

CAF Dimensions as Measures of University Students' Writing Proficiency in Arabic as a Foreign Language

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Abstract

Writing in Arabic remains a persistent challenge for non-native university learners, primarily due to the interplay between structural limitations and affective barriers—an intersection that has received limited integrative investigation. This study aims to identify and analyze the main obstacles faced by students in Arabic academic writing using the CAF (Complexity, Accuracy, Fluency) framework, as conceptualized by Barrot and Agdeppa (2021), which serves as the primary analytical lens. A descriptive-qualitative approach was employed, involving textual analysis of student writing samples and thematic analysis of responses collected through a Google Form questionnaire. The findings reveal that students struggle to construct complex syntactic structures, maintain grammatical accuracy, and sustain coherent idea development. These three dimensions are interdependent and further exacerbated by psychological factors such as fear of making mistakes and low self-confidence. The study concludes that writing difficulties are not purely linguistic but are also shaped by affective and cognitive dimensions. Theoretically, this research contributes to a deeper understanding of the interrelationship between linguistic competence and psychological readiness in academic writing. Practically, the findings offer pedagogical implications for designing more integrative writing instruction that emphasizes syntactic exploration, functional grammar internalization, and the development of metacognitive strategies.

Keywords: Arabic As A Foreign Language; Fluency; Grammatical Accuracy; Writing

INTRODUCTION

Writing is the most complex productive skill in Arabic language learning because it requires mastery of linguistic aspects, critical thinking skills, and the ability to organize ideas in a structured manner (Schoonen, 2022). At the university level, writing serves not only as a means of expression, but also as a reflection of mastery of nahwu–sarf, vocabulary selection, and the development of coherent discourse. This complexity underscores the need for an assessment framework that is capable of mapping writing skills in a multidimensional manner so that the academic quality of students can be measured more comprehensively.

Non-native speakers still face difficulties in producing accurate and coherent Arabic writing (Halim et al., 2017). These difficulties are mainly due to the characteristics of Arabic, which has a complex morphological and syntactic system, requiring higher skills than other languages (Aljuraifani & Alanazi, 2025). This condition is also experienced by students of Arabic Language and Literature programs in Indonesia, who often encounter limitations in their mastery of language structure and fluency of ideas. Previous studies have tended to focus on specific aspects of writing skills, such as grammatical errors, diction, or sentence structure, without using a comprehensive assessment framework (Solimando, 2022). A narrow focus on accuracy cannot fully describe the quality of writing, because the quality of writing is also determined by the complexity of structure and the fluency of ideas. Therefore, an evaluation framework that is capable of assessing writing skills in a multidimensional manner is needed so that students' weaknesses can be identified more accurately and comprehensively.

The Complexity, Accuracy, and Fluency (CAF) framework offers an important solution for comprehensively assessing writing skills (Housen & Kuiken, 2009; Shahmirzadi, 2020). CAF covers sentence structure diversity, grammatical accuracy, and discourse fluency, enabling a more comprehensive mapping of students' interlanguage development. In Second Language Acquisition research, this framework has proven effective in linking linguistic aspects with the writer's cognitive processes. The relevance of CAF becomes even clearer when applied to Arabic language students in Indonesia who face multidimensional challenges in writing.

In Indonesian language studies, Arabic writing skills often receive less attention than receptive skills such as reading and listening (Laili et al., 2022). In fact, writing is a productive skill that requires the integration of linguistic knowledge and critical thinking skills. This imbalance contributes to students' poor performance in the CAF dimension, making this research important to fill the gap. Thus, focusing on writing skills is crucial to improving the quality of Arabic language learning in higher education.

CAF-based assessment not only serves as a linguistic diagnostic tool, but also as a pedagogical instrument that can help lecturers design more effective writing learning strategies (Barrot & Agdeppa, 2021). With indicators of complexity, accuracy, and fluency, lecturers can understand the relationship between linguistic knowledge, cognitive processes, and students' writing outcomes. This allows writing instruction to be directed more systematically and in accordance with students' needs, so that the evaluation process does not stop at assessment, but also becomes the basis for developing learning strategies.

The urgency of this research is even greater when linked to academic demands in higher education. Students are required to produce scientific papers in Arabic that are not only grammatically correct, but also complex and coherent. Without a comprehensive evaluation, students' weaknesses will continue to recur and hinder the achievement of academic standards (Rass & Portman, 2024; Soulimani, 2018). Therefore, this study aims to provide a comprehensive overview of students' writing skills, while offering a more systematic evaluation solution.

Based on this description, this study was conducted to analyze students' writing skills using the Complexity, Accuracy, and Fluency (CAF) framework adapted from Barrot & Agdeppa (2021). This study is expected to contribute to the development of Arabic writing learning strategies and offer a more comprehensive evaluation model.

Thus, this study not only describes students' weaknesses but also formulates development strategies relevant to the challenges they face.

METHOD

This study uses a descriptive qualitative approach to evaluate students' writing skills through the dimensions of Complexity, Accuracy, and Fluency (CAF). This approach was chosen because it provides an in-depth description of students' linguistic performance without manipulating variables, allowing phenomena to be understood naturally as they appear in written texts (Park, 2025). By emphasizing the analysis of written text data, this study enables the systematic identification of syntactic patterns, grammatical errors, and discourse fluency (Rizvić-Eminović et al., 2025). Therefore, descriptive qualitative design is considered most relevant to reveal the quality of students' language production based on CAF dimensions.

The research subjects were students of the Arabic Language and Literature Study Program who had taken the Mahārah al-Kitābah course. The subjects were selected using purposive sampling, based on the students' active participation in lectures and their willingness to provide research data. This strategy was chosen because it allowed the researcher to obtain relevant and representative data from participants who were truly involved in the Arabic writing learning process. The research sample consisted of students' written texts produced in the Mahārah al-Kitābah assignment and responses to an open questionnaire about writing strategies, obstacles, and experiences. Thus, the data obtained not only reflected the written products but also the writers' reflections on the writing process.

The research instruments consisted of a CAF assessment rubric and an open-ended questionnaire. The CAF rubric was used as the main instrument to assess the dimensions of complexity, accuracy, and fluency in students' writing. This rubric was compiled based on an adaptation from Barrot & Agdeppa (2021) with adjustments to the linguistic characteristics of Arabic, so that the analysis results are more valid and in accordance with the nahwu-ṣarf system. The CAF-Complexity instrument assesses the level of linguistic structure complexity through indicators such as the average length of T-units and the ratio of clauses per T-unit. The CAF-Accuracy instrument assesses linguistic accuracy using the Weighted Clause Ratio (WCR), while the fluency dimension is analyzed through discourse fluency. Meanwhile, an open-ended questionnaire was designed to explore students' perceptions, strategies, and constraints in writing Arabic, with thematic analysis using the Braun & Clarke (2006) framework (Alsariera & Alsarairh, 2024).

Data was collected through the assessment of students' writing assignments in the Mahārah al-Kitābah course and an open questionnaire distributed online. All texts were analyzed in their original form without correction by the instructor in order to maintain the authenticity of the data and accurately reflect the students' initial abilities. Data validity was ensured through expert judgment, involving Arabic linguistics experts to assess the clarity of the CAF rubric indicators, as well as through triangulation of data sources by comparing the results of writing analysis and questionnaire responses (Cooke, 2018). Data analysis was conducted using three main approaches: CAF-based analysis to assess linguistic performance, thematic analysis to reveal student perceptions, and descriptive-comparative analysis to map writing ability profiles comprehensively.

RESULTS AND DISCUSSION**Patterns of Complexity in Arabic Writing Assignments**

The distribution of complexity analysis results for 30 student texts shows a strong tendency toward the moderate category. A total of 22 texts (73%) fall into this category, 7 texts (23%) are classified as low, and only 1 text (4%) reaches the high category. This pattern confirms that the majority of students have surpassed basic sentence structure, but have not yet fully mastered complex syntactic constructions. These findings reveal a significant transitional phase in the development of Arabic writing skills.

Table 1. Complexity Analysis Instrument for Student Texts (T01–T30)

| Text Code | MLT (Mean Length of T-unit) | C/T (Clauses per T-unit) | CN/T (Complex Nominals per T-unit) | CP/C (Coordinate Phrases per Clause) | Complexity Score | Category |
|-----------|-----------------------------|--------------------------|------------------------------------|--------------------------------------|------------------|----------|
| T01 | 6.84 | 1.21 | 0.63 | 0.48 | 2.29 | Medium |
| T02 | 6.64 | 1.29 | 0.71 | 0.44 | 2.27 | Medium |
| T03 | 5.35 | 1.03 | 0.58 | 0.38 | 1.83 | Low |
| T04 | 5.69 | 0.97 | 0.61 | 0.43 | 1.93 | Low |
| T05 | 6.11 | 1.11 | 0.72 | 0.25 | 2.05 | Medium |
| T06 | 4.36 | 0.91 | 0.73 | 0.50 | 1.63 | Low |
| T07 | 5.48 | 1.09 | 0.48 | 0.52 | 1.89 | Low |
| T08 | 6.67 | 1.00 | 0.67 | 0.22 | 2.14 | Medium |
| T09 | 6.57 | 1.07 | 0.93 | 0.53 | 2.28 | Medium |
| T10 | 6.80 | 1.20 | 0.67 | 0.50 | 2.29 | Medium |
| T11 | 7.31 | 1.56 | 0.81 | 0.28 | 2.49 | Medium |
| T12 | 7.43 | 1.21 | 0.86 | 0.29 | 2.45 | Medium |
| T13 | 10.00 | 2.00 | 1.08 | 0.17 | 3.31 | High |
| T14 | 7.73 | 1.27 | 1.18 | 0.36 | 2.64 | Medium |
| T15 | 6.60 | 1.53 | 0.73 | 0.30 | 2.29 | Medium |
| T16 | 8.50 | 1.13 | 0.69 | 0.44 | 2.69 | Medium |
| T17 | 8.40 | 1.27 | 1.40 | 0.42 | 2.87 | Medium |
| T18 | 6.09 | 1.03 | 1.03 | 0.31 | 2.12 | Medium |
| T19 | 6.57 | 1.09 | 1.48 | 0.44 | 2.40 | Medium |
| T20 | 6.24 | 1.06 | 1.03 | 0.33 | 2.17 | Medium |
| T21 | 5.38 | 1.04 | 1.13 | 0.32 | 1.97 | Low |
| T22 | 6.18 | 1.45 | 1.18 | 0.22 | 2.26 | Medium |
| T23 | 7.25 | 1.13 | 1.92 | 0.30 | 2.65 | Medium |
| T24 | 7.11 | 1.72 | 1.67 | 0.39 | 2.72 | Medium |
| T25 | 5.67 | 1.25 | 1.67 | 0.23 | 2.21 | Medium |
| T26 | 6.00 | 1.35 | 1.70 | 0.48 | 2.38 | Medium |
| T27 | 6.29 | 1.29 | 1.29 | 0.41 | 2.32 | Medium |
| T28 | 6.00 | 1.23 | 1.38 | 0.38 | 2.25 | Medium |
| T29 | 5.63 | 1.32 | 0.37 | 0.48 | 1.95 | Low |
| T30 | 6.62 | 1.67 | 1.33 | 0.43 | 2.51 | Medium |

High-category text, namely T13, displays prominent syntactic characteristics. An MLT score of 10.00 and a C/T score of 2.00 indicate the ability to construct long T-units with high clause density. A CN/T score of 1.08 also demonstrates proficiency in forming complex nominal phrases. The combination of these indicators results in a complexity score of 3.31, which significantly exceeds the threshold for the high category.

Example:

في الصَّبَاحِ الْبَكْرِ اسْتَيْقِظُ مِنَ النَّوْمِ لِصَلَاةِ الصُّبْحِ جَمَاعَةً → C/T (nested clause)

الصَّبَاحِ الْبَكْرِ → CN/T (phrase nominal/idāfah)

صلاة الصبح → CN/T (phrase nominal/idāfah)

The strength of T13 lies not only in the length of the sentences, but also in the integration of layered subordinate clauses. This shows that the author is able to connect ideas hierarchically, rather than simply linearly. The presence of multi-level nominal phrases enriches the sentence structure and demonstrates the ability to develop arguments syntactically.

Example:

لِأَنَّ وَاجِبُ كُلِّ الطَّلَابِ → C/T (subordinate clause)

Conversely, low-category texts such as T06, T03, and T29 show limitations in syntactic exploration. Low MLT scores and C/T below 1.1 indicate that the sentences constructed tend to be short and linear. The lack of subordination and complex nominal phrases shows that the writers still adhere to basic structures. This phenomenon is consistent with the strategy of syntactic simplification commonly found in second language writers.

Example:

أَسْتَيْقِظُ كُلَّ الصَّبَاحِ فِي السَّاعَةِ الْخَمْسَةِ (T06) → MLT (Simple T Unit)

كل يوم، استيقظ في الساعة الرابعة لصلاة الصبح (T03) → C/T (single clause)

Limitations in the low category also show that students are not yet accustomed to using subordinate clauses as a means of expanding ideas. The sentences produced tend to be simple declarative statements, without cause-and-effect relationships or additional explanations.

Example:

في الصباح استيقظت من النوم لوضوح (T29) → C/T (simple single clause)

Medium-level texts such as T24, T19, and T30 show more progressive dynamics. Relatively high C/T and CN/T scores indicate that students are beginning to experiment with complex clauses and nominal phrases. However, the still low CP/C scores show that coordination between clauses is not yet a dominant strategy.

Example:

أَذْهَبُ إِلَى بَائِعِ الْخَضِرَوَاتِ وَأَشْتَرِي كَلْبًا عَرَامًا مِنَ الْبَطَّاطِيسِ (T24) → CP/C (coordinating phrase)

The moderate category also shows variations in sentence construction strategies. Some students use subordinate clauses to expand their ideas, while others rely more on nominal phrases to enrich their structure.

Example:

كُنْتُ قِيَامًا النُّومِ فِي الصَّبْحِ مَبْكَرًا، خَرَجْتُ مِنَ الْحِجْرَةِ وَأَدْخَلْتُ الْحَمَامَ (T19) → C/T (nested clause)

كُتِبَ التَّرَاثُ كَأَلْفِيَةِ ابْنِ مَالِكٍ (T19) → CN/T (phrase nominal)

When viewed from the overall average, the MLT indicator ranges from 6.5 to 7.5, C/T from 1.1 to 1.3, CN/T from 0.9 to 1.2, and CP/C from 0.3 to 0.5. This pattern shows that students tend to be stronger in expanding T-units and constructing complex nominal phrases, but are still weak in clause coordination.

The low CP/C score is an important note in this analysis. Students do not seem to be accustomed to integrating clauses coordinatively, so the resulting sentences tend to be long but lack cohesion.

Example:

فِي الْبَيْتِ أَعْسَلُ وَالصَّلَاةَ الْعَصْرِ (T24) → CP/C (simple coordinating phrase)

Overall, this complexity analysis shows that students are in a promising syntactic transition zone. They have surpassed basic structures and begun experimenting with nested clauses and complex nominal phrases. However, to achieve full syntactic maturity, pedagogical reinforcement is needed that emphasizes the integration of coordinative clauses and the systematic strengthening of nahwu structures. Thus, the results of this analysis not only describe the current situation but also provide direction for the development of Maharah Kitabah learning.

Accuracy in The Maharatul Kitabah Task

Table 2. Accuracy Analysis Instrument

| Text Code | Total Clauses | Weighted Clause Ratio (WCR) | Accuracy Score (WCR ÷ Total Clauses) | Category |
|-----------|---------------|-----------------------------|--------------------------------------|----------|
| T01 | 23 | 12 | 0.48 | Medium |
| T02 | 18 | 21 | 0.00 | Low |
| T03 | 32 | 20 | 0.37 | Low |
| T04 | 35 | 31 | 0.11 | Low |
| T05 | 20 | 17 | 0.15 | Low |
| T06 | 20 | 3 | 0.85 | High |
| T07 | 25 | 13 | 0.48 | Medium |
| T08 | 18 | 21 | 0.00 | Low |
| T09 | 15 | 11 | 0.27 | Low |
| T10 | 18 | 16 | 0.11 | Low |
| T11 | 25 | 24 | 0.04 | Low |
| T12 | 17 | 20 | 0.00 | Low |
| T13 | 24 | 37 | 0.00 | Low |
| T14 | 14 | 11 | 0.21 | Low |
| T15 | 23 | 19 | 0.17 | Low |
| T16 | 18 | 26 | 0.00 | Low |
| T17 | 19 | 21 | 0.00 | Low |
| T18 | 36 | 20 | 0.44 | Medium |
| T19 | 25 | 22 | 0.12 | Low |
| T20 | 36 | 34 | 0.06 | Low |
| T21 | 25 | 27 | 0.00 | Low |
| T22 | 32 | 48 | 0.00 | Low |
| T23 | 27 | 36 | 0.00 | Low |
| T24 | 31 | 30 | 0.03 | Low |
| T25 | 30 | 23 | 0.23 | Low |
| T26 | 27 | 16 | 0.41 | Medium |
| T27 | 22 | 22 | 0.00 | Low |
| T28 | 32 | 37 | 0.00 | Low |
| T29 | 25 | 40 | 0.00 | Low |
| T30 | 35 | 24 | 0.31 | Low |

Table 2 shows that accuracy is the weakest dimension in students' writing. Of the 30 texts analyzed, only one text (T06) reached the high category, four texts were in the medium category (T01, T07, T18, T26), and the remaining 25 texts fell into the low category. This imbalance indicates that although some students are able to write long and fluently, the accuracy of clause structure remains a major challenge.

Text T06 displays consistency in forming error-free clauses. Clauses such as *أَسْتَيْقِظُ كُلَّ الصَّبَاحِ فِي السَّاعَةِ الْخَمْسَةِ* and *أَسَاعِدُ أُمِّي فِي إِعْدَادِ الْفُطُورِ* demonstrate a valid fi'l-fā'il structure, correct use of tarkīb idhāfī, and accurate use of jar-majrūr functioning as zharf makān or zamān. There were no violations of sentence structure, conjugation errors, or syntactic confusion. This accuracy reflects a strong command of basic nahwu, so that accuracy becomes the foundation that supports complexity and fluency in a balanced manner.

The medium category text shows a combination of valid and problematic clauses. In T01, clauses such as *أَذْهَبُ إِلَى الْجَامِعَةِ سَبْرًا عَلَى الْأَقْدَامِ* dan *نُرِيدُ أَنْ نَأْكُلَ* shows the fi'l-fā'il

structure and accurate subordination. However, clauses such as *عَلِمَ اللُّغَةَ الاجْتِمَاعِ ... سَأَخُلُّ* are structurally damaged due to *تصحيف* and invalid *tarkīb idhāfi*, as well as entries such as *نَوْمٌ* (ثُمَّ نَوْمٌ) which are not clauses, but merely nouns without predicates. These errors relate to the failure to form grammatically correct sentences, not just errors in *harakat* or *i'rab* words. This inconsistency shows that intermediate-level students have understood the basic structure, but are not yet able to maintain overall accuracy.

Text T26 also shows a similar pattern. Clauses such as *أَجْلِسُ فِي عُرْفَتِي* dan *أَتَوَضَّأُ* are structurally correct, but the clause *أَصَلِّي الظُّهْرَ* dan *أَصَلِّي الصُّبْحَ* contains an *idhāfah* error because it does not include the word *صَلَاةٌ* as *mudhāf*. In addition, clauses such as *فِي إِعْدَادِ* and *لِمُشَاهَدَةِ الأفْلامِ* which stands alone without a verb or subject, so it is not valid as a sentence. Another error appears in the clause *خَمَارَانِ اثْنَانِ* which is redundant in terms of *i'rab*, because the dual form is sufficient without the addition of a number. Thus, the text in the intermediate category reflects a partial understanding of sentence structure, but is not yet stable in its application.

Conversely, low-category texts such as T29 show a predominance of broken clauses. The clause *نَظَرْتُ الحَيَوَانَ* should be *نَظَرْتُ إِلَى الحَيَوَانَ*, because the verb *نَظَرَ* requires a preposition. The clause *هُوَ الطُّيُورُ كَثِيرَةٌ* is invalid because the subject and predicate are not balanced in number and type. Errors also appear in *أَجْرِي لِذَهَابِ مِنَ السُّوقِ*, which is invalid in terms of *tarkīb*, because the preposition *مِنْ* is not appropriate in this context. There is even a structure such as *شَعَرَ الجَوُّ سَيَنْزِلُ المَطَرُ* which is semantically and syntactically incorrect. These errors indicate a weak command of *fi'1*, *tarkīb idhāfi*, and sentence structure in general.

The error patterns in the low category also show that many clauses fail to form complete predicates. Some are only *masdar* or *zharf* without *fi'1* or *mubtada'*, such as *حَتَّى السَّاعَةِ السَّادِسَةِ* or *لِلأَكْلِ فِي الدُّكَّانِ*. In addition, conjugation errors such as *أَسْتَعْمِلُ* (should be *أَسْتَعْمِلُ*) and *أَعْتَى* (should be *أَعُوذُ*) worsen the clause structure. This indicates that accuracy is not just a matter of minor errors, but concerns the failure to form grammatically correct clauses. The comparison between categories shows clear gradations. High-category texts show consistency in forming error-free clauses. Medium-category texts reflect partial understanding that is not yet stable, while low-category texts are dominated by damaged clauses that do not meet the requirements. These findings confirm that accuracy is the most sensitive indicator in assessing the syntactic quality of students' writing. Without accuracy, complexity and fluency lose their valid basis for assessment.

Fluency in the Maharatul Kitabah Task

The data distribution in Table 4.3 shows that the fluency dimension in students' writing is dominated by the moderate category. Of the 30 texts analyzed, 21 texts were in the moderate category, 6 texts were in the high category, and only 3 texts fell into the low category. This pattern indicates that the majority of students have basic skills in constructing clauses coherently, although they have not yet reached the maximum level of fluency characterized by syntactic automation. This distribution is an initial indicator that fluency is not yet fully established as a productive competency in students' Arabic writing.

Texts in the high category, such as T03, T04, T18, T20, T23, and T28, show stable and structured production characteristics. Text T18, for example, produced 213 words, 35 T-units, and 36 clauses, with an average fluency of 94.67. This achievement shows that students are able to write at length and continuously, without being interrupted by

syntactic errors. This type of production reflects the internalization of established sentence structures, as well as the ability to develop ideas syntactically without hindrance. Barrot and Agdeppa (2021) state that syntactic automation is the result of intensive exposure and practice in second language learning.

Table 3. Fluency Analysis Instrument for Student Texts (T01–T30)

| Text Code | W/Tx (Words per Text) | T/Tx (T-units per Text) | C/Tx (Clauses per Text) | Average Fluency Score | Category |
|-----------|-----------------------------|----------------------------|-------------------------------|--------------------------|----------|
| T01 | 130 | 19 | 23 | 57.33 | Medium |
| T02 | 93 | 14 | 18 | 41.67 | Low |
| T03 | 166 | 31 | 32 | 76.33 | High |
| T04 | 205 | 36 | 35 | 92.00 | High |
| T05 | 110 | 18 | 20 | 49.33 | Medium |
| T06 | 96 | 22 | 20 | 46.00 | Medium |
| T07 | 126 | 23 | 25 | 58.00 | Medium |
| T08 | 120 | 18 | 18 | 52.00 | Medium |
| T09 | 92 | 14 | 15 | 40.33 | Low |
| T10 | 102 | 15 | 18 | 45.00 | Medium |
| T11 | 117 | 16 | 25 | 52.67 | Medium |
| T12 | 104 | 14 | 17 | 45.00 | Medium |
| T13 | 120 | 12 | 24 | 52.00 | Medium |
| T14 | 85 | 11 | 14 | 36.67 | Low |
| T15 | 99 | 15 | 23 | 45.67 | Medium |
| T16 | 136 | 16 | 18 | 56.67 | Medium |
| T17 | 126 | 15 | 19 | 53.33 | Medium |
| T18 | 213 | 35 | 36 | 94.67 | High |
| T19 | 151 | 23 | 25 | 66.33 | Medium |
| T20 | 212 | 34 | 36 | 94.00 | High |
| T21 | 129 | 24 | 25 | 59.33 | Medium |
| T22 | 136 | 22 | 32 | 63.33 | Medium |
| T23 | 174 | 24 | 27 | 75.00 | High |
| T24 | 128 | 18 | 31 | 59.00 | Medium |
| T25 | 136 | 24 | 30 | 63.33 | Medium |
| T26 | 120 | 20 | 27 | 55.67 | Medium |
| T27 | 107 | 17 | 22 | 48.67 | Medium |
| T28 | 156 | 26 | 32 | 71.33 | High |
| T29 | 107 | 19 | 25 | 50.33 | Medium |
| T30 | 139 | 21 | 35 | 65.00 | Medium |

Texts T04 and T23 show strong inter-clause continuity. T04 produces 205 words with 36 T-units and 35 clauses, indicating that students can maintain the flow of ideas syntactically and semantically. T23, with 174 words and 27 clauses, shows consistent use of connectors and uninterrupted sentence flow. This kind of production shows that students have moved beyond sporadic writing and are entering a phase of communicative and coherent production. Halim et al. (2017) emphasize that fasāhah in Arabic writing includes the ability to maintain structural continuity within complete sentence units.

In contrast, low-category texts such as T02, T09, and T14 show limitations in production fluency. Text T14 only produced 85 words, 11 T-units, and 14 clauses, with an average fluency of 36.67. The low number of clauses and T-units indicates that students are not yet able to develop ideas continuously. Text production tends to be disjointed, short, and lacking in idea development. Afshar et al. (2017) mention that syntactic fluency is a prerequisite for the formation of complex and accurate structures in

L2 writing. When fluency is weak, the expression of ideas loses continuity and syntactic coherence.

Texts T02 and T09 show broken sentence flow and minimal idea development. T02 only produced 93 words and 18 clauses, while T09 produced 92 words and 15 clauses. Both texts show that students tend to stop at short clauses and do not develop ideas syntactically. This type of production not only hinders coherence, but also shows that students are still in the early stages of mastering Arabic sentence structure. This reinforces the finding that low scores are not simply a matter of word count, but rather an inability to maintain syntactic continuity consistently.

The medium-level texts show a wide range of variation, both in terms of text length and number of clauses. Texts such as T01, T07, T21, T24, and T25 produce between 120 and 136 words with between 23 and 32 clauses, and an average fluency of around 57 to 63. Although they have not yet achieved maximum fluency, these texts show that students have been able to maintain syntactic continuity between clauses. Their production shows strong potential for development into the high category if given the right reinforcement. Barrot and Agdeppa (2021) mention that fluency in production is a reflection of the stability of the structure that begins to form in the learning process.

Texts T07 and T25 represent the intermediate category, showing initial stability in production. T07 produced 126 words, 23 T-units, and 25 clauses, with an average fluency of 58.00. This text shows that students are able to maintain the flow of ideas, although they are not yet stable in their use of connectors. T25, with 136 words and 30 clauses, shows strong fluency potential, but there are still syntactic pauses that hinder full continuity. Halim et al. (2017) emphasize that structural continuity is an integral part of *fasāhah*, and that syntactic fluency is a key indicator in assessing the quality of Arabic writing.

Overall, the fluency analysis shows that students have basic skills in composing coherent and continuous texts. However, to consistently achieve a high category, it is necessary to strengthen writing exercises that emphasize continuity between clauses, the use of appropriate connectors, and the development of ideas syntactically. Fluency is not only a technical indicator, but also reflects students' readiness to construct structurally complete and communicative texts. Afshar et al. (2017) emphasize that without stable fluency, the dimensions of accuracy and complexity cannot develop optimally.

Multidimensional Challenges in Arabic Writing Skills

Students face fundamental challenges in constructing complex and multi-level syntactic structures. The results of the analysis show that the majority of texts fall into the low to moderate category in terms of complexity, characterized by minimal use of subordinate clauses, complex nominal phrases, and coordinative structures. The sentences produced tend to be linear and simple, not reflecting the ability to organize ideas into hierarchical structures that are logically interrelated. When sentence structures are unable to accommodate the complexity of ideas, meaning becomes reduced and the argumentative power of the writing weakens (Rahimi, 2019).

This limitation is inseparable from learning patterns that do not explicitly emphasize syntactic exploration (Ramzan & Alahmadi, 2024). Students interact more often with short and simple texts, and are not guided to experiment with more varied sentence structures such as multi-level *tarkīb na'tī* or complex *idāfah*. As a result, they lack sufficient internal references to construct layered sentence structures. Without

pedagogical intervention that emphasizes the syntactic function in constructing meaning, students will continue to be stuck in producing shallow and repetitive texts.

The challenge in accuracy is evident in the high frequency of grammatical, morphological, and syntactic errors. Students have not yet demonstrated stable control of nahwu-şarf rules, especially in the use of i'rab and word formation. The errors that appear are systemic, not incidental, and indicate that Arabic language rules have not yet been functionally internalized (Ismail et al., 2020). When sentence structure does not follow grammatical rules, the message being conveyed becomes unclear and loses precision.

This weakness is exacerbated by a learning approach that is still oriented towards memorization and reproduction of forms (Zare, 2020). Students tend to write using a transliterative approach, translating ideas from their native language without considering the unique structure of Arabic. Limited vocabulary also worsens accuracy, as students often use inappropriate words or even create new, non-standard forms. This shows that lexical and morphological mastery are not yet in sync, making the accuracy of writing highly susceptible to deviation.

In terms of fluency, students have not yet demonstrated the ability to write smoothly and coherently. The resulting texts are still fragmentary, with unstable flow and limited idea development. Students write slowly and intermittently, without clear thematic planning. When writing automation has not yet been established, the text production process becomes rigid and loses its persuasive power (Rønneberg et al., 2022). Limited fluency is also influenced by weak vocabulary mastery and syntactic flexibility (Tong et al., 2023). Students often stop writing to search for synonyms or appropriate sentence structures, which disrupts their train of thought. Strategies such as rewriting or using conjunctions have begun to be implemented, but they are not yet sufficient to build cohesive and ideatively developed paragraphs. When complexity and accuracy are not yet stable, fluency is also disrupted.

The findings of the student questionnaire reinforce the diagnosis from the CAF analysis. In terms of complexity, the majority of respondents stated that they preferred simple sentences so that their writing would be easy to understand. Although some tried to construct long sentences, they admitted that they did not yet have sufficient knowledge and confidence. This shows that structural limitations are not only a matter of linguistic ability, but are also related to immature writing perceptions and strategies. In terms of accuracy, almost all respondents admitted that nahwu-şarf rules were the main obstacle. Difficulties in determining word forms, choosing harakat, and constructing sentence structures were the dominant complaints. In addition, limited vocabulary causes students to often use inappropriate or non-standard words. This shows that accuracy is not only influenced by mastery of rules, but also by morphological and semantic sensitivity that has not yet been formed. Fluency is also influenced by strong affective factors (Guo et al., 2025). Many students feel nervous, afraid of making mistakes, and lack confidence when writing. This causes them to hold back in their expression and choose safe sentence structures. Although some respondents demonstrated metacognitive awareness with strategies such as revision, searching for references, or using technology, without systematic pedagogical support, these strategies remain sporadic and unfocused.

This study shows that students' low ability to construct complex syntactic structures is not merely a result of technical limitations, but reflects a lack of familiarity with sentence construction practices that require logical relationships and hierarchical meanings. This is in line with the view that complexity in writing is not only measured

by sentence length, but by the depth of structure and the interrelationships between syntactic units (Deng et al., 2021). When students become accustomed to simple sentence structures and are not allowed to explore more complex forms, their ability to articulate ideas systematically will be hindered. Thus, problems at the level of complexity indicate that writing instruction has not yet touched upon the structural dimensions that are essential for the development of academic reasoning.

The low accuracy is evident from the high frequency of grammatical and morphological errors in students' writing, which indicates that their mastery of nahwu and sharaf rules has not yet developed into productive competence. This condition affirms the results of previous studies that highlight the weak internalization of grammatical rules among learners of Arabic as a foreign language, especially in writing (Faraj & Zawawi, 2024). Reliance on rote memorization and transliterative approaches shows that students are not yet able to apply rules autonomously in the process of constructing meaning. Low accuracy not only results in errors in form, but also in distortion of meaning, which ultimately undermines the clarity and credibility of arguments.

Discontinuity of ideas, unstable flow, and a lack of elaboration in students' writing indicate that fluency skills have not been adequately developed. This analysis reinforces the view that writing fluency cannot be separated from the automation of thinking and structured idea management. (Kim et al., 2011). When students write with long pauses and without careful thematic planning, their writing becomes stagnant and loses its persuasive power. This indicates that fluency is not merely a matter of quantity of production, but also the quality of continuity of ideas that are constructed consciously and progressively.

The questionnaire data show that students' perceptions of writing are greatly influenced by affective factors and immature strategies. Fear of making mistakes, low self-confidence, and a tendency to play it safe with simple sentences indicate that barriers to writing stem not only from linguistic aspects, but also from psychological dimensions that inhibit the expression of ideas (Li, 2022). Although some students have begun to develop strategies such as revision and the use of references, these efforts are still reactive and have not been integrated into the reflective writing process. This analysis emphasizes that writing success is not only determined by mastery of the rules, but also by mental readiness and metacognitive strategies that support the courage to express oneself.

Considering the overall results, this study offers an important contribution to expanding the understanding of the relationship between linguistic and affective dimensions in the development of writing skills. The approach that combines CAF analysis with student perception data allows for a more comprehensive reading of the challenges of writing, while also opening up space for the formulation of pedagogical strategies that are more responsive to learners' needs. This analysis confirms that the development of writing skills cannot be left to technical exercises alone, but must be supported by a learning design that simultaneously fosters form awareness, courage to think, and affective resilience. (Garim et al., 2023).

This study also fills a gap in research on Arabic writing ability by offering a comprehensive reading of linguistic and affective challenges simultaneously. Most previous studies tend to separate the analysis of written products from the writer's perception, or only highlight one linguistic dimension partially (e.g., only grammatical or lexical aspects). This research goes beyond such partial approaches by integrating CAF analysis and student perception data, thereby revealing the relationship between linguistic

form, writing strategies, and emotional barriers more comprehensively. Thus, the results of this study not only reinforce previous research but also broaden the scope of analysis by emphasizing the importance of a holistic approach in understanding and developing academic writing skills in Arabic.

CONCLUSION

This study reveals that students face multidimensional challenges in writing Arabic, including weak ability to construct complex syntactic structures (complexity), unstable mastery of grammatical rules (accuracy), and limitations in maintaining fluency and continuity of ideas (fluency). These three dimensions are intertwined and reinforced by affective factors such as fear of making mistakes and low self-confidence. The main contribution of this study lies in its approach, which integrates CAF linguistic analysis with student perception data, resulting in a comprehensive reading of writing barriers. These findings have theoretical implications in expanding the understanding of the relationship between structural competence and psychological readiness, as well as practical implications for the development of pedagogical strategies that are more adaptive and reflective of learners' needs.

The limitations of this study lie in the limited scope of participants and the use of self-report questionnaires, which do not directly capture the dynamics of the actual writing process. Further research is recommended to expand the scope of participants across institutions, integrate observation and interview methods, and explore additional variables such as cognitive strategies or the influence of native language background. With a broader and more in-depth approach, understanding of the challenges of writing Arabic can be developed in a more comprehensive and applicable manner. This study emphasizes the importance of a holistic approach to writing learning and contributes conceptually to the development of pedagogical models that support courageous thinking and academic expression.

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