



# ENGLISH INFLECTIONAL MORPHEME ACCURACY IN INDONESIAN EFL STUDENTS

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## Keywords

Academic Writing,  
Interlingual and  
Intralingual Factors,  
Inflectional Morphemes,  
Morphological Accuracy

## Abstract

*The study focused on how accurately fourth-semester English Literature students at Putera Batam University used eight types of English inflectional morphemes in their academic writing. Employing a descriptive qualitative approach complemented with simple statistical descriptions, the study reviewed students' written assignments along with questionnaire data to determine their level of accuracy, the most frequent error patterns, and the factors contributing to incorrect forms. To assess accuracy, the researchers adopted Brown's (1973) calculation and applied an 80% benchmark to classify whether a morpheme had been sufficiently acquired. The analysis revealed that only three morphemes—the present participle (-ing), the superlative (-est), and the simple past (-ed)—met or exceeded the expected mastery level. In contrast, several others, including the comparative (-er), the past participle (-ed/-en), the possessive ('s), and the third-person singular (-s), fell well below the threshold, suggesting that students had not yet mastered them. Further examination showed that omission was the error type that occurred most frequently, while mis-formation and addition followed as secondary patterns. The inaccuracies were largely attributed to the influence of Bahasa Indonesia as the learners' first language and to internal developmental factors such as overgeneralization and partial understanding of grammatical rules. Overall, the findings point to persistent difficulties Indonesian EFL learners encounter when dealing with English inflectional morphology and emphasize the importance of more focused grammar instruction within academic writing courses.*

## 1. INTRODUCTION

A strong command of grammatical morphology plays a central role in producing precise and coherent English writing, as these forms directly shape how meaning is conveyed (Aronoff & Fudeman, 2011). Although inflectional morphemes are small units, they function as markers for grammatical features such as tense, number, and comparison. When students misuse these forms, their writing often becomes unclear or ambiguous, which is particularly problematic in academic contexts (Trask, 1999).

Learners in EFL settings, including Indonesia, often encounter long-lasting difficulties with these morphological features (Yule, 2020). This challenge is partly due to the considerable structural differences between Indonesian and English. Bahasa Indonesia lacks inflection for tense, plural marking, and subject-verb agreement, relying instead on separate lexical items or fixed structures (Sneddon, 2010).

Because these features do not exist in their first language, Indonesian learners must acquire entirely new grammatical systems when learning English morphology, a process that requires substantial cognitive adjustment (Ellis, 2015). This linguistic distance frequently results in negative transfer or developmental errors that appear as learners progress through stages of interlanguage development (Larsen-Freeman & Long, 2014).

Studies in both first language acquisition (Brown, 1973) and second language contexts (Dulay & Burt, 1974) indicate that morphemes emerge in fairly predictable sequences. However, accuracy varies widely depending on instructional quality, input exposure, learner aptitude, and linguistic background (Lightbown & Spada, 2013). In Indonesia, where authentic English input outside the classroom is limited, learners typically display slow and uneven morphological development (Lauder, 2008).

Despite extensive error-analysis research in Indonesia, relatively few studies have examined students' performance across all eight English inflectional morphemes simultaneously (Ramlan, 2018). Even fewer have applied explicit benchmarks—such as Brown's (1973) 80% criterion—to determine whether a morpheme is considered acquired. Such benchmarks are crucial for designing more targeted instructional strategies and effective grammar interventions (Ellis, 2008).

As Indonesian universities increasingly emphasize academic writing, proper mastery of inflectional morphology becomes essential to meet academic standards (Hyland, 2006). Although third-semester English majors are expected to demonstrate stronger grammatical control, many continue to produce texts containing frequent morphological errors, which reduce clarity and weaken academic communication (Emilia, 2011).

To respond to these concerns, the present study examines how third-semester EFL students at Yogyakarta State University use English inflectional morphemes. The research evaluates accuracy across eight morphemes, identifies recurring error types, and explores both L1 interference and developmental factors that contribute to inaccuracies (Ellis, 2015). By employing a comprehensive analysis grounded in SLA theory, this study offers insights that support teachers, curriculum developers, and researchers in enhancing morphological instruction in Indonesian higher education.

## 2. LITERATURE REVIEW

### 2.1 Inflectional Morphemes in English

Morphology can be defined as a field of study which examines the relationship between words and their structure (Johan, 2024). In morphology, there are two things that always be discussed namely derivational and inflectional morphemes. Related to this study, inflectional morphemes are bound forms that encode grammatical information without altering a word's lexical category, allowing speakers to signal distinctions such as number, tense, comparison, or aspect (Lieber, 2010). They do not alter a word's core meaning; rather, they indicate grammatical changes like tense, number, or degree (Tewarat & Afriana, 2025). In English, these grammatical markers appear in a limited set but cover several functional domains. Nouns are marked through plural **-s** and the possessive **'s**, while verbs take several inflections including the third-person singular **-s**, the simple past **-ed**, the progressive **-ing**, and the past participle forms **-ed** or **-en**. Adjectives, in turn, adopt comparative **-er** and superlative **-est** endings.

Despite their small inventory, these morphemes are central to maintaining grammatical relations within clauses and ensuring syntactic cohesion (Carstairs-McCarthy, 2002). Learners whose mother tongues do not employ such morphological devices—such as speakers of Bahasa Indonesia—often experience difficulties because these English markers have no structural equivalents in their L1. As a result, many learners struggle to perceive when English requires inflectional marking and consequently show inconsistent mastery in both recognition and production.

## 2.2 Morphological Acquisition in SLA

Brown's (1973) foundational study demonstrated that first-language learners acquire morphemes in a predictable sequence. This pattern was later mirrored in second-language contexts, as observed by Dulay and Burt (1974). Furthermore, later findings (Lightbown & Spada, 1999; Murakami & Alexopoulou, 2015) confirmed that L2 learners follow systematic acquisition pathways, though their accuracy is heavily shaped by L1 structure, input frequency, and morphological complexity. Consequently, forms frequently encountered in instruction, such as the progressive -ing, tend to appear earlier in learner output. In contrast, morphemes like third-person singular -s consistently exhibit low accuracy across learner groups.

## 2.3 Interlingual and Intralingual Errors

Ellis (2003) and Richards (1974) classify learner errors into interlingual and intralingual categories. On the one hand, interlingual errors arise from transferring first-language structures into English—an expected issue among Indonesian learners since Bahasa Indonesia lacks inflectional morphology. On the other hand, intralingual errors stem from developmental processes within the learner's interlanguage. These include overgeneralizing rules (*e.g.*, *buyed*), applying rules partially (*e.g.*, *he walk*), forming inaccurate hypotheses, and overlooking rule constraints. Collectively, these error types significantly shape learners' progress in acquiring English morphological forms.

## 2.4 Inflectional Morpheme Studies in Indonesia

Research on English morphology in Indonesia has largely examined only individual inflectional markers, such as plural forms or past-tense verbs, rather than the entire set of eight. For example, studies by Margana (2012) and Gayo and Widodo (2018) report recurring issues with pluralization, agreement, and tense formation—findings consistent with international SLA literature (Dulay, Burt, & Krashen, 1982; Richards, 1974). However, these studies remain limited because they do not assess all morphemes holistically.

Additionally, only a small number of researchers employ the full eight-morpheme framework commonly used in morpheme-order research (Brown, 1973; Murakami & Alexopoulou, 2016). Likewise, Brown's accuracy threshold, a standard indicator of morpheme mastery, is rarely applied in Indonesian contexts. Therefore, by adopting this benchmark and examining all eight markers simultaneously, the present study addresses a methodological gap and offers a more comprehensive understanding of learners' morphological accuracy in academic writing.

## 3. RESEARCH METHOD

### 3.1 Research Design

This study adopted a descriptive qualitative approach complemented by basic descriptive statistical analysis. The qualitative procedure focused on examining linguistic

features within students' written work in order to locate and categorize the inflectional morphemes they produced. In contrast, the quantitative component involved computing the accuracy rates for each morpheme type. Such a combined method is commonly used in SLA morphology studies, as numerical accuracy scores must be supported by qualitative explanations of the error patterns that emerge.

### 3.2 Participants

The research involved fourth-semester English Literature students at Putera Batam University who were taking an Academic Writing course in the 2024–2025 academic year. These learners had already completed introductory grammar and writing courses, making them suitable for observations of inflectional-morpheme usage. Program assessments indicated that their writing proficiency was at an intermediate level.

Data were collected in a natural classroom setting, where students completed regular writing assignments, ensuring that the linguistic output reflected their authentic language use rather than test-driven performance.

### 3.3 Instruments

There are two primary instruments were used in this study:

a. Written Texts

Students produced a 300–350-word academic composition on a topic familiar to them. The task was structured to elicit the natural use of inflectional morphemes found in verbs, nouns, and adjectives, without providing direct hints or explicit prompts regarding morphological forms.

b. Questionnaire

A structured questionnaire containing both open-ended and closed-ended items was administered to identify students' perceived challenges in using inflectional morphemes. Items explored issues such as first-language influence, confusion about grammatical rules, memory-related difficulties, and confidence levels in academic writing.

### 3.4 Data Collection Procedure

To obtain consistent information for the analysis, the study followed a structured sequence of steps during data gathering. The procedures below outline how the written samples and questionnaire responses were processed and analysed.

- a. Students completed the writing task during their regular class session.
- b. All essays were collected, transcribed when necessary, and assigned codes.
- c. Every occurrence of the eight inflectional morphemes was examined.
- d. Each morpheme was marked as either correctly or incorrectly produced.
- e. Accuracy rates were computed for all morpheme types.
- f. Questionnaire responses were analysed for recurring themes and compared with the linguistic findings for validation.

### 3.5 Data Analysis

To evaluate learners' mastery of each morpheme, accuracy rates were determined using Brown's (1973) formula:

Accuracy was calculated using Brown's (1973) formula:

$$\text{Accuracy} = \frac{\text{Correct Morpheme Uses}}{\text{Total Morpheme Uses}} \times 100\%$$

A minimum 80% accuracy was required to classify a morpheme as “adequately acquired.” This level shows that the morpheme is used correctly most of the time, which means the learner understands and uses it consistently in real situations.

### 3.5.2 Error Analysis

Errors were categorized based on the taxonomy proposed by Dulay, Burt, and Krashen (1982), which includes:

- a. Omission: absence of a required morpheme
- b. Misformation: incorrect use or form of a morpheme (e.g., *buyed*)
- c. Addition: insertion of unnecessary morphemes (e.g., *childrens*)

The underlying causes of these errors were interpreted using Ellis's (2003) classification, consisting of:

- a. Interlingual transfer from Bahasa Indonesia
- b. Intralingual developmental processes, such as overgeneralization and incomplete rule application

## 4. RESULT AND DISCUSSION

### 4.1 Result

The analysis of students' written texts focused on determining how accurately Indonesian EFL learners applied eight types of English inflectional morphemes. The summary of their performance is displayed in Table 4.1, which outlines the accuracy rates and indicates which morphemes have been successfully internalized and which ones still pose challenges.

Inflectional Morpheme Type	Accuracy Percentage	Classification Based on Brown's (1973) Criterion
<b>Progressive marker (-ing)</b>	91.21%	<i>Very accurate</i>
<b>Superlative form (-est)</b>	85.71%	<i>Very accurate</i>
<b>Simple past marker (-ed)</b>	83.13%	<i>Very accurate</i>
<b>Plural marking (-s, -es, -ies)</b>	76.63%	<i>Below mastery level</i>
<b>Third-person singular verb ending (-s)</b>	72.81%	<i>Low accuracy</i>
<b>Possessive marking ('s / s')</b>	67.96%	<i>Low accuracy</i>
<b>Past participle form (-ed / -en)</b>	62.50%	<i>Low accuracy</i>
<b>Comparative form (-er)</b>	55.56%	<i>Lowest accuracy</i>

Table 4.1 The Accuracy Level of Eight Inflectional Morphemes

The data indicate that learners demonstrated solid acquisition of only three morphemes—present participle (-ing), superlative (-est), and past tense (-ed)—all of which exceeded the 80% mastery benchmark. Their high scores may be attributed to the regularity of these forms and their frequent appearance in classroom writing tasks.

In contrast, accuracy rates for the remaining morphemes fell below the required threshold, with the comparative (-er), past participle (-ed/-en), and possessive ('s)

emerging as the most problematic. This pattern of uneven mastery is consistent with common challenges faced by EFL learners whose first language does not rely on inflectional morphology, signaling a need for more explicit and sustained practice with these structures.

#### 4.1.1 Dominant Error Types

The patterns of students' mistakes in using inflectional morphemes offer valuable clues about the areas where they experience the most difficulty. These errors also indicate which aspects of morphology may need more focused instructional attention. The table below summarizes the recurring error categories, the morphemes most affected, and sample instances.

Error Category	Morphemes Most Frequently Involved	Illustrative Incorrect Forms
<b>Omission Errors</b>	Plural markers, third-person singular endings, possessive forms	<i>two cat; she walk; the girl bag</i>
<b>Misformation Errors</b>	Past participle forms, comparative markers	<i>writed; more fast; goed</i>
<b>Addition Errors</b>	Plural and possessive endings	<i>childrens</i>

Table 4.2 Common Type of Errors

As shown in Table 4.2, omission emerged as the most widespread error, a pattern commonly noted in studies of second language morphological development, where learners frequently leave out required inflectional endings. Misformation was primarily linked to morphemes with irregular patterns—especially past participles and comparatives—indicating that learners struggle with forms that do not follow predictable rules. Addition errors, on the other hand, generally resulted from overgeneralization, suggesting that students often extend familiar inflectional patterns to words where they do not apply.

#### 4.1.2 Factors Contributing to Inaccuracy

Learners' difficulties with English inflectional morphemes are strongly influenced by the structural properties of Bahasa Indonesia. Because Indonesian lacks morphological markers for plurality, tense, comparison, and possession, students often fail to supply corresponding English forms such as plural **-s**, third-person singular **-s**, and comparative **-er**. The reliance on syntactic rather than morphological expression of possession further contributes to frequent misuse or avoidance of the possessive **'s**. These cross-linguistic differences encourage transfer of L1 patterns into L2 production, resulting in errors that arise not from semantic confusion but from structural incongruity between the two languages.

In addition to L1 interference, several intralingual processes characteristic of developing interlanguage were evident. Overgeneralization of familiar patterns (e.g., *writed, buyed*), incomplete application of rules (e.g., *he walk*), and misinterpretation of morphemic functions—such as conflating plural **-s** with possessive **'s**—all contributed to inaccuracies. These patterns suggest that learners are still consolidating morphological rules and continue to test hypotheses about English grammar, reflecting a transitional stage rather than stable competence.

#### 4.3.1 Interlingual Factors

A significant portion of the errors could be attributed to differences between English and Bahasa Indonesia. These contrasts affected several key areas:

- a. Plural formation: Indonesian does not rely on inflection to mark plurality, leading students to omit plural endings in English.
- b. Past tense marking: Because Indonesian expresses time through adverbs rather than verb changes, learners frequently fail to apply the -ed ending.
- c. Subject-verb agreement: Indonesian verbs remain unchanged regardless of the subject, which often results in incorrect or missing 3rd person singular -s.
- d. Possessive forms: Since Indonesian indicates possession through separate words (e.g., rumah saya), confusion between possessive 's and plural -s frequently appears.
- e. Comparative structures: Indonesian uses the word lebih rather than morphological marking, contributing to misused or missing -er endings.

#### 4.1.3 Intralingual Factors

In addition to L1 influence, several internal learning processes also shaped the types of errors produced:

- a. Overgeneralization: Learners apply familiar rules to all forms (e.g., buyed, mores happy).
- b. Partial rule application: Incomplete understanding results in constructions like "*he walk*" instead of "*he walks*".
- c. Ignoring rule limitations: Some students extend rules too broadly, such as adding -er to adjectives that cannot take comparative endings.
- d. Incorrect conceptual assumptions: Misinterpretations of morpheme functions lead to errors like confusing possessive 's with plural -s.

These findings align with Richards (1974), confirming that both L1 transfer and learners' developmental processes play a crucial role in EFL morpheme acquisition.

## 4.2 Discussion

### 4.2.1 Uneven Morpheme Acquisition Reflects Universal Difficulty

The morphemes that students handled most successfully in this study—progressive -ing, simple past -ed, and the superlative -est—correspond with the forms that Second Language Acquisition researchers identify as being mastered earliest by learners (Murakami & Alexopoulou, 2015). Their high accuracy rates can be attributed to several characteristics: they operate under straightforward grammatical rules, they occur frequently in the input learners receive, and they typically appear in stable, easily recognizable syntactic environments.

In addition, Indonesian EFL instruction tends to place considerable emphasis on continuous tenses and simple past structures, meaning that -ing and -ed endings are practiced repeatedly from the early stages of learning. This instructional familiarity likely strengthened students' performance with these particular morphemes.

### 4.2.2 Persistent Difficulty with Plural, Agreement, and Participle Morphemes

Learners continued to experience substantial difficulty with several English inflectional forms, most notably the comparative -er, the past participle -ed/-en, the possessive 's, and the third-person singular -s. Such challenges are typical among speakers of languages that do not use inflectional morphology, and the results of this

study reinforce the view that the structure of a learner's first language shapes how easily English morphemes are acquired.

The comparative *-er* was the weakest area of performance. In Indonesian, comparison is formed with *lebih* + adjective, whereas English requires choosing between *-er* for short adjectives and *more* for longer ones. Because *lebih* functions similarly to *more*, many learners defaulted to the more familiar pattern, resulting in frequent errors.

Difficulties also surfaced with past participles, as students frequently confused them with simple past forms. A common pattern was the overuse of *-ed* in all past contexts, while irregular participles such as *written*, *eaten*, and *broken* caused additional confusion. Problems with the possessive *'s* were likewise evident; Indonesian expresses possession through word order rather than morphological marking, which often led students to misinterpret or interchange plural *-s* with possessive *'s*. Taken together, these issues indicate that structural differences between Indonesian and English, combined with incomplete understanding of specific inflectional rules, continue to contribute to persistent learner errors.

#### 4.2.3 Interlingual Transfer Plays a Major Role

Many errors can be traced to the structural differences between English and Indonesian. Because Indonesian lacks verb inflection for tense or agreement, plural marking, morphological possession, and comparative morphology, students frequently omit English morphemes when they are unsure or perceive them as unnecessary. This finding aligns with prior research indicating that typological distance between L1 and L2 significantly affects morphological learning (Derakhshan & Karimi, 2015; Ellis, 2003).

#### 4.2.4 Intralingual Factors Demonstrate Developmental Nature of Errors

Errors such as overgeneralization (*buyed*), misformation (*goed*), and rule misapplication (*mores better*) indicate that learners are actively forming hypotheses about English grammar. These patterns support SLA theories suggesting that learners progress through internal developmental stages, which operate alongside, and sometimes independently of, L1 influence.

### 5. CONCLUSION

The results of this research indicate that Indonesian learners of English display inconsistent mastery of inflectional morphemes in their academic writing. Only three forms—the present participle *-ing*, the simple past *-ed*, and the superlative *-est*—achieved accuracy levels above 80%, a performance likely tied to their predictable rules and frequent appearance in classroom activities. In contrast, learners continued to struggle with the comparative *-er*, the past participle *-ed/-en*, the possessive *'s*, and the third-person singular *-s*, revealing ongoing difficulties with structures that do not exist in Bahasa Indonesia and highlighting gaps in their overall morphological competence.

In addition, omission and misformation emerged as the most common error types, showing that learners often have trouble applying inflectional rules consistently. These patterns were influenced by both cross-linguistic transfer—resulting from differences between Indonesian and English—and developmental factors such as overgeneralization and partial understanding of grammatical rules. Consequently, the findings emphasize the importance of explicit, focused instruction to help students gain better control over problematic morphemes, and they offer valuable insights for improving grammar pedagogy, curriculum design, and writing instruction within Indonesian EFL higher-education settings.

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