Ed Process Int J

www.edupij.com

ISSN 2147-0901 (Print), 2564-8020 (Online)

EDUCATIONAL PROCESS
INTERNATIONAL JOURNAL

Avoidance Strategies by BIPA Students in Bahasa Indonesia Production as L3

Bambang Yulianto, Margana, M. Zaim, Prima Vidya Asteria, Abdul Kholiq, Zulfadhli

Research Article

Cite this article: Yulianto, B., Margana, Zaim, M., Asteria, P. V., Kholiq, A., & Zulfadhli. (2025). Avoidance Strategies by BIPA Students in Bahasa Indonesia Production as L3. *Educational Process: International Journal, 19*, e2025538.
https://doi.org/10.22521/edupij.2025.19.538

Received August 11, 2025
Accepted October 21, 2025

Keywords: L3 production, avoidance strategies, BIPA students, third language acquisition

Author for correspondence:
Abdul Kholiq
abdulkholiq@unesa.ac.id
Universitas Negeri Surabaya, Indonesia

Abstract

Background/purpose. This study aims to fill this gap by analyzing the forms of language avoidance strategies employed by BIPA students. The results are expected to contribute to the development of language avoidance theory in language learning within a multilingual context.

Methods. This study uses a qualitative approach to examine the avoidance strategies employed by BIPA students in BI production as an L3. The research participants consisted of six BIPA students from Universitas Negeri Surabaya. Data collection was conducted using elicitation techniques. Eliciting was conducted through casual conversation to elicit natural utterances. Data analysis was conducted in three stages: identification, classification, and interpretation.

Results. Based on the research results, there are forms of language avoidance strategies in BI production as L3 in BIPA students, namely topic avoidance, message abandonment, and meaning replacement. These strategies are not entirely passive in the face of linguistic constraints. The use of language fillers has been identified as having a dual role: as a marker of linguistic unpreparedness and as a tool for regulating the conversational rhythm.

Conclusion. Based on the results, BIPA students employ three main avoidance strategies in BI production as L3: topic avoidance, message abandonment, and meaning replacement, as a means of adapting to linguistic and non-linguistic limitations. These findings underscore the importance of explicitly teaching compensatory communication strategies in BIPA learning, including training in the effective use of language fillers, so that learners can manage linguistic limitations strategically, adaptively, and communicatively.

1. Introduction

The development of the Bahasa Indonesia bagi Penutur Asing (BIPA) Program has shown an increasingly significant trend in recent years. In Indonesia, BIPA programs are expanding rapidly at various universities and language institutions, with a widespread presence in multiple countries. Over the past few decades, about 59 nations have sought to institute BIPA initiatives. In addition to those, Bahasa Indonesia departments at several universities in other countries have offered their programs outside Indonesia, including those in Poland, Thailand, Germany, and India (Hertiki, 2017; Andriyanto et al., 2025). Based on data from Kementerian Pendidikan dan Kebudayaan Indonesia, there are around 100 institutions that provide BIPA programs in Indonesia. At the same time, the BIPA program has been gaining popularity with international partners, especially in countries like Japan, Korea, and Australia. This version of BIPA will become a trigger that, around the world, Bahasa Indonesia (BI) can be an international language. The above development was also accompanied by an increase in research on BIPA topics that appear annually based on Scopus site publication (Ulya et al., 2020).

UNESCO's recognition of BI as an official language implies that the role of BIPA learning is proven to be essential in promoting BI worldwide (Shafira et al., 2024; Susanto et al., 2024). This recognition is bringing greater attention to BI, and they are all inclined towards learning it from foreign trainers. So, BIPA learning becomes very important in the process of developing a BI learning (Andriyanto et al., 2025). Within this framework, the effectiveness of BIPA instruction is very much determined by how students' BI learning problems are addressed.

Since most BIPA students have already mastered two or more languages, BI has the status of a third language (L3) for them. Yes, this would make BIPA learners polyglots. During the process, BIPA students experience difficulties in learning BI, which can be even difficult due to the complex process, especially in linguistic structures between L1 and L2. The learning strategies used to learn BIPA must also consider these conditions (Hammarberg, 2014; Falk & Bardel, 2010). The acquisition of a third language (TLA) is studied nowadays as being highly variegated and intricate, encompassing the factors of cross-linguistic influence (CLI) (Leonet et al, 2020). This is further a function of BIPA being influenced by different linguistic features, particularly language background, especially language typology (Cenoz, 2001). Under certain conditions, with the same language background as nearly L3, this TLA approach is often easier for students. On the other hand, when learners' language backgrounds are different from their L3, TLA becomes more difficult (Cenoz, 2012). Thus, language avoidance emerges as a strategy to reduce mistakes in BI production since L3 holds relevant information on the challenges encountered by BIPA students in producing BI as L3.

BIPA students also learn about BI, which is in line with a multilingual and multicultural-based context. There are a lot of BIPA students and each one has his or her characteristics that differentiate him or her from others, as he/she comes from a different cultural environment and belongs to a specific big language. Thus, differences in the background define the strategy of acquiring BI for each distinct individual (Santos et al., 2017). As such, each BIPA student takes his/her path in facing the obstacles of learning BI and may therefore resort to different types of language avoidance strategies (Cenoz, 2001). One of the most widely applied resolutions in these types of studies is avoidance, which language production learners utilize when they do not have enough or incomplete knowledge about grammatical rules and lexical components. This increases how much the target language is being produced. In this context, the avoidance strategies in the BI acquisition as an L3 by BIPA learners are aimed at cutting down the difficulties that might be faced by them while producing BI.

Although little research has focused exclusively on language-avoidance strategies, they have been studied with avoidance factors in SLA (Laufer & Eliasson, 1993) and as a learning strategy in foreign-language learning (Vázquez, 2005). Nevertheless, little is known about the language avoidance strategies concerning TLA, especially in the use of BI as the target language. Prior research

https://doi.org/10.22521/edupij.2025.19.538 Published online by Universitepark Press

has put more emphasis on language transfer and the part played by the native language in TLA (Hammarberg, 2001; Kholiq et al., 2024). Consequently, investigating the avoidance strategies in BI production as an L3 in BIPA students is important for covering a study on language avoidance strategies, as there is a lack of approaches among TLA.

The present study seeks to investigate the avoidance strategies in the BI production by BIPA students at L3. We hope this study will help the development of language avoidance theory in a multilingual environment. This research, moreover, has the intention to enrich the literature on how BI teaching in BIPA programs can be eased, and L3-BI as an issue from the BIPA student perspective can be lessened. So, the formulation of this research question is: What are the avoidance strategies in the BI production by BIPA students at L3?

2. Literature Review

2.1. The Third Language

L3 is defined as the language being acquired by a polyglot (Hammarberg, 2018; Bardel & Falk, 2021). According to Hammarberg (2018), L3 is not a linear order of acquisition, but it is the linguistic system that develops in a multilingual environment. This process is closely related to how language background interacts with the L3. Bardel and Falk (2021) claim that the dimensions of TLA are even more complicated than both FLA and SLA. TLA is a process of moving from one language background to another. There is an overlapping process where speakers need to achieve mastery before the target language acquisition. Language backgrounds can be dysfunctional in TLA in some cases due to differences in language typologies.

According to Cenoz et al. (2001), TLA is not equal to SLA. SLA studies are carried out in the domain of bilingualism rather than TLA in multilingualism. SLA has a definable source language (i.e., L1), whereas TLA can be any language. TLA opens the possibility of any language, L1 or L2, as a source language. SLA pays attention to L1↔L2 correlations, but TLA can focus on either L1↔L3 or other types of cross-linguistic influence, such as L2↔L3 and L1 & L2↔L3 (De Angelis, 2007; Najjar, 2020; Puig-Mayenco et al., 2020). It indicates that TLA is more intricate than SLA.

Various phenomena of language acquisition are addressed in TLA. Those phenomena include regularization, transfer, interference, language avoidance, and borrowing, as well as the loss of old skills that were no longer needed in the TLA process (Cenoz et al., 2001). This aspect more broadly informs hypotheses in TLA studies than is the case for SLA. This enables L3 research to develop different analysis methods compared to the SLA. Alonso et al. (2020) stated that only one language source (L1) of the L2 learner is involved in the process of L2 acquisition, whereas L3 acquisition may take place according to various principles: (a) an input coming from either an L1 or L2; (b) different qualitative characteristics of L1 and L2 have a characteristic advantage; (c) which have a holistic nature, as well as that can be used simultaneously or repeatedly. These principles can be found in the thought processes of L3 learners because of the interaction between languages in L3 acquisition. The complexity of L3 acquisition studies is the basis for distinguishing between L2 and L3 acquisition studies.

TLA studies are growing rapidly. For instance, research on L3 acquisition in linguistics, psychology and pedagogy have evolved into categories of L3 research clusters (a) third language; (b) third language phonology; (c) clil; (d) multilingual speaker; (e) metalinguistic awareness; (f) language negotiation; (g) minimum pairs; and (i) heritage learners (Ding, & Ding 2021). These results examining research in L3 acquisition are based on both cluster analysis and citing of references of publications in the field of L3 acquisition. These clusters show the theoretical conceptions regarding what L3 acquisition research could potentially offer to our understanding of third language learning.

https://doi.org/10.22521/edupij.2025.19.538 Published online by Universitepark Press

Although prior studies have extensively discussed the theoretical underpinnings of third language acquisition (TLA), including phenomena such as transfer, interference, and language avoidance (Cenoz et al., 2001; De Angelis, 2007; Alonso et al., 2020), there is limited empirical research focusing specifically on avoidance strategies employed by BIPA students in the production of BI as L3. Most existing studies have been conducted in European or general multilingual contexts, leaving a gap in understanding how language background interactions (L1 and L2) influence avoidance behaviors in this specific learner population. Furthermore, while clusters of L3 research have identified various linguistic and pedagogical factors (Ding & Ding, 2021), few have systematically analyzed how learners strategically avoid certain linguistic forms or structures when producing L3. This gap underscores the need for empirical investigation into the cognitive and strategic mechanisms underlying L3 avoidance in BIPA contexts.

2.2. The Avoidance in Language Production

In the context of TLA, avoidance strategies are one of the most frequently mentioned communicative devices adopted by foreign language learners. According to Elyıldırım (2017), foreign language learners tend not to use grammatical structures or vocabulary that they have not yet learned, for example, adverbial clauses, noun clauses, and idiomatic expressions. While these strategies may help to reduce language production mistakes, they often do not provide the intended message of the utterance. The learners naturally simplify sentences and avoid difficult vocabulary in order to communicate more easily in the target language.

Avoidance is a language production strategy that has been linked to psychological factors like fear of making mistakes due to formal correctness. According to Faerch and Kasper (1983), these reduction strategies can be classified as formal reduction and functional reduction. This is called formal reduction, in which learners avoid using certain linguistic forms because they are not sure if they should be used. Functional reduction would be avoiding both socially and pragmatically complex communication functions. According to Elyıldırım (2017), one frequently used strategy is topic avoidance, where students simply avoid discussing those topics that demand a high semantic complexity at various grammatical structures.

In TLA, the complexity of avoidance strategies is due to the relationship between language background and L3. Bardel (2019) stated that L3 learners unconsciously use elements from the L2 in L3 production to avoid L3 production errors. This phenomenon is known as the L2 effect, which is the tendency to transfer lexical or grammatical elements from the L2 into the L3 even though these elements have no intended communicative function. The cross-language lexical mixtures also emerge, indicating that avoidance strategies in the L3 are not solely the result of a lack of linguistic knowledge but also a failure to inhibit the activation of the language background system.

While avoidance strategies have been extensively discussed in TLA, including formal and functional reductions as well as topic avoidance (Faerch & Kasper, 1983; Elyıldırım, 2017; Bardel, 2019), there remains a lack of empirical research focusing on BIPA students producing Bahasa Indonesia as L3. Previous studies primarily addressed general foreign language learners without systematically exploring the influence of L1 and L2 interactions on avoidance behaviors. Additionally, the psychological aspects underlying avoidance, such as fear of errors and pragmatic complexity, have not been deeply investigated in this learner population. This gap highlights the need for a targeted study examining how BIPA students employ avoidance strategies in L3 production, including the cognitive and linguistic mechanisms involved.

The communication strategies introduced by Tarone (1977) include three forms of avoidance in language production, namely topic avoidance, message abandonment, and meaning replacement.

https://doi.org/10.22521/edupij.2025.19.538 Published online by Universitepark Press

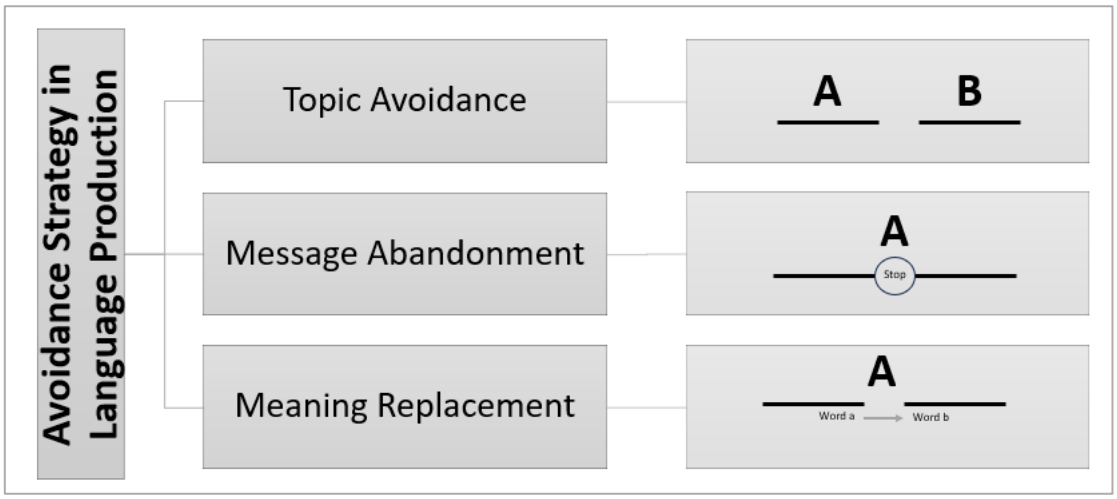

Figure 1. The Forms of Avoidance in Language Production

Topic avoidance occurs when a learner consciously chooses not to discuss a particular topic because they feel they lack the linguistic skills to express it, either in terms of grammatical structure or vocabulary. Meanwhile, message abandonment occurs when a learner begins a statement but stops midway due to difficulty continuing the expression or finding the appropriate language form, thus preventing the message from being fully conveyed. Meaning replacement refers to a strategy in which the learner maintains the topic of conversation but simplifies or replaces the information intended to be conveyed with a more general or less specific form to maintain communication. These three strategies reflect learners' efforts to maintain language fluency while avoiding areas perceived as complex or high-risk for error.

Factors triggering language avoidance have been discussed in various studies of second and third language acquisition. Schachter (1974) defined avoidance as a form of underproduction, where learners avoid certain structures or vocabulary due to limited mastery or differences between their language background and the target language. Dagut and Laufer (1985) added that lexical and structural differences—or lexical gaps—encourage learners to choose simpler alternative forms or those with direct equivalents in the L1. In addition to structural and lexical differences, affective factors also trigger language avoidance. Krashen (1982) said that the Affective Filter Hypothesis states that anxiety, low motivation, and lack of self-confidence can hinder the processing of language input. MacIntyre and Gardner (1991) explain that foreign language anxiety plays a role in increasing the tendency to avoid using linguistic forms perceived as difficult.

Another factor is grammatical uncertainty. Ellis (1994) showed that learners avoid grammatical forms they have not yet mastered productively, even though they have passively understood them. Faerch and Kasper (1983) categorize this phenomenon as a reduction strategy, in which learners simplify or reduce the content of the message to maintain fluency. The complexity of the communicative function also triggers language avoidance. Communication situations that require the use of complex sentence structures or specific vocabulary encourage learners to choose simpler forms of language to avoid errors or obstacles in conveying messages.

Based on this description, factors triggering language avoidance can be grouped into three main categories: (1) lexical and structural differences between the target language and previously mastered languages, including the presence of lexical gaps; (2) affective factors such as anxiety, low self-confidence, and learning motivation that influence the courage to use certain language forms; and (3) limited mastery of grammar that encourages learners to choose simpler linguistic forms. These three factors interact to influence the avoidance strategies used by language learners.

https://doi.org/10.22521/edupij.2025.19.538 Published online by Universitepark Press

3. Methodology

This study employs a qualitative approach to investigate the avoidance strategies employed by BIPA students in producing BI as an L3. This approach was chosen because it provides in-depth exposure to students' natural language avoidance strategies. The focus of this study is on the avoidance strategies that emerge during the BIPA production process, as reported by the research participants.

The research participants consisted of six BIPA students from Universitas Negeri Surabaya. The participants' selection criteria included: (1) status as active BIPA learners, (2) BI as an L3, and (3) willingness to participate in the entire research process. The participants' linguistic profiles can be seen in Table 1.

Table 1. Research Participants

Participants	Country	Language Background	BI Learning Needs
S1	Uganda	L1: Luganda L2: English L3: Bahasa Indonesia	Study and humanitarian mission
S2	China	L1: Mandarin L2: English L3: Bahasa Indonesia	Study
S3	South Korea	L1: Korean L2: English L3: Bahasa Indonesia	Study
S4	South Korea	L1: Korean L2: English L3: Bahasa Indonesia	Study
S5	South Korea	L1: Korean L2: English L3: Bahasa Indonesia	Business
S6	Philippines	L1: Ilocano L2: English L3: Bahasa Indonesia	Study

Data collection was conducted using elicitation techniques. Eliciting was conducted through casual conversation to elicit natural utterances without the pressure of formal situations, allowing avoidance strategies to be spontaneously identified. All interactions were recorded with the participants' consent and transcribed verbatim for further analysis.

Data analysis was conducted in three stages: identification, classification, and interpretation. The identification and classification stages involved marking utterances containing avoidance strategies according to the categories of topic avoidance, message abandonment, and meaning replacement. The interpretation stage linked findings to linguistic profiles to understand factors influencing strategy use, including L1 transfer, L2 influence, and cultural background. The credibility of the

https://doi.org/10.22521/edupij.2025.19.538 Published online by Universitepark Press

research was maintained through data triangulation between the elicitation and peer debriefing with other researchers in applied linguistics.

4. Results

Based on the research results, there are several forms of language avoidance strategies in acquiring BI as L3 in BIPA students, namely 1) topic avoidance, 2) message abandonment, and 3) meaning replacement.

4.1. Topic Avoidance

The research revealed that some participants chose to avoid certain topics of conversation when they felt they lacked the vocabulary or language structure to discuss them. This strategy typically emerged when the topic was technical or required a detailed explanation. In such situations, participants shifted the conversation to other or more familiar topics. This can be seen in the following data.

Data 1

Q : *"Bisa ceritakan tentang pernikahan tradisional di negaramu?"*
'Can you tell us about traditional weddings in your country?'

S : *"Sebenarnya saya kurang tahu, tapi di kota saya ada banyak tempat wisata yang indah, seperti pantai dan pegunungan."* (S2)
'Actually, I don't really know, but in my city there are many beautiful tourist attractions, such as beaches and mountains.'

Data 2

Q : *"Bagaimana bilang gotong royong dalam Korea?"*
'How do you say *gotong royong* in Korean?'

S : *"Itu susah. Apa bisa kata yang lain?"* (S4)
'That's hard. What else can you say?'

From these data, lexical and structural differences between L1/L2 and L3 can trigger topic avoidance strategies. In Data 1, the lack of relevant vocabulary to describe traditional weddings in the target language caused the speaker to shift the conversation to a more familiar topic. This indicates a lexical gap that hindered the speaker's ability to maintain the initial topic.

Meanwhile, in Data 2, unfamiliarity with the lexical equivalent of the term gotong royong in the target language was exacerbated by difficulty constructing appropriate sentence structures. These factors suggest that lexical limitations can coexist with structural barriers, which together hinder language fluency. Both cases emphasize that lexical and structural differences affect discourse continuity and cause speakers to tend to avoid topics that require the use of unfamiliar vocabulary or constructions.

In both data sets, topic avoidance strategies were implemented through strategies of shifting the focus of the conversation and requests for a change of topic. In Data 1, the speaker directly changed the requested topic to a more familiar one, namely tourism, without addressing the substance of the initial question. This technique is known as topic shifting, where the speaker shifts the discourse to a linguistically safer realm. In Data 2, the participant used the phrases "Itu susah." and "Apa bisa kata yang lain?" to indicate that they hadn't mastered the topic, so they avoided the topic and asked to change to another topic. This avoidance indicates that the speaker is not explicitly refusing to answer, but rather is utilizing discursive strategies to minimize communication barriers caused by lexical and structural limitations.

In addition to lexical gaps, students also avoid topics due to limited grammatical mastery. This can be seen in the following data.

https://doi.org/10.22521/edupij.2025.19.538 Published online by Universitepark Press

Data 3

Q : *"Bagaimana pendapat Anda tentang kebijakan ekspor impor Indonesia?"*
'What do you think about Indonesia's import export policy?'

S : *"Itu agak rumit. Eh, Apakah kamu memiliki teman yang bekerja di Korea?"* (S5)
'That's a bit complicated. Uh, do you have any friends working in Korea?'

Data 4

Q : *"Bagaimana sistem pemilihan umum di negaramu?"*
'How is the general election system in your country?'

S : *"Saya kurang paham, tapi saya tahu mereka punya tradisi unik saat pemilu."* (S1)
'I don't understand, but I know they have a unique tradition during elections.'

In Data 3, topic avoidance occurred when the speaker was asked to provide an opinion on Indonesia's import-export policy, a topic that linguistically demands the use of complex sentence structures and technical vocabulary in the field of economics. The speaker responded with the delaying phrase "Itu agak rumit," which served as an initial signal of linguistic unpreparedness, before eventually shifting the conversation to a simpler and more personal topic, namely, about a friend working in Korea. This phenomenon suggests that lexical and structural differences between the first and target languages hinder the speaker's ability to construct an appropriate argument. This difficulty arose primarily because the speaker lacked appropriate equivalents and mastered the syntactic patterns needed to explain the complex issue.

In Data 4, the speaker was asked about the "election system" in her country, which required a descriptive explanation with procedural details and political terminology. The speaker began her response with the statement "saya kurang paham," indicating limited knowledge or vocabulary related to the topic, before immediately shifting the focus to "mereka punya tradisi unik saat pemilu," which is more narrative and structurally simple. This strategy indicates that the participant avoids language by omitting aspects related to difficult grammar. Then, the participant changes the topic using common vocabulary in BI.

Based on these two data, it can be seen that topic avoidance occurs through two strategies. First, topic avoidance is carried out by using linguistic unpreparedness markers and signaling to the interlocutor that a direct response is not possible. Second, topic avoidance diverts the conversation to other, more general topics that do not require complex grammatical understanding. This strategy is used to maintain smooth communication and avoid obstacles. In this context, topic avoidance may be influenced by lexical gaps and limited mastery of complex structures in BI.

4.2. Message Abandonment

The message abandonment strategy is carried out by the participant when BI production stops in the middle of a sentence. Long pauses and the use of fillers mid-sentence characterize this. This can be seen in the following data.

Data 5

Q : *"Ceritakan perjalanan liburanmu kemarin!"*
'Tell us about your holiday trip yesterday!'

S : *"Kemarin saya pergi ke… eh… apa ya namanya… ya pokoknya ke tempat itu, terus…"* (S3)
'Yesterday I went to… eh… what was it called… well, basically to that place, then…'

Data 6

Q : *"Menurutmu, solusi terbaik untuk mengatasi kemacetan apa?"*
'In your opinion, what is the best solution to overcome traffic jams?'

S : *"Kalau menurut saya… eh… tidak jadi, saya nggak tahu pasti…"* (S6)
'In my opinion… eh… it won't happen, I don't know for sure…'

https://doi.org/10.22521/edupij.2025.19.538 Published online by Universitepark Press

Data 5 shows the participant's message abandonment strategy, which involves stopping speech mid-conversation. The participant was asked about their holiday trip yesterday. They answered by stating their destination, but mid-sentence, they used fillers and paused for a long time. To continue their answer, they redirected their response by using the phrase " apa ya namanya… ya pokoknya ke tempat itu, terus….” The message abandonment strategy is a form of avoidance, often caused by lexical or memory constraints.

From the data, 6 participants were asked questions about solutions to overcome traffic jams. The participant initially responded by saying "kalau menurut saya...", then used the filler "eh...", indicating that the participant was experiencing lexical difficulty in expressing his opinion. The participant avoided this by saying " tidak jadi, saya nggak tahu pasti… " and paused. This indicates a message abandonment strategy, which involves the use of fillers that signal communication difficulties and make statements to stop the answer.

The use of language fillers and long pauses is an indicator of message abandonment. This was also used by other participants, as seen in the following data.

Data 7

Q : *“Menurutmu, bagaiman sistem transportasi di kota besar?”*
‘What do you think about the transportation system in big cities?’

S : *“Ya… di kota besar itu ada banyak… hmm… ah, susah dijelaskan…”* (S2)
‘Yes… in that big city there are many… hmm… ah, it's hard to explain…’

Data 8

Q : *“Bagaimana cara membuat kue tradisional daerahmu?”*
‘How do you make your traditional cake?’

S : *“Pertama-tama, kita butuh… hmm… saya lupa… ya, begitulah…”* (S1)
‘First of all, we need… hmm… I forgot… yeah, that’s it…’

In data 7, the participant uses the filler "hmm... ah..." to indicate that she is having difficulty with BI production as an L3. A long pause follows the use of this filler and indicates a message abandonment strategy employed by the participant. This pattern indicates that the speaker faces difficulties during syntactic planning and the process of organizing ideas into a coherent linguistic form. The use of fillers serves as a marker of hesitation and a mechanism to maintain the flow of conversation, even though the explanation is ultimately terminated. In data 8, the participant uses the fillers "hmm..." and "ya, begitulah... " The filler "hmm..." is used to indicate that the participant is having difficulty producing BI as an L3. Then, the filler "ya, begitulah... " is used to end the BI production. This strategy demonstrates that message termination can function as a form of avoidance mitigation. Participants attempt to reduce the negative impact of message termination by providing a natural-sounding conclusion.

For BIPA students, the message abandonment strategy is implemented to mitigate obstacles in BI production. This strategy involves the use of language fillers, long pauses, and closing phrases.. This pattern suggests that message abandonment isn't always sudden, but can be accompanied by linguistic strategies to reduce the impression of a communication breakdown. For BIPA learners, this strategy is one way to manage language limitations while minimizing the risk of errors, even though the result is incomplete information.

4.3. Meaning Replacement

The meaning replacement strategy is seen when a participant replaces a difficult-to-articulate message with a simpler form or one with a different but still relevant meaning. This allows the participant to continue participating in the interaction, even though the information conveyed is more limited. This can be seen in the following data.

https://doi.org/10.22521/edupij.2025.19.538 Published online by Universitepark Press

Data 9

Q : *"Bagaimana rasa makanan itu?"*
'How does the food taste?'

S : *"Rasanya… eh… bukan seperti… ya, enak saja, manis sedikit."* (S5)
'It tastes… uh… not like… yeah, it's just delicious, a little sweet.'

Data 10

Q : *"Bisa jelaskan proses pembuatan batik?"*
'Can you explain the batik-making process?'

S : *"Ehm… saya mau jelasin semua tahapnya, tapi ya intinya cuma digambar terus diwarnai."* (S4)
'Um… I'd like to explain all the steps, but it's just drawing and coloring.'

Data 9 shows the application of the meaning replacement strategy, which is characterized by replacing specific descriptions with more general and lexically accessible forms. The speaker initially attempted to describe the food's taste in detail, but had difficulty finding or remembering the word gurih 'savory', so she replaced it with the phrase "enak saja, manis sedikit." Before this replacement, the speaker used a language filler, "eh...", to signal a cognitive pause while searching for the right word. The presence of this language filler indicates that the meaning replacement process does not always occur instantaneously, but often begins with an attempt to find a suitable lexical equivalent, followed by a decision to simplify the message.

Data 10 shows a meaning replacement strategy through simplifying the message content, which was originally planned to be more complex. The speaker stated her intention to explain all the stages of batik-making, but after using the language filler "ehm..." to signal a search for ideas and words, she opted for a summary, "just drawn and colored." This language filler serves as a sign of an internal process of restructuring the message structure due to limited vocabulary or cognitive load. The Meaning replacement can occur as a result of a change in strategy when the participant realizes limited L3 competence.

Avoidance strategies involve replacing produced L3 structures with simpler forms to support fluent language production. The use of language fillers is crucial as a pause in thought to find simpler vocabulary. Language fillers are also used as an indication that BIPA students are experiencing difficulties in BI production. In the context of BIPA learning, this phenomenon demonstrates that language fillers are an integral part of language acquisition and emerge when language students encounter obstacles in BI production.

The three forms of language avoidance strategies mentioned above are closely related to limited lexical and syntactic mastery, and affective factors, such as nervousness and fear of making mistakes. Topic avoidance occurs when the speaker realizes that the topic of conversation is beyond their linguistic competence, thus choosing to shift the conversation to a more familiar topic. Message abandonment occurs when the speaker has begun to convey a message but stops due to difficulty finding the appropriate lexical equivalent or constructing the correct sentence structure. Meanwhile, meaning replacement shows an adaptive strategy by changing or simplifying the message, even though the information conveyed is more limited.

Overall, the three strategies reflect that BIPA students actively try to cope with linguistic constraints in their BI production. BIPA students can interact with the accuracy of BI structures. It lets conversation continue without these topics or using new ones while replacing specific meanings, which allows the information to quickly become something else. This paper offers pedagogical implications for teaching communication strategies in the use of language fillers in BIPA learning, so that it will help BIPA students to manage their language limitations strategically, adaptively, and communicatively.

https://doi.org/10.22521/edupij.2025.19.538 Published online by Universitepark Press

5. Discussion

Research results show that BIPA students employ 3 avoidance strategies in BI productions as L3, namely topic avoidance, message abandonment, and meaning replacement. Topic avoidance is a situation where BIPA students discern that their lexical and structural mastery in producing BI (Palmberg, 1983; Elyıldırım, 2017). BIPA students often shift to topics perceived as safer or more familiar, thus reducing the risk of linguistic errors. Message abandonment occurs through long pauses and language fillers in their BI utterances. These reasons are word finding, sentence constructing, and confidence (Palmberg, 1983; Elyıldırım, 2017). Language fillers also gave a hint that the word use of BIPA students in BI production seems difficult. Language Fillers are used when they cannot think of how to produce BI as an L3 (Gandeza, 2023). On the other hand, the meaning replacement deals with converting hard-to-say utterances to easier ones. Even though the information conveyed is more limited, this strategy is used by BIPA students to still be able to produce BI accurately (Hubert, 2011). Language fillers also often appear in this strategy as a processing pause before BIPA students choose a simpler form of speech (Sarira et al., 2023; Gandeza, 2023).

L3 communication adaptation used in avoidance strategies in the written and non-written communication of L3 by BIPA students. BIPA Students use several linguistic devices to remain in fluent conversation. Spontaneous utterances in BI production as L3 reveal the realization of avoidance strategies by using language fillers. This provides us with the evidence that language fillers are essential for the avoidance strategy employed by BIPA learners in BI production as L3.

Factors contributing to the topic avoidance, message abandonment, and meaning replacement strategies used by BIPA students include both linguistic and nonlinguistic factors. Linguistic factors, are small vocabulary, simplistic syntactic structures, and poor knowledge of idiomatic expressions, are elements to bear in mind when referring to BI. These barriers influence the implementation of the set-avoidance risk mitigation mechanism for human error during BI production as an L3 (Laufer, 1985; Llach, 2010; Hubert, 2011).

Self-confidence, communication anxiety, and communicative context pressure are among non-linguistic factors (Gardner, 1991; Mitchell, 2018). Speaking to someone on the phone reminds him of realizing what he says is wrong and increases his concern. So that the affective factors were reported to make a significant contribution to the BI production of BIPA students as well. Naturally, the BIPA student involved prefers to avoid strategies when they feel poor self-confidence and anxiety. The surface features of language fillers evidence such spontaneity as a linguistic unreadiness and an interpersonal strategy to produce BI in L3 (Awang et al., 2022; Sarira et al., 2023; Gandeza, 2023). In addition, learning experience and language exposure also play a part in avoidance strategies. BIPA students who receive significant language exposure are generally more advanced in their BI production and employ fewer avoidance strategies as an L3. This shows that language experience and exposure can have a positive impact on L3 production skills.

Furthermore, the avoidance strategies in BIPA students' L3 production have implications for the development of BIPA learning. They show that there is a significant disparity between BIPA students' linguistic competence and the stated learning objectives (Elyıldırım, 2017). In simple terms, instructors must seek to increase BIPA students' thematic vocabulary and proficiency in complex sentence structures (Chang & Read, 2007; Indrariani & Khusniyah, 2025; Rahmawati et al., 2025) as well as teach them how to produce BIPA—albeit somewhat imperfectly—but in a way that eliminates the barrier between multiple languages (Gatbengkeungteu et al. It enables identifying areas of intervention using language fillers as a starting point. Instructors can analyze the kind and the amount of filler used to track down the problems experienced by BIPA students, for example, poor vocabulary or indecisiveness in using correct grammar. Therefore, language filler not only is considered a

https://doi.org/10.22521/edupij.2025.19.538 Published online by Universitepark Press

communication obstacle but also becomes a diagnostic tool to learn (Erten, 2014; Awang et al, 2022; Sarira et al., 2023).

The teachers could be implementing learning strategies to create real-world communication simulations, such as group discussions, role-playing, or formal debates. It aims to make BIPA students less dependent on avoidance in communication and to increase their self-confidence when communicating. These strategies allow BIPA students to apply BI competencies in an actual setting. This indicates that language avoidance strategies are not simply negative for BIPA students; they are part of the normal communicative adaptation process employed by these learners when producing BI as L3.

These findings contribute to the theoretical discussion of third language acquisition by highlighting avoidance strategies as an essential yet underexplored mechanism in BIPA learners' production of BI as L3. Beyond this, the study provides practical insights for BIPA pedagogy, suggesting that language fillers, often perceived as communication obstacles, can be reinterpreted as diagnostic tools to identify learners' linguistic gaps. Furthermore, by implementing communicative simulations such as group discussions, role-plays, and debates, instructors can reduce learners' reliance on avoidance strategies while fostering greater self-confidence in BI production. Thus, this research not only enriches the understanding of avoidance strategies in multilingual contexts but also offers concrete pedagogical interventions for improving BIPA instruction.

6. Conclusion

The findings of the research reveal that with respect to language limitations as well as non-linguistic constraints, BIPA students use three core communication strategies, namely topic avoidance, message abandonment, and meaning replacement. These three tactics act as compensatory resources that allow learners to sustain interactional continuity. Language fillers have been located as markers of linguistic unpreparedness and conversational rhythm regulation (Fraser, 2005). Linguistic factors such as limited vocabulary, limited mastery of syntactic structures, and limited understanding of idiomatic expressions, along with non-linguistic factors such as self-confidence, speaking anxiety, and the pressure of communication situations, influence the choice of these strategies. Language exposure and learning experience are associated with the frequency of strategy use, with learners with greater language exposure tending to rely more on meaning replacement than topic avoidance.

These findings suggest that the language avoidance strategies used by BIPA learners represent a form of communication adaptation based on linguistic competence and the demands of the communication situation. The language fillers present in these three strategies can serve as indicators of a gap between language production ability and interaction needs, and thus can be used as a tool to identify aspects that contribute to communication barriers. The implementation of communication activities that simulate real situations, such as group discussions, role plays, and structured debates, has the potential to direct learners to optimize meaning replacement, reduce message abandonment, and minimize topic avoidance, so that the avoidance strategies used can take place while maintaining the relevance of information in the interaction. Despite these insights, this study is limited by the scope of its participants and the classroom-based context of data collection. Consequently, the findings should be interpreted with caution in terms of generalizability to broader or more naturalistic communicative settings. Future research with a more diverse sample of learners and data drawn from authentic interactional contexts outside the classroom would be valuable in further validating and expanding these findings.

https://doi.org/10.22521/edupij.2025.19.538 Published online by Universitepark Press

7. Suggestion

Theoretically, these findings confirm communication strategy as a case of linguistic as well as psycholinguistic adaptation. The use of topic avoidance, message abandonment, and meaning replacement demonstrates that linguistic constraints in combination with affective variables such as confidence and nervousness regarding speaking are significant in defining learners' strategic choice. Subsequent research can further include language experience and exposure to further advance second language acquisition theories, particularly in describing the interaction between frequency of target language exposure and the tendency to adopt more productive communication strategies.

In practice, BIPA teaching must be geared toward communicative tasks that simulate actual interaction, such as role plays, group discussions, and structured debates, to enable learners to make the fullest possible use of meaning substitution at the cost of minimum topic avoidance and message abandonment. Development of vocabulary, idioms, and syntactic structures relevant to communicative language must be given high priority, accompanied by affective techniques with a view to promoting confidence and reducing tension. Moreover, the application of fillers can also serve as a diagnostic tool to identify gaps between communicative needs and linguistic ability, and exposure to authentic situations outside class can also more effectively allow learners' adaptive use of communication strategies.

Declarations

Author Contributions. Bambang Yulianto: conceptualization and data analysis. Margana: conceptualization and review-editing. M. Zain: Data analysis and original manuscript preparation. Prima Vidya Asteria: review-editing. Abdul Kholiq: review-editing. Zulfadhli: Data analysis.

Conflicts of Interest. In this research, there is no conflict of interest, either with the author or with any institution.

Ethical Approval. This research has received approval from the LPPM Universitas Negeri Surabaya with the number 622/UN38/HK/2025

Data Availability Statement. This research data can be accounted for and can be accessed in the research report.

References

Alonso, J. G., Banón, J. A., DeLuca, V., Miller, D., Soares, S. M. P., Puig-Mayenco, E., Sophie, S. & Rothman, J. (2020). Event-related potentials at initial exposure in third language acquisition: Implications from an artificial mini-grammar study. *Journal of Neurolinguistics*, *56*. https://doi.org/10.1016/j.jneuroling.2020.100939

Andriyanto, O. D., Panich, P., Susanto, G., Ramansyah, W., Amil, A. J., & Hardika, M. (2025). BIPA Evaluation Design Based on Local Wisdom: Specific Needs of Thai Students. Educational Process: International Journal, 15, e2025105. https://doi.org/10.22521/edupij.2025.15.105

Awang, S., Hassan, W. N. F. W., Abdullah, N., & Zawawi, M. Z. M. (2022). Use of fillers as a communication strategy in oral interactions. *International Journal of Academic Research in Business and Social Sciences*, *12*(7), 1024–1037. http://dx.doi.org/10.6007/IJARBSS/v12-i7/14330

Bardel, C. (2019). Syntactic Transfer in L3 Learning. What Do Models and Results Tell Us About Learning and Teaching a Third Language? In: Gutierrez-Mangado, M., Martínez-Adrián, M., Gallardo-del-Puerto, F. (eds) *Cross-Linguistic Influence: From Empirical Evidence to Classroom Practice*. 101—120. https://doi.org/10.1007/978-3-030-22066-2_6

Bardel, C., & Falk, Y. (2021). L1, L2,s, and L3: Same or different? *Second Language Research*, *37*(3), 459–464. https://doi.org/10.1177/0267658320941033

Cenoz, J. (2001). The Effect of Linguistic Distance, L2 Status, and Age on Cross-linguistic Influence in Third Language Acquisition. In J. Cenoz, B. Hufeisen & U. Jessner (Ed.), *Cross-Linguistic Influence in Third Language Acquisition: Psycholinguistic Perspectives* (pp. 8-20). Bristol, Blue Ridge Summit: Multilingual Matters. https://doi.org/10.21832/9781853595509-002

Cenoz, J., Hufeisen, B. & Jessner, U. (2001). *Cross-Linguistic Influence in Third Language Acquisition: Psycholinguistic Perspectives*. Bristol, Blue Ridge Summit: Multilingual Matters. https://doi.org/10.21832/9781853595509

Cenoz, J. (2012). Third language acquisition. *The encyclopedia of applied linguistics*, 1-5. https://doi.org/10.1002/9781405198431.wbeal1214.pub2

Chang, A. C. S., & Read, J. (2007). Support for foreign language listeners: Its effectiveness and limitations. *RELC journal*, *38*(3), 375–394. https://doi.org/10.1177/0033688207085853

Dagut, M., & Laufer, B. (1985). Avoidance of phrasal verbs – A case for contrastive analysis. *Studies in Second Language Acquisition*, 7(1), 73–79. https://doi.org/10.1017/S0272263100005167

De Angelis, G. (2007). *Third or Additional Language Acquisition*. Bristol, Blue Ridge Summit: Multilingual Matters. https://doi.org/10.21832/9781847690050

Ding, H., & Ding, A.-Q. (2021). A review of foreign studies on third language acquisition. *Social Science, Education, and Human Science*. https://doi.org/10.12783/dtssehs/ehla2021/35680

Elyıldırım, S. (2017). Avoidance strategy in foreign language production. *Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (28), 231-242. https://dergipark.org.tr/en/download/article-file/2697176

Ellis, R. (1994). *The study of second language acquisition*. Oxford University Press. https://doi.org/10.5070/L461005209

Erten, S. (2014). Teaching fillers and students' filler usage: A study conducted at ESOGU preparation school. *International Journal of Teaching and Education*, *2*(3), 67. https://www.iises.net/teaching-fillers-and-students-filler-usage-a-study-condu.html

Faerch, C. and Kasper, G. (1983). Plans and strategies in foreign language communication. In C. Færch and G. Kasper (eds.) *Strategies in Interlanguage Communication*. (pp.20–60). London: Longman. https://archive.org/details/strategiesininte00frch

Falk, Y. & Bardel, C. (2010). The study of the role of background languages in third language acquisition. The state of the art. *International Review of Applied Linguistics in Language Teaching*, 48(2-3), 185–219. https://doi.org/10.1515/iral.2010.009

Gandeza, C. C. (2023). Language fillers used by students in conversation. *Journal of Social Work and Science Education*, *4*(2), 539-555. https://doi.org/10.52690/jswse.v4i2.394

Hammarberg, B. (2001). Roles of L1 and L2 in L3 Production and Acquisition. In J. Cenoz, B. Hufeisen & U. Jessner (Ed.), *Cross-Linguistic Influence in Third Language Acquisition: Psycholinguistic Perspectives* (pp. 21-41). Bristol, Blue Ridge Summit: Multilingual Matters. https://doi.org/10.21832/9781853595509-003

Hammarberg, B. (2014). Problems in Defining the Concepts of L1, L2, and L3. In A. Otwinowska & G. De Angelis (Ed.), *Teaching and Learning in Multilingual Contexts: Sociolinguistic and Educational Perspectives* (pp. 3-18). Bristol, Blue Ridge Summit: Multilingual Matters. https://doi.org/10.21832/9781783091263-003

Hammarberg, B. (2018). L3, the tertiary language. In *Foreign language education in multilingual classrooms* (pp. 127-150). John Benjamins Publishing Company. https://doi.org/10.1075/hsld.7.06ham

Hertiki, H. (2017). Pengajaran dan pembelajaran BIPA di perguruan tinggi Polandia. *Jurnal Pendidikan Bahasa dan Sastra Indonesia*, *6*(2), 1-5. https://doi.org/10.15294/jpbsi.v6i2.20226

Hubert, M. D. (2011). Foreign language production and avoidance in US university Spanish-language education. *International Journal of Applied Linguistics*, *21*(2), 222–243. https://doi.org/10.1111/j.1473-4192.2010.00276.x

Indrariani, E. A., & Khusniyah, A. (2025). Constraints of Developing Country Partnership (KNB) Foreign Learners in BIPA Learning Interaction. *KEMBARA: Jurnal Keilmuan Bahasa, Sastra, dan Pengajarannya*, *11*(1), 199-211. https://doi.org/10.22219/kembara.v11i1.36095

Kholiq, A., Yulianto, B., & Suhartono, S. (2024). Role Of L1 And L2 In The Acquisition Of Bahasa Indonesia As A Third Language. *Issues in Language Studies*, *13*(1), 413–431. https://doi.org/10.33736/ils.5567.2024

Krashen, S. D. (1982). *Principles and practice in second language acquisition*. Pergamon Press. https://www.sdkrashen.com/content/books/principles_and_practice.pdf

Laufer, B., & Eliasson, S. (1993). What causes avoidance in L2 learning: L1-L2 difference, L1-L2 similarity, or L2 complexity? *Studies in second language acquisition*, *15*(1), 35–48. https://doi.org/10.1017/S0272263100011657

Leonet, O., Cenoz, J., & Gorter, D. (2020). Developing morphological awareness across languages: Translanguaging pedagogies in third language acquisition. *Language awareness*, *29*(1), 41–59. https://doi.org/10.1080/09658416.2019.1688338

Llach, M. P. A. (2010). Lexical gap-filling mechanisms in foreign language writing. *System*, *38*(4), 529-538. https://doi.org/10.1016/j.system.2010.09.009

MacIntyre, P. D., & Gardner, R. C. (1991). Methods and results in the study of anxiety and language learning: A review of the literature. *Language Learning*, 41(1), 85–117. https://doi.org/10.1111/j.1467-1770.1991.tb00677.x

Mitchell, A. (2018). Allusive references and other-oriented stance in an affinal avoidance register. *Journal of Linguistic Anthropology*, *28*(1), 4–21. https://doi.org/10.1111/jola.12174

Najjar, N. (2020). Factors influencing lexical transfer in third language acquisition. *Studia Linguistica Universitatis Iagellonicae Cracoviensis*, *137*(4), 259-283. https://www.ceeol.com/search/article-detail?id=1003150

Palmberg, R. (1983). On the Use of Lexical Avoidance Strategies in Foreign-Language Communication. In *Psycholinguistics and Foreign Language Learning*. 146—154. https://files.eric.ed.gov/fulltext/ED276318.pdf

Puig-Mayenco, E., González Alonso, J., & Rothman, J. (2020). A systematic review of transfer studies in third language acquisition. *Second Language Research*, *36*(1), 31–64. https://doi.org/10.1177/0267658318809147

Rahmawati, I. Y., Suyitno, I., & Andajani, K. (2025). Problems of Learners with L1 Background (Non-Latin Mother Tongue) Learning Indonesian as L2. *Educational Process: International Journal*. 16. https://doi.org/10.22521/edupij.2025.16.268

Santos, A., Gorter, D., & Cenoz, J. (2017). Communicative anxiety in the second and third language. *International Journal of Multilingualism*, 14(1), 23–37. https://doi.org/10.1080/14790718.2017.1258980

Sarira, P., Mahmud, M., Affandi, A., & Burhamzah, M. (2023). The existence of fillers in converting the written language to spoken language. *Borneo Journal of English Language Education*, *5*(1). https://doi.org/10.35334/bjele.v5i1.3384

Schachter, J. (1974). An error in error analysis. *Language Learning*, 24(2), 205–214. https://doi.org/10.1111/j.1467-1770.1974.tb00502.x

Shafira, A. W., Saprilia, D. F., Fajriani, B., Almanda, N. I., Pinandhita, P., & Muliastuti, L. (2024). Desa BIPA: Upaya Internasionalisasi Bahasa Indonesia untuk Mewujudkan Indonesia Emas 2045. *Fon: Jurnal Pendidikan Bahasa dan Sastra Indonesia*, *20*(2), 212-224. https://doi.org/10.25134/fon.v20i1.8946

Susanto, G., Pickus, D., Espree-Conaway, D., Suparmi, Rusiandi, A., & Noviya, H. (2024). Indonesian language policy and perspectives on its implementation in promoting Bahasa Indonesia as an international language. *Cogent Arts & Humanities*, *11*(1), 2364511. https://doi.org/10.1080/23311983.2024.2364511

Tarone, E. (1977). Conscious communication strategies in interlanguage: a progress report. In Brown, D., Yono, C., & Crymes, R. (eds.): On *TESOL: Trends in Research and Practice*. Washington, De. TESOL. 194-203. https://www.academia.edu/67222968/Conscious_communication_strategies_in_interlanguage_A_progress_report

Ulya, C., Rohmadi, M., Sudaryanto, M., Chewoh, F., & Baptiste-Burundi, A. J. (2020). *The Trend of BIPA Research in the International Scope: A Bibliometric Analysis*. https://doi.org/10.4108/eai.9-11-2019.2294976

Vázquez, M. (2005). Avoidance as a learning strategy. *Estudios ingleses de la Universidad Complutense*, *13*, 49-66.

About the Contributor(s)

Bambang Yulianto, M.Pd., is a Professor of Language Learning at Surabaya State University, Indonesia. He is the Chair of the East Java Provincial Language Forum. His main research interests include language acquisition, language assessment, and foreign language learning. He has published numerous research articles in reputable international journals and written books related to language learning.
Email: bambangyulianto@unesa.ac.id
ORCID: https://orcid.org/0000-0002-4282-226X

Margana, M.A., is Professor of Applied Linguistics at Universitas Negeri Yogyakarta, Indonesia. His main research interests include applied linguistics, language acquisition, and language learning strategies. He is active in scientific forums in linguistics at the national and international levels. He has published numerous articles on linguistics and second language learning.
Email: margana@uny.ac.id
ORCID: https://orcid.org/0000-0002-7680-641X

M. Zaim, M.Hum., is a Professor of Linguistics in the Department of English at Universitas Negeri Padang. He teaches various courses, such as Introduction to Linguistics, Morphology and Syntax, Semantics and Pragmatics, Evaluation of Language Teaching, Applied Linguistics, Educational

Research on Psycholinguistics, Current Issues in Psycholinguistics, Curriculum Development for EFL, and Development of Language Teaching Methods and Techniques. He has conducted extensive research in the field of linguistics and language teaching. He has also published many articles in the field of linguistics and language learning in international journals.
Email: mzaim@fbs.unp.ac.id
ORCID: https://orcid.org/0000-0002-6152-6650

Prima Vidya Asteria, M.Pd., is an Associate Professor in Language learning in the BIPA context at Universitas Negeri Surabaya. He is the chairman of the Dosen Bahasa Indonesia (ADOBSI) Jawa Timur, Indonesia. Her main research interests include language learning strategies, BIPA learning, multicultural classrooms, and language learning for children with disabilities. She has published many research results in reputable international journals and many books related to innovative learning.
Email: primaasteria@unesa.ac.id
ORCID: https://orcid.org/0000-0001-5288-6198

Abdul Kholiq, M.Pd., is an Assistant Professor in language acquisition at Universitas Negeri Surabaya. He is active in scientific meetings in the fields of language learning and language acquisition. His research focuses on third language acquisition, language learning for non-native speakers, and psycholinguistics. He has published numerous articles in reputable international journals and is actively writing books on linguistics.
Email: abdulkholiq@unesa.ac.id
ORCID: https://orcid.org/0000-0003-4105-9829

Zulfadhli, M.A., is an Associate Professor in Language teaching at Universitas Negeri Padang, Indonesia. He is active in scientific meetings in the field of language learning. His main research interests include language learning, literature, and foreign language learning. He has published numerous research articles in reputable international journals and written books related to language learning.
Email: zulfadhli@fbs.unp.ac.id
ORCID: https://orcid.org/0009-0009-8131-2762