammar instruction.

Students with greater awareness of both components wrote more coherent essays, emphasizing the need for instructional approaches that teach grammar and meaning as interconnected. Contrastive analysis and activities highlighting differences between Indonesian and English can help address L1 interference. Process-oriented methods, including guided feedback and peer collaboration, are crucial for fostering critical thinking and revision skills.

The findings underscore the need for curriculum reforms that include authentic writing tasks balancing grammatical accuracy and meaningful communication. Real-world scenarios and self-editing exercises can boost confidence and proficiency. This research contributes to EFL writing literature, offering insights into challenges faced by Indonesian students. Future studies

should explore specific instructional interventions, while policymakers invest in teacher training to enhance syntax-semantics integration in classrooms.

# **REFERENCES**

- Al-Jarf, R. (2021). A model for communicative error correction in Saudi EFL freshman students' writing. *iManager's Journal on English Language Teaching*, 11(2), 32–41. <a href="https://doi.org/10.26634/jelt.11.2.17719">https://doi.org/10.26634/jelt.11.2.17719</a>
- Blanchette, F., Flannery, E., Jackson, C., & Reed, P. (2024). Adaptation at the Syntax–Semantics Interface: Evidence From a Vernacular Structure. Language and Speech, 67(1), 140-165. <a href="https://doi.org/10.1177/00238309231164972">https://doi.org/10.1177/00238309231164972</a>
- Cahyanil, I. (2019). Syntax and semantics interface analysis on verb telicity in English sentences. CLLiENT (Culture, Literature, Linguistics, and English Teaching), 1(2), 165–176. <a href="https://doi.org/10.32699/cllient.v1i02.951">https://doi.org/10.32699/cllient.v1i02.951</a>
- Cennetkuşu, N. G., Koç, H., & Kozcaz, E. T. (2020). An experimental study on incidental vocabulary acquisition: Incidental vocabulary acquisition in foreign language by visual literary quotations. Open Access Library Journal, 7(3). https://doi.org/10.4236/oalib.1106176
- Creswell, J.W. and Poth, C.N. (2018) Qualitative Inquiry and Research Design Choosing among Five Approaches. 4th Edition, SAGE Publications.
- Denzin, N. K. (2012). Triangulation 2.0. Journal of Mixed Methods Research, 6(2), 80–88. https://doi.org/10.1177/1558689812437186
- Eisenbeiss, S. (2015). Syntax and language acquisition. In Handbücher zur Sprach- und Kommunikationswissenschaft / Handbooks of Linguistics and Communication Science (HSK) 42/3 (pp. 1792–1833). De Gruyter. https://doi.org/10.1515/9783110363685-012
- Hussein, N. O., & Elttayef, A. I. (2018). The homogeneous relationship between syntax and semantics: Structure, and meaning in arrangement of English language sentences. British Journal of English Linguistics, 6(5), 38–45.
- Larsen-Freeman, D. (2015). Research into practice: Grammar learning and teaching. Language Teaching, 48(2), 263–280. https://doi.org/10.1017/S0261444814000408
- Lebkuecher, A., & Malt, B. C. (2024). Does L2 influence on use of L1 animacy constraints depend on alignment of syntactic and semantic features? Evidence from Japanese–English bilinguals. International Journal of Bilingualism, 28(3), 337–352. <a href="https://doi.org/10.1177/13670069231159169">https://doi.org/10.1177/13670069231159169</a>
- Ma, W., Zhao, M., Xie, X., Hu, Q., Liu, S., Zhang, J., ... & Liu, Y. (2022). Unveiling Code Pre-Trained Models: Investigating Syntax and Semantics Capaties. <a href="https://doi.org/10.485550/arXiv:2212.10017">https://doi.org/10.485550/arXiv:2212.10017</a>.
- Merriam, S. and Tisdell, E. (2016) Qualitative Research: A Guide to Design and Implementation. John Wiley & Sons.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods,* 16(1), 1–13. https://doi.org/10.1177/1609406917733847
- Polio, C., & Friedman, D. (2016). Understanding, Evaluating, and Conducting Second Language Writing Research (1st ed.). Routledge. <a href="https://doi.org/10.4324/9781315747293">https://doi.org/10.4324/9781315747293</a>
- Sari, I. P., Wijaya, B., & Syarifhusain. (2014). The correlation between students' syntax scores and students' writing scores. Jurnal Pendidikan dan Volume 6 Nomor 2 Tahun 2024 | 50

- Pembelajaran Untan, 3(11). https://doi.org/10.26418/jppk.v3i11.7762
- Setyowati, L., Sukmawan, S., & El-Sulukiyyah, A. A. (2023). The use of internet for academic writing course: Do they still need books in the library? *International Journal of Language Teaching and Education*, *6*(1). https://doi.org/10.22437/ijolte.v6i1.9964
- Zeng, T., Li, Y., & Wu, M. (2020). Syntactic and semantic processing of passive BEI sentences in Mandarin Chinese: Evidence from event-related potentials. *NeuroReport,* 31(13), 979–984. https://doi.org/10.1097/WNR.0000000000001507