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Understanding Indonesian Affixes Among Arabic-Speaking BIPA Learners: Semantic Errors and Pedagogical Implications

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A B S T R A C T

It is important to discuss affixes in BIPA learning, since affixes can be used to build grammatical and lexical meaning in sentences. But little research has been done on the understanding of affixes in the Arabic language by university students who are not native speakers of Arabic in Indonesia, especially in terms of their phonological and pragmatic understanding. The purpose of this study is to investigate (1) the understanding of Indonesian affixes by beginner-level students of the Arabic language and (2) the pattern of semantic errors in affix usage by the students. This study adopted a mixed-methods approach with an explanatory sequential design. The method used to collect quantitative data was questionnaires and an affixation test applied to 82 students of the Indonesian Language and Literature Program of Al-Azhar University, Egypt. In order to get further details regarding the findings of the quantitative data, 20 selected students were asked to give written interviews. The findings showed that students' level of understanding of affixes was different. The affix ke-an had the lowest error rate (80.5%), while the prefix ber- had the lowest accuracy (82.9%). The results also show that the form-oriented learning strategies, the interference of L1 transfer from Arabic, and the difficulty of understanding the semantic functions of affixes in sentences had the greatest effect on the occurrence of semantic errors. The results indicate that the learning of affixes among beginner BIPA learners needs context-rich teaching approaches that involve both form and meaning with the right scaffolding technique. In addition, the study will add to the understanding of second language (L2) morphological acquisition, especially in the language learning of Arabic speakers by learning the Indonesian language.
Keywords: BIPA learning; first-language transfer; Indonesian affixation; morphology; semantic errors

Memahami Imbuhan Bahasa Indonesia di Kalangan Pembelajar BIPA Berbahasa Arab: Kesalahan Semantik dan Implikasi Pedagogis

Penguasaan afiks merupakan aspek penting dalam pembelajaran Bahasa Indonesia bagi Penutur Asing (BIPA) karena berperan dalam pembentukan makna leksikal dan gramatikal dalam kalimat. Namun, kajian empiris mengenai pemahaman afiks bahasa Indonesia pada pembelajar penutur bahasa Arab, khususnya dalam konteks pendidikan tinggi di luar Indonesia, masih relatif terbatas dan lebih banyak berfokus pada aspek fonologis dan pragmatik. Penelitian ini bertujuan memetakan tingkat pemahaman afiks bahasa Indonesia serta mengidentifikasi pola kesalahan semantis yang muncul pada mahasiswa penutur bahasa Arab tingkat awal. Penelitian menggunakan pendekatan mixed methods dengan desain explanatory sequential. Data kuantitatif diperoleh melalui angket dan tes afiksasi terhadap 82 mahasiswa Program Studi Bahasa dan Sastra Indonesia di Universitas Al-Azhar, Mesir, sedangkan data kualitatif dikumpulkan melalui wawancara tertulis terhadap 20 partisipan. Hasil analisis menunjukkan bahwa tingkat ketepatan penggunaan afiks bervariasi, dengan konfiks ke-an memiliki tingkat ketepatan tertinggi (82,9%), sementara prefiks ber- menunjukkan tingkat kesalahan tertinggi (80,5%). Temuan kualitatif menunjukkan bahwa kesalahan terutama dipengaruhi oleh kecenderungan strategi belajar berbasis bentuk, keterbatasan pemetaan fungsi semantik afiks dalam konteks kalimat, serta pengaruh transfer bahasa pertama. Temuan ini menegaskan bahwa pembelajaran afiks bagi pembelajar BIPA pemula perlu dirancang secara kontekstual dengan mengintegrasikan aspek bentuk dan makna serta didukung oleh strategi scaffolding yang memadai.
Kata Kunci: *afiksasi bahasa Indonesia; kesalahan semantik; morfologi; pembelajaran BIPA; transfer bahasa pertama*

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INTRODUCTION

In recent years, the academic interaction between Indonesia and other countries has been growing, and the effort to internationalise the Indonesian language has led to a greater international scope for Indonesian. The use of the Indonesian language in higher education institutions as a language of instruction is growing even though it is not a common language used in formal education. The use of the Indonesian language as a language of instruction in higher education institutions is more and more widespread, although it is not the common language used in formal education. This can only be achieved with more advanced language skills. Based on several previous studies, the approach to teaching Indonesian for non-native speakers is experiencing a shift from a communicative-practical approach to more analytical and academically oriented approaches, as mentioned by Ma'rufah and Arsanti (2021), Stoffelsma et al. (2020), Tanwin (2020), and Zhang (2021). The BIPA (Indonesian for Foreign Speakers) program is a reflection of this change.

In the higher education environment, BIPA teaching is not only to cultivate students' communicative competence, but also to enhance their ability to understand academic texts, formal text writing, and to facilitate their participation in intellectual discourse. Thus, grammatical correctness and interpretative accuracy are becoming as significant as communicative competence in terms of assessment of language acquisition results. Therefore, empirical linguistic research is crucial to making a comprehensive account of the problems facing second-language learners (SLs) (Roehr-Brackin et al., 2024; Zhang, 2021). The spread of BIPA in foreign universities is also reflected by universities that have formally established Indonesian in their higher education curriculum (Mahan 2022, Suek 2020).

This is one area of development seen at Al-Azhar University, Egypt. Al-Azhar University introduced the Indonesian Language and Literature Program in Indonesian language education in the institutional expansion process, which had been conducted for many years by Al-Azhar in the field of Indonesian language by offering non-credit and elective courses (Shehata, 2023). This development is a proof that Indonesian language learning in this context has developed into an academic discipline that needs academic level language competence as seen in the development of Indonesian language learning in this context by Suek (2020) and Tanwin (2020). Since this is an academic orientation, it requires an early knowledge of the basic structure of the Indonesian language, particularly the use of affixation that is an important part of Indonesian morphology. Affixation is significant as a word-formation device, as well as for word-class transformation and for establishing relationships in sentences, both syntactic and semantic. The mastery of affixes not only helps in the construction of sentences but it also helps in understanding academic texts (Stoffelsma et al., 2020; Zhang, 2021).

Indonesian affixes are unique challenges for Arabic-speaking students. Unlike Indonesian, which has a linear affixation system, Arabic has a complex non-linear root-and-pattern morphological system. According to Haddad-Najjar and Abu-Rabia (2025), Masrukhi (2022), and Wang et al. (2022), typological differences between the first and second language can greatly affect the L2 learner's perception of the language structure and cause problems in different areas of language use. In general, at the early stage of learning, most of the Arabic-speaking learners can identify the affixes of the Indonesian language. In addition to formal recognition, however, learners must also be aware of the grammatical and semantic roles of affixes in sentences. According to Bañón et al. (2017) and Li and Yang (2022), learners' errors are not just the result of structural problems but also a result of not knowing how form relates to meaning and to the contextual use of language. Likewise, the studies conducted by Azaz (2019), Besse et al. (2019), and Shehata (2023) prove that the affixation process and other grammatical structures in Indonesian for Arabic-speaking learners are still difficult.

However, the majority of the previous studies conducted with Arabic-speaking BIPA learners have concentrated mainly on pedagogical, pragmatic, phonetic, and phonological aspects. There are several studies that have documented that students still have difficulties in articulating the consonants

and in realising the vowels (Masrukhi, 2022; Rafkahanun, 2021; Suparsa, 2021). Another line of research focuses on affective factors, learning strategies, and pragmatic competence of Arabic-speaking learners (Abdulkaream, 2020; Hasanah & Sari, 2021). However, many of these studies (Bañón et al., 2017; Wang et al., 2022) focus on language skills that are apparent in actual language performance rather than the processes underlying the comprehension of morphology.

Studies on Arabic speakers learning Indonesian, specifically on semantic error patterns and the understanding of affixes in the Indonesian language, have not been conducted extensively, especially in the context of BIPA in international universities. Affixation has been treated in most of the previous research on morphology as a minor issue, or it has been mentioned in pedagogical descriptions or analysis of learners' error patterns without treating it as a primary issue (Shehata, 2023). Furthermore, it is not only that studies based on curriculum and instructional material have more emphasis on the instructional design than on learners' morphological understanding, but also that the former is solely dependent on the latter. In one instance, Fahri and Supriadi (2023) explored the use of the Common European Framework of Reference (CEFR) in textbooks for the BIPA language learners of Arabic. Thus, the understanding of Arabic-speaking learners of Indonesian affixes and the emergence of errors in the early stages of the L2 acquisition process are still limited (Haddad-Najjar & Abu-Rabia, 2025; Zhang & Li, 2016). Studies that have so far been conducted on phonological errors and pronunciation intervention strategies have mostly used descriptive qualitative approaches (Rafkahanun, 2021; Yoviyani & Mulyati, 2023). There is still a lack of studies that combine a quantitative analysis of morphological comprehension with a qualitative analysis of semantic errors among first-semester students who participate in formal BIPA programs; however, (Ioannou & Tsagari, 2022; Roehr-Brackin et al., 2024; Zhang & Zou, 2024).

This study aimed to fill that gap by examining the knowledge of Indonesian affixes in the first semester of Arabic-speaking students learning Indonesian and determining the pattern of semantic error that occurs in their use of language. The study employed a mixed-method design, which involves both quantitative and qualitative analyses, in order to explore the relationship between the morphological comprehension and semantic performance of the learners. The results have implications for the theory of second language (L2) morphological acquisition, especially in the field of learning the Indonesian language by learners who are speakers of the Arabic language. Furthermore, the study offers empirical evidence for the design of more contextualized BIPA instructional strategies which incorporate both the form and meaning of affixes.

METHOD

The research method in this study was mixed methods with an explanatory sequential design. In this design, quantitative data were collected and analyzed first, and after that, qualitative data were collected to explain or deepen the interpretation of the quantitative data. Creswell and Plano Clark (2018) state that the explanatory sequential design has been well suited to the situation where the researcher will try to explain the statistical findings to participants' experiences, perceptions, and context. Hence, this design was deemed appropriate for the present study as it allowed the researchers to quantitatively determine the level of understanding of the Indonesian affix by Arabic-speaking students and qualitatively investigate the factors influencing the semantic errors in affixes learned from the linguistic and experiential point of view.

Another advantage of using mixed methods is its compatibility with the aims of this research, which are: (1) To investigate the understanding of beginner-level learners of the Arabic language about the affixes of the Indonesian language; and (2) To observe the patterns of semantic errors made by the Arabic language beginner learners in the affixes of the Indonesian language. The patterns of accuracy and frequency of errors were identified using quantitative data, while the qualitative data were used to gain deeper insights into the learners' reasoning processes, learning strategies, and the effects of their first-language influence on affix acquisition.

The study was done by researchers from the Indonesian Language and Literature Program and Faculty of Languages and Translation, Al-Azhar University, Cairo, Egypt collaboratively. The odd semester of the 2025/2026 academic year was used to gather data from November to December 2025. The subjects were 82 students of Indonesian language and literature in the first semester of the academic year 2021/2022 at Al-Azhar University. The participants were all native speakers of Arabic and had no previous experience in learning Indonesian. Thus, they were classified as novice-level learners for the purposes of BIPA learning.

The quantitative phase was a total sampling in which all students in the research period were included. Based on Sugiyono (2019), total sampling is suitable if the population size is relatively small and all members of the population can be included in the study. During the qualitative phase, 20 students were randomly selected from the same population. The items were selected to ensure adequate variability in learners' responses, in level of understanding, and in types of semantic errors that appeared in the quantitative stage. According to Creswell (2018), in mixed methods research, the goal of the qualitative sampling is to gather in-depth explanatory data, not to seek statistical representation. Thus, the participants chosen were believed to be adequate in giving lengthier explanations about Indonesian learners' difficulties and experiences in understanding Indonesian affixes.

Three research instruments were used: the Likert Scale questionnaire, the diagnostic test with multiple-choice questions, and semi-structured written interviews. The questionnaire was made up to measure students' perception, awareness, and learning experiences about Indonesian affixes. It consisted of ten statements, which were rated on a scale from strongly disagree to strongly agree. The questionnaire was directed towards metalinguistic awareness and their difficulties in understanding the affixation of the Indonesian language. The questionnaire was reviewed by two experts who teach BIPA in order to ensure content validity. In order to ensure the content validity, two experts who teach BIPA were asked to review the questionnaire. The feedback was used to make changes for item clarity and relevance to the research objectives.

The reliability of the instruments was calculated by Cronbach's alpha and obtained a reliability coefficient of 0.83, which showed that the instrument had high internal consistency. A five-item diagnostic test with multiple-choice questions was the main quantitative tool. Every one of them was a large affix class that was new at the beginner stage in Indonesia, such as prefixes me-, ber-, suffix -an, and the confix ke-an. The test was designed to reveal patterns of semantic understanding, as well as the typical errors in the use of affixes in context, but not achievement scores.

Two BIPA specialists validated the content of the instrument, checking the appropriateness of the sentence context, the function of affixes, and the clarity of the language. The validation process made sure that the instrument was valid for measuring the understanding of Indonesian affixes in semantic context. Twenty students were randomly selected to participate in semi-structured written interviews that were used to gather qualitative data. Interviews were held in Arabic to enable the participants to express their thoughts and learning experiences in their natural and accurate expression. The interview items focused on the problems of the learners in affix understanding, learning strategies, semantic understanding process, and the impact of Arabic affixes on Indonesian affixes. Data collected were then translated into Indonesian and thematically analyzed.

The process of data collection was done in accordance with the stages of the explanatory sequential design. All 82 participants completed questionnaires and multiple-choice tests in the first stage. The quantitative data were used to measure the level of affix comprehension of students and to find the dominant pattern of students' affix-semantic errors in Indonesian. In the second stage, 20 students were chosen randomly for semi-structured written interviews. The interviews concentrated on the categories of affixes that had the highest error rates in the quantitative data. This stage was intended to provide an explanation of students' semantic misconceptions based on cognitive, linguistic, and experiential factors.

Descriptive statistics were used to analyse the quantitative data. The responses of the students were analyzed in terms of mean score and standard deviation to find out the perception of the students and their differences in responding. In addition, Cronbach's Alpha was computed to explore the internal consistency of the questionnaire instrument. Percentages of correct answers and item difficulty indices were used to analyze the multiple-choice test results. An item difficulty index was computed as the number of correct responses divided by the number of respondents. The purpose of this analysis was to identify which affixes were relatively easy and/or hard for the beginner Indonesian learners.

The written interviews were conducted and analyzed using the procedures of thematic analysis, including open coding, categorization, and development of themes, on a qualitative basis. Patterns of semantic and morphological errors, learning strategies, and first-language interference were analyzed. The view on semantic errors was presented within the framework of Corder's (1974) error analysis theory, which focuses on the errors of learners as signs of the processes of second language acquisition. Furthermore, the concepts of morphological analysis in L2 learning were employed to describe how L2 learners semantically and structurally analyzed Indonesian affixes.
In the interpretation phase, the data were triangulated quantitatively and qualitatively. The process helped the researchers compare test results, questionnaire answers, and interviews to have a holistic picture of Indonesian affix acquisition by Arabic-speaking BIPA learners.

All the instruments were validated and found to be reliable using the expert judgment method with two BIPA lecturers who are experts in the field of Indonesian morphology and language teaching. Items were revised to make them more construct-relevant, linguistically clear, and in keeping with the research question(s) based on the feedback from the experts. Additionally, the questionnaire reliability coefficient showed good internal consistency of the questionnaire instruments used, which is an indication that the questionnaire used is suitable to be used in the study of beginners' understanding of Indonesian affixes.

RESULTS AND DISCUSSION

Results

Level of Accuracy in Indonesian Affix Usage

The results of this study can answer the first research objective, which is to study the extent of understanding of Indonesian affixes by Arabic learners at the beginner level in the Indonesian language. From the quantitative results, students showed different aspects of conceptualization of Indonesian affixes. The differences indicate that during the first stage of language acquisition, learners' understanding of the Indonesian affixation system is still in the development process. The results of the affixation test depending on the type of affix tested is presented in Table 1.

Table 1. Results of the Student Affixation Test by Type of Affix (N = 82)

No.	Type of Affix Tested	Correct Answers	Incorrect Answers	Correct Percentage (%)	Incorrect Percentage (%)
1	Prefix *me-*	53	29	64.6	35.4
2	Prefix *ber-*	16	66	19.5	80.5
3	Suffix *-an*	42	40	51.2	48.8
4	Confix *ke-an*	68	14	82.9	17.1

There are significant differences in the percentages of correct responses for the affix categories as indicated in Table 1. The prefix ber- showed the lowest accuracy rate (19.5%) and the highest error rate (80.5%), which means that this affix was the most difficult for students. The confix ke-an, on the other hand, was the most accurate (82.9%), indicating that students were relatively more successful in determining the meaning of its role. Figure 1 shows the distribution of accuracy in the use of affixes.

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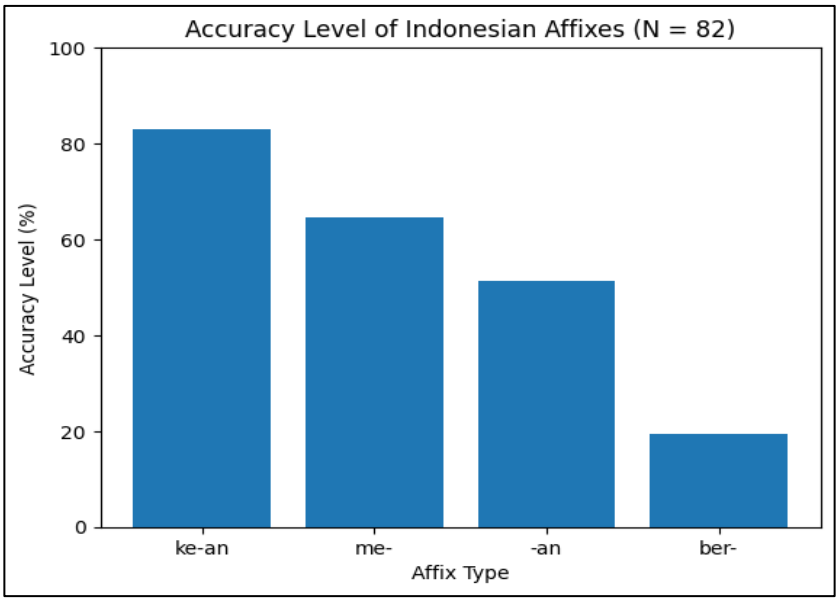


Figure 1. Distribution of Accuracy Rates for Affix Usage

The difficulty level of Indonesian affixes ranged from very easy to very difficult, as seen in Figure 1. Subordinate conjunctions that had more specific, common, and often-used lexical meanings were easier for students to understand. Affixes that needed more abstract semantic understanding in the context of sentences, however, were more difficult to master.

The results suggest that semantic complexity is one of the important factors influencing the difficulty of the acquisition of affixes. One problematic prefix was ber-, which could mean many things, such as possession, state, habitual action, and verb formation. The problem of semantic variability seems to cause difficulties in the learning process for beginners, because they are still developing the skills of understanding the meaning of words in their context in the language they are learning. The overall results in this study indicate that the Arabic beginner learners can recognize some affixes in Indonesian, but their understanding of the meaning of the affixes is inconsistent, which varies from one affix category to another.

Survey Findings on Students' Perceptions of Affix Learning

The results of the questionnaire data support the first objective of this research, which is to find out what students' perceptions and learning experiences are about the Indonesian affixes; this can be seen from the questionnaire that was obtained from students. The results of descriptive statistics of students' perceptions towards affix learning are presented in Table 2.

Table 2. Descriptive Statistics of Students' Perceptions of Affix Learning (N = 82)

No.	Statement	Mean	Standard Deviation
1	Affixes are difficult to understand.	2.82	1.18
2	Affixes are easier to understand when explained through examples.	3.80	1.14
3	I tend to memorize word forms using dictionaries.	3.23	1.47
4	I learn affixes by rewriting words repeatedly.	3.52	1.31
5	Practice exercises help me understand affixes.	3.95	1.12
6	I prefer learning affixes through complete sentences.	3.27	1.28
7	Affixes are easier to understand when practiced in texts.	3.52	1.29
8	Learning affixes helps me understand Indonesian texts better.	3.83	1.18
9	Affixes are easier to understand when explained bilingually.	3.63	1.32
10	Affixes are easier to understand when explained only in Arabic.	3.13	1.48

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The data in Table 2 show that most mean scores are located at the higher scores of the Likert scale, meaning that generally students' posture in learning affixes in Indonesian was positive. The statement about the importance of affixes for the understanding of Indonesian texts (M = 3.83) got the second-highest mean score, while the statement regarding the role of practice exercises in understanding affixes (M = 3.95) scored the highest mean score.

Based on these findings, it could be concluded that students believe that affix learning requires contextual practice and repeated exposure. Furthermore, relatively high mean scores were found in the statements that emphasized the usefulness of examples, contextual learning, and bilingual explanations. However, some of the items showed substantial standard deviations, suggesting that the students' learning preferences and strategies varied. Some students used memorization methods while others used the interpretative method (contextual reading and sentence manipulation). It is argued that this variation shows that affix acquisition not only requires morphological recognition, but also requires individual cognitive and learning strategies. Figure 2 shows the distribution of students' responses to the key items in this survey.

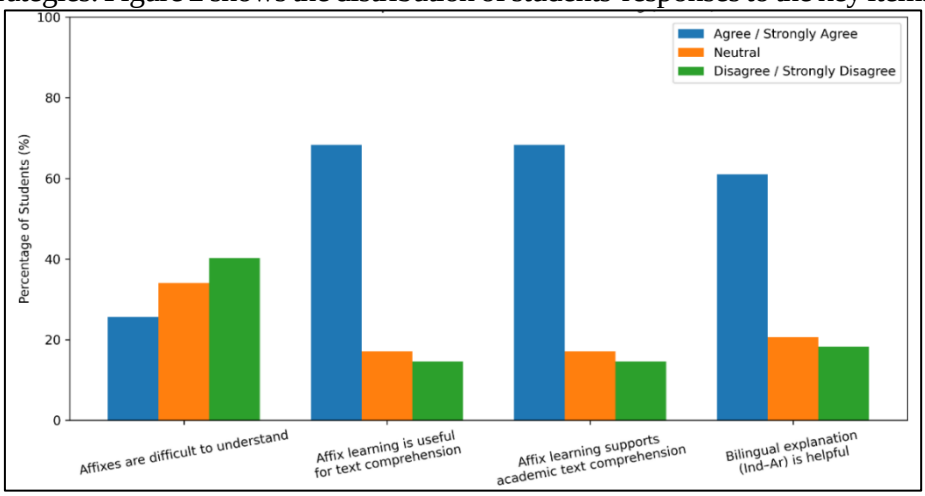


Figure 2. Students' Perceptions of Indonesian Affix Learning (N = 82)

Students overall gave positive responses to some of the instructional strategies used, such as contextual examples, practice activities, and bilingual explanation, as seen in Figure 2. It is very important to integrate semantic information into morphological teaching in the process of beginning-level BIPA learning, and this finding also confirms it.

Interview Findings

The second research objective of identifying patterns of semantic errors and identifying the factors that underlie the semantic errors is addressed in the interviews. In general, the student answers in the interviews showed that Indonesian affixes were perceived to be difficult but also important to enhance language proficiency. A number of participants mentioned problems at the beginning of their learning in terms of conceptual problems, especially in the understanding of affix meaning in the context of sentences. The interviews revealed that students were able to explain and recognize the prefixes and suffixes in formal situations but had difficulty in understanding the meanings generated by the affixes in the actual use of language. This result has shown that the main difficulty in learning affixes is not only recognizing morphology, but also gaining the meaning of the affixes.

Some participants described how they gained an understanding when they were given explicit explanations, examples in context, and repeated practice activities. This is consistent with the idea that affix acquisition takes place gradually and through exposure to meaningful language use and not only by memorizing affixes. The interviews also identified several learning strategies that students used to solve the problems of affix comprehension. The most frequently mentioned techniques were reading examples, doing exercises, going over the material again, translating, and reading the Arabic explanations. The results

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of these findings indicate that the learner actively engages in learning by combining classroom learning with self-learning strategies to learn the morphology of the Indonesian language.

Moreover, the results of the interviews showed that contextual practice plays a crucial role in reinforcing the understanding of affixes by learners. It was found that many students preferred that practical exercises that used sentences be presented before theoretical explanations. As a result, affix learning seems to be more effective if students are presented with language opportunities to link the form of affixes to their meaning in real language. The interviews also showed that students believed it was important to master affixes to comprehend words, reading, and sentence construction in Indonesian. Yet, learners who are new to the content still needed structured language instruction to help them understand and learn the subject matter, such as the use of explanations in Arabic language that were simplified, translations of major ideas in Arabic, and more contextual examples.

The qualitative results of the study show that, in general, the acquisition of morphological knowledge among Arabic-speaking learners in Indonesia is affected by the four learning factors, which include: morphological awareness, semantic interpretation ability, L1 interference, and learning strategies. These findings also agree with the quantitative findings and give a more detailed explanation of the semantic error pattern that was found in the affixation test.

Discussion

Learning Strategies Between Form-Based and Meaning-Based Approaches

The results indicate that students' affix recognition skills differ from their understanding and application of the affixes in meaningful contexts. Some students were able to give a formal explanation of the Indonesian affixes but had problems understanding their semantic function, especially the prefixes me- and ber-. The result is in line with the previous study which found that morphological recognition is easier for learners than semantic interpretation (Deng et al., 2017; Kimppa et al., 2019).

Interviews with students also revealed, in the follow-up interviews, that students often used form-oriented learning strategies. The bulk of their learning activities were centered on identification of affix forms, memorization of the meaning of vocabulary items, and translation of vocabulary items. Such approaches can aid in the identification of affixation patterns, but are not sufficient in enhancing semantic flexibility or awareness. Students thus tend to learn affixes in an automatic manner, not considering their communicative role in sentences (Amenta et al., 2025; Clahsen et al., 2010).

This interpretation is supported by the high error rates of semantically complex affixes like ber-, etc. In addition to the complexity of affixation in the Indonesian language, learners' difficulties may also be due to the instructional processes implemented by teachers, which tend to focus on the formal aspect of the grammar without paying attention to semantic aspects (Cintrón-Valentín & Ellis 2016, Roehr-Brackin et al. 2024). Similarly, Ellis (2001) contends that a form-oriented teaching approach alone is not enough for the acquisition of meaningful competence in speaking.

In this context, the Indonesian Language Education Association, which believes in a comprehensive and progressive approach to learning and teaching the language, agrees. Theoretically, students have a good understanding of the importance of affixes in their learning of Indonesian, but if there are no strategies in teaching affixes that bridge the relationship between the affix form and its use in context, students are likely to continue being confused. The difficulties faced by students, therefore, can be interpreted as a lack of semantic processing because the learning is still focused on forms. The results underscore the importance of incorporating meaning and context in learning the BIPA at the initial stage (Loewen & Sato, 2018; Zhang & Zou, 2024).

Interactions Between Arabic and Indonesian Affixes in First-Language (L1) Transfer

The high frequency of errors in the prefixes "me-", and "ber-" reveals the significant role of L1 (namely Arabic) in students' errors. Generally, learners could identify these affixes formally, but they had difficulty translating the meaning of these affixes in sentence contexts. Students' answers in

the interview indicated that many students used Arabic translation as a first approach to understanding the Indonesian meanings. Students often used their L1 to understand the explanations given by the lecturer before trying to grasp L2 structures. The process, which Besse et al. (2019) and Wang et al. (2022) describe as the "use of the first language as a cognitive scaffold" during the initial phases of SLA, is characterized by the use of L1 resources. The process is identified as the "use of the first language as a cognitive scaffold" during the initial stages of SLA and involves the use of L1 resources (Besse et al., 2019; Wang et al., 2022).

The problems are due to the difference in morphological systems between Indonesian and Arabic. The difference is primarily that the morphology of the Indonesian language is linear (conventional), while the Arabic language is largely non-linear (conventional) and root-based. This makes Indonesian affixes that do not have direct structural correspondences in Arabic a source of negative language transfer and semantic confusion (Azaz, 2019; Mikhaylova, 2018). A few pupils admitted that while they might be able to see the affix forms, they were unable to understand what they meant. The results are similar to previous studies which have shown that Arabic learners are prone to transferring morphological and syntactic patterns from their L1 to the L2. The challenge is more evident when students come across affixes in the Indonesian language like me- and ber-, which need context and meaning. The Linguistic Interdependence Hypothesis (L2) also sheds light on this phenomenon, which says that L2 processing is affected by L1 schemas. If the linguistic systems are not completely compatible, it is more likely that conceptual errors will arise.

Moreover, Ayoun (2020) and Kimppa et al. (2019) consider affix-related errors as developmental phenomena of interlanguage formation and consider them as signs of learning failure. In this stage, students actively try to harmonize two linguistic systems. There may be some instability in the beginning, but after some time, learners start to realize the differences in the language and begin to adjust their learning strategies (Imad, 2024). Arabic influences are found in both structural and cognitive aspects of affix acquisition for the Indonesian language in general. The results of this study highlight the need for teaching methods which focus on Arabic typological differences from Indonesian. The strategies may help to reduce negative transfer and facilitate better learning in academic BIPA contexts.

The Need for a Contextual Approach in Teaching Affixes

The results suggest that students have more problems understanding the meaning of affixes in sentences than their morphological forms. Students could generally identify the affixes me- and ber-, but were not able to interpret the semantic functions of these affixes in real use of language. In the interviews, students mentioned that the recognition of affix forms was not much difficult, but the understanding of the meaning of these forms was difficult to understand. The fact that this tendency is also further proof of the ineffectiveness of teaching affixation without the use of real language. When students come to a new affix in real communicative situations, they need to combine the knowledge of the grammatical structure with the meaning of the affix, making it even more complex. The same is true, as suggested by Amenta et al. (2025) and Deng et al. (2017), when it comes to the acquisition of operational language competence based on grammatical description. Learners also need to have an understanding of the semantic function of the affixes in meaningful speech.

The results are also in line with the linguistic research that has proved that the affixes used in Indonesian do not only mark the grammatical categories but also the meaning of the sentences, the argument structure, and the lexical class. If the teaching of affixes is too detached from context, learners are likely to get isolated and mechanical affix knowledge (Mikhlaylova, 2018; Roehr-Brackin et al., 2024). The students' responses to the contextual examples and meaningful sentence patterns also indicated that they were a great help to students. Linguistic information presented in the context of natural use was found to be easier to understand for learners who said that affix meanings were easier to understand in natural use than in lexical explanations. The results are in line with prior

studies that show that the introduction of language forms in meaningful communicative situations is an effective way to facilitate the learning of Indonesian by non-native learners.

Based on this, the study points out that in the process of teaching and learning academic BIPA, it is necessary to adopt a contextual teaching method. Repeated exposure to affixes in meaningful sentences, texts, and communicative interactions is necessary for beginner learners to internalize affix forms and affix meanings. Similarly, Cintrón-Valentín and Ellis (2016) and Loewen and Sato (2018) stress the importance of contextualized instruction to help students make connections between formal language knowledge and actual language use.

The Role of Scaffolding in Teaching Affixes to Beginner Learners

The interview results show that the Arabic-speaking beginner BIPA learners need structured teaching assistance in understanding affixes in the Indonesian language. Students indicated that they were confused at the beginning of acquiring the language; however, the explanation and providing the students with Arabic translations, review, and systematic organization of exercises helped them improve their understanding. Mahan (2022) and Zhang and Zou (2024) suggest that the problems are not solely attributable to the limitations of the learners but mostly to the inadequate instructional support they receive in the early stages of L2 formation. This is a discovery that is closely related to the concept of scaffolding in language learning. According to Luisa et al. (2024), scaffolding is defined as temporary pedagogical support, which helps the learner to carry out a language activity that he or she is unable to carry out independently. Studies show (Ioannou & Tsagari, 2022; Roehr-Brackin et al., 2024) that the more guided the explanation is by the teacher, the more the teacher structures the examples, and the more the teacher structures the practice, the more the learners can develop the ability to construct their own affix forms.

Along with instructional scaffolding, cognitive scaffolding is also of significant importance. Students expressed that imagining the relationship between the form and meaning of the affix was helpful in grasping more difficult concepts. The results of the study coincide with the previous studies conducted by Asteria et al. (2024), which indicated that the graphic organizer method is effective in making connections between language forms and language meanings. The results indicated that there are three main types of scaffolding in the beginners' affix learning, namely: bilingual scaffolding by giving explanation in both Arabic and Indonesian, graded scaffolding by giving simple explanation—complex explanation, and visual scaffolding by using affix map and semantic grouping techniques. In general, it seems that scaffolded affix instruction has a positive effect on students' conceptual understanding and long-term retention. Similarly, Loewen and Sato (2018) and Mahan (2022) find that affix instruction in an academic BIPA setting is more adaptive, more responsive, and more effective when appropriately scaffolded.

Pedagogical Implications for Academic BIPA Instruction

Based on the above findings, the following implications can be drawn with regard to the development of affix instruction in academic BIPA programs, especially for beginner Arabic-speaking university students. The results showed that students' difficulty in understanding the meaning of the affixes in sentences was greater than their ability to identify the syntactic structures of the affixes. This indicates that the basis of memorization and morphological classification is not enough to build meaningful competence in affixes (Deng et al., 2017; Kimppa et al., 2019). The findings of this study can be used as a reminder for teachers of affixes not to separate form and meaning when teaching affixes. Both Cintrón-Valentín and Ellis (2016) and Mikhaylova (2018) stress that the function of affixes should not be limited to being merely grammatical markers, but also as meaning carriers for the purposes of sentence interpretation.

Second, affixes should be introduced contextualized within meaningful sentences, texts, and communicative encounters. The students' understanding was improved with the use of authentic examples when introducing the affixes. The results are similar to the recommendations made by academics in the field of Indonesian language and the context of language learning by non-native

Indonesian learners, which emphasize contextualism in language learning, where Indonesian language is taught as a learned community language, which is in line with the syntactic and semantic analysis of me- prefixes and ber- prefixes by Laksanti (2023). Third, the results of the interviews confirm the significance of scaffolding in the early stages of learning. The use of visual aids, bilingual explanations, and progressively structured activities facilitated the association of affix forms and their meanings better. The present results are also in line with the research on the role of cognitive scaffolding in the learning of BIPA at the beginner's level.

In comparison with highly theoretical teaching, contextualized and sequenced practice activities seem to be more effective for learning. Ioannou and Tsagari (2022) and Roehr-Brackin et al. (2024) stress the need for explicit instructional support in key moments of language learning. Hawkes (2023) also discovered that the conceptual understanding of the learners increases when the abstract language is related to real communicative situations. Based on all of these, the present study recommends that affix teaching should combine contextual teaching, semantic understanding, gradual teaching, and step-by-step practice. Such an approach is more conducive to the linguistic and cognitive abilities of beginners, and it is able to foster language competence as well as metalinguistic awareness for their practical use in the academic context of the Indonesian language.

This study is also a contribution to the literature of second-language morphological acquisition in which the author hopes to empirically map and explain the knowledge of Indonesian affixes of second-language learners of Arabic in the formal academic environment. To obtain a more holistic picture of affix acquisition in BIPA learning, both quantitative measurement and qualitative semantic analysis were integrated, which was achieved through the mixed-methods approach.

Research Limitations

The following limitations should be noted in this study. The research was limited to four affix categories deemed to be difficult for beginning students, namely me-, ber-, -an, and ke-an. This emphasis enabled more detailed studies, but does not exhaustively cover the full spectrum of the Indonesian affixation pattern, which is structurally and semantically more complex. Second, the study was conducted only at Al-Azhar University in Egypt and only with Arabic-speaking students in the first semester of studies in the Indonesian Language and Literature Program. Therefore, the results cannot be extrapolated to other BIPA situations involving other language backgrounds and proficiency levels, or other learning environments. Third, written interviews were used rather than oral interviews or classroom observations in collecting qualitative data. Because of this, spontaneous emotional reactions and intonation and interactional patterns were not adequately represented. However, written responses were still good enough to provide rich information about students' learning experiences and perceptions of affix learning.

Directions for Future Research

Based on the results and limitations of this study, the following are some ideas for future studies. First, there is a need for research on how affix comprehension develops in the progression of Arabic-speaking learners from beginner to intermediate and advanced levels in longitudinal studies. These investigations might explore changes in morphological awareness, semantic interpretation, and affix use across time. Second, further experimental research is needed to systematically examine various scaffolding methods. For instance, learners who receive bilingual contextual scaffolding can be compared to those who receive standard instruction to test the effects of the scaffolding on their ability to understand meaning and on their use of affixes. Third, a comparative cross-linguistic study on the L1 background of learners, including English, Mandarin, and Southeast Asian languages, would give more insights into language transfer patterns in the acquisition of Indonesian affixes. Lastly, future research can quantitatively assess contextual methods of affix instruction based on real texts, activities embedded in meaning, and real academic communication contexts. These investigations might help develop more adaptive, contextualized, and sustainable models to teach BIPA as an affix.

CONCLUSION

The two primary research goals of this study were accomplished: The first was to observe the extent of understanding of the affixes of Indonesian by beginners learning Arabic, and the second was to determine the pattern of the errors in affix usage among the Arabic-language learners. The results showed that students can generally identify Indonesian affixes' forms; however, they have more difficulty understanding and interpreting the semantic function of the affixes in contextual language use. The affixes analysed in the present study revealed that the prefixes me- and ber- were found to be the most semantically ambiguous, which suggests that affixes with more complex semantics are more difficult to master from the beginning. The study also showed that multiple and related factors such as form-oriented learning strategies, limited contextual knowledge, and first language transfer from Arabic to Indonesian had an impact on semantic errors. Memorisation and direct translation were very often used, helping to recognise the morphology but not enough to build up deeper semantic understanding. Furthermore, the morphological systems of Arabic and Indonesian caused conceptual confusion in the process of acquiring the affixes. The results indicate that the affix instruction in the beginner level BIPA classroom should focus on contextualized learning, the connection between form and meaning, and scaffolding of instructional support. Affectivity of learning is improved by students' exposure to meaningful sentence contexts, guided practice, bilingual explanations, and progressively structured learning activities. This can be expected to facilitate the association of form and function of morphological elements by the learner to the use of the language in academic contexts. However, the application of this research is still confined to four categories of affixes in Arabic and Arabic learner beginners at Al-Azhar University with Arabic instruction in Indonesia. Further research is suggested to examine more Indonesian affixes and to include participants from various linguistic and educational backgrounds to gain a wider view of the acquisition of affixes in BIPA learning contexts.

Author Contribution Statement

Han-han Ulumudin Ismail was responsible for the study's conceptualization, data collection and analysis, and preparation of the original manuscript. **Shirly Rizki Kusumaningrum** contributed to the theoretical framework, research methodology, and manuscript revision. **Radeni Sukma Indra Dewi** contributed to instrument development, data analysis, and refinement of the discussion. **Abdul Aziz Khoiri** provided academic supervision, methodological guidance, and critical review of the manuscript. All authors reviewed and approved the final version.

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Conflict of Interest Statement

The authors declare that they have no financial, professional, or personal conflicts of interest that could have influenced the conduct, interpretation, or publication of this study.

Data Availability Statement

The data were collected through questionnaires and diagnostic tests involving 82 students, as well as written interviews with 20 participants at Al-Azhar University, Egypt. To protect participants' privacy, the data are not publicly available. Anonymized data may be obtained from the corresponding author upon reasonable request, subject to ethical considerations and participant confidentiality.

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