

THE IMPACT OF CODE-SWITCHING ON BILINGUAL TEXT COMPREHENSION AMONG ENGLISH LITERATURE STUDENTS

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Abstrak

Keywords:

Psycholinguistics,
Code switching,
Bilingualism,
Comprehension,
Language

This study aims to determine the effect of code-switching on the reading comprehension of English Literature students, by comparing full English and mixed (code-switching) texts. A total of six students with different levels of English proficiency were given a text titled The Impact of Social Media on Student Productivity, then they took a comprehension test and completed a perception questionnaire and reflective questions. Results showed that comprehension scores on the code-switching text tended to be higher than those on the full English text. However, the scores on the full English text were also relatively good, possibly due to the participants' habit of reading English texts or because they read the text first before the code-switching text. Participants' reflections showed that three respondents felt that the code-switching text helped them understand the content more easily, as the mixed language made it easier to interpret certain words or sentences. In contrast, the other three respondents felt distracted by the language switching in the text, as they had to divide their focus between two different language systems. Some also stated that the reading experience became less fluent or natural. Therefore, it can be concluded that the use of code-switching has the potential to improve reading comprehension, especially for readers who have additional linguistic support needs. However, its effectiveness is not absolute, as it is highly influenced by individual factors such as reading habits, order of text presentation, comfort level with language change, as well as each reader's linguistic preferences.

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INTRODUCTION

Psycholinguistics is a branch of linguistics that studies the relationship between language and human mental processes. Psychology is a discipline that studies the mental, behavioral, and thought processes that occur in individuals. Linguistics is a discipline that studies language. The two disciplines are much different in their studies (Gustina, 2019). Also, Chaer (2002) in the (Megah, 2023) explains that etymologically psycholinguistics



formed from psychology and linguistics. Therefore, the fields can stand on its own. Furthermore, those fields combine linguistics and psychology, which can be mentioned as "psychology of language". Chaer (2002) also adds that psycholinguistics describes the process of psychology followed if people communicate by saying sentences. This explanation is in line with the broader view of psycholinguistics, particularly in relation to how the field examines the mental processes involved in language use. According to Kootstra (2015), psycholinguistics focuses on the cognitive mechanisms and knowledge structures underlying language production, comprehension, and acquisition. Unlike pure linguistics, psycholinguistics focuses more on how language works in the human mind, such as how we construct sentences, understand the meaning of a word, store all information about language in memory, and can understand an utterance directly. Psycholinguistics also studies how children learn their first language, and how adults learn and use a second language.

In this increasingly globalized era, more and more people are using two or more different languages which makes them bilingual. Bilingualism is defined as the ability to know and use two languages, and it often extends to multilingualism, where an individual knows three or more languages (Sisamout, 2024). One clear example of this bilingualism is code switching, which is the switching between two or more languages in a conversation or discourse. According to Muflihah (2016) Code switching is one of the linguistic symptoms that often appear in everyday life. Code-switching often occurs naturally in the middle of a conversation, especially when the speaker changes topics, adjusts to the interlocutor, or wants to emphasize a point. This language switching can occur consciously, for example to clarify meaning, or unconsciously as part of language habits. The reasons behind code-switching can generally be recognized by paying attention to the context, purpose, and flow of the speaker's speech. This things has become a common linguistic phenomenon among bilingual individuals, especially English Literature Students who generally have more than one language ability, code switching will appear more often in oral and written contexts. Although code switching (switching between languages) is often done for various communication purposes such as to be more easily understood or to adapt to the interlocutor, many experts have not agreed whether code switching helps or interferes with the thinking process, especially in terms of understanding written texts.

English Literature students are often required to read academic texts in English. It takes a high level of comprehension to be able to read and understand foreign language texts, especially in an academic context. However, what if they are faced with a text that contains two languages at once, the foreign language and their mother tongue. Does this combination help or hinder their comprehension. In a psycholinguistic context, text comprehension is a complex cognitive process that involves semantic processing, syntax, and working memory. Comprehension is the essential goal of reading and reading instruction (Brassell, 2008). For bilingual readers, this process becomes more challenging when there is a language switch (code-switching) in the text, as the reader's brain has to adjust between two different language systems in order to comprehend it.

The researcher chose this topic because it is quite relevant to the current situation which is increasingly globalized, especially in the environment of English literature students. They often interact in two languages, therefore the phenomenon of code-switching or language switching is very common in the teaching and learning process, but it is not fully known whether it has a positive or negative impact, especially on their

understanding of the text. Departing from this problem, the researcher wants to explore how code-switching affects students' cognitive processes in understanding English reading. Although there have been several studies involving the influence of code-switching in the comprehension of bilingual texts, none have examined it specifically in the environment of English literature students.

To explore the influence of code-switching on bilingual text comprehension among English Literature students, this study seeks to answer the following research questions:

1. How does code-switching affect the reading comprehension of English Literature students compared to monolingual texts?
2. What are students' perceptions of texts with code-switching compared to monolingual texts?

The findings of this study are expected to contribute to the growing body of research on psycholinguistics and bilingualism by providing empirical evidence regarding the role of code-switching in reading comprehension. Furthermore, the study may offer practical implications for language teaching by helping educators understand when and how code-switching can facilitate comprehension among bilingual learners. It is also expected to encourage further research on bilingual language processing and instructional practices in multilingual educational settings.

LITERATURE REVIEW

Psycholinguistics

Psycholinguistics is an interdisciplinary field that combines psychology and linguistics to examine how language is processed, acquired, produced, and understood in the human mind. Rather than focusing only on the structure of language, psycholinguistics investigates the mental mechanisms involved in language use, including perception, comprehension, memory, and language production. According to Kootstra (2015), psycholinguistics seeks to explain the cognitive processes underlying language comprehension and production, particularly in multilingual speakers who frequently manage more than one linguistic system.

Chaer (2002, as cited in Megah, 2023) explains that psycholinguistics emerged from the integration of psychology and linguistics, allowing researchers to understand the psychological processes that occur when people communicate. This perspective suggests that language comprehension is not simply a linguistic activity but also involves cognitive functions such as attention, memory, and semantic processing.

In bilingual contexts, psycholinguistics provides an important framework for understanding how readers process texts containing more than one language. When bilingual individuals encounter code-switching, they activate both language systems simultaneously, requiring additional cognitive control to integrate meaning effectively (Kootstra, 2015). Therefore, psycholinguistics offers an appropriate theoretical foundation for investigating whether code-switching facilitates or hinders reading comprehension.

Bilingualism and Code-Switching

Bilingualism refers to the ability of an individual to understand and use two languages. According to Sisamout and Karen (2024), bilingual individuals are capable of communicating effectively in two linguistic systems, although their proficiency in each language may differ depending on the context and frequency of use. In multilingual societies, bilingualism has become increasingly common due to globalization, international education, and intercultural communication.

One of the most common characteristics of bilingual communication is code-switching, which refers to the alternation between two or more languages within a conversation or discourse. Muflihah (2016) defines code-switching as a natural linguistic phenomenon that occurs when bilingual speakers switch languages intentionally or unconsciously during communication. Such switching may occur to clarify meaning, emphasize particular ideas, adapt to the interlocutor, or express identity. According to Kootstra (2015), code-switching is not merely a social phenomenon but also reflects complex cognitive processes. Bilingual speakers continuously monitor and select between two language systems while maintaining communicative efficiency. Consequently, code-switching provides valuable insights into how bilingual individuals organize and access linguistic knowledge during language processing.

Although code-switching has traditionally been examined in spoken interaction, recent studies have increasingly explored its role in written texts, particularly in educational settings where bilingual learners regularly encounter mixed-language materials.

Reading Comprehension in Bilingual Contexts

Reading comprehension is the process of constructing meaning from written texts through the interaction between linguistic knowledge and cognitive processing. Brassell and Rasinski (2023) argue that comprehension is the ultimate goal of reading because readers must actively integrate textual information with their prior knowledge to understand the intended message.

For bilingual readers, comprehension becomes more demanding because information may be processed through two linguistic systems simultaneously. Readers must recognize vocabulary, analyze grammatical structures, access semantic memory, and integrate contextual information while managing language interference.

Research by Yeganepoor and Seifoori (2016) suggests that code-switching can facilitate comprehension among English as a Foreign Language (EFL) learners because the inclusion of the first language reduces lexical difficulty and cognitive burden. However, the effectiveness of code-switching is influenced by readers' language proficiency, familiarity with bilingual texts, and individual cognitive preferences. Some bilingual readers benefit from linguistic support, whereas others may experience interruptions in reading fluency due to frequent language switching.

These findings indicate that bilingual reading comprehension is influenced by both linguistic and cognitive factors, making it an important area of investigation within psycholinguistics.

Levels of Processing Theory

This study adopts the Levels of Processing (LoP) Theory proposed by Craik and Lockhart (1972) as its theoretical framework. Unlike traditional memory models that emphasize separate memory stores, the Levels of Processing Theory argues that memory

retention depends primarily on the depth at which information is processed.

Craik and Lockhart classify information processing into three levels: shallow processing, phonetic processing, and deep semantic processing. Shallow processing focuses on physical characteristics, such as visual appearance, while phonetic processing involves sound patterns. Deep processing emphasizes semantic meaning and the relationship between new information and existing knowledge, resulting in stronger memory retention.

According to Banerjee (2024), semantic processing occurs when readers encode the meaning of words and relate them to existing concepts in long-term memory. McLeod (2025) further explains that information processed semantically is more likely to be retained because meaningful analysis creates stronger cognitive connections.

In the context of bilingual reading, code-switching may promote deeper semantic processing by allowing readers to access meaning through both languages. When unfamiliar English vocabulary is supported by the reader's first language, semantic integration becomes easier, potentially improving comprehension and memory performance.

RESEARCH METHOD

This research use mixed method, combining both quantitative and qualitative approaches to gain a comprehensive of how code-switching affect bilingual students text comprehension. According to (Johnson, 2007) Mixed methods research is, generally speaking, an approach to knowledge (theory and practice) that attempts to consider multiple viewpoints, perspectives, positions, and standpoints (always including the standpoints of qualitative and quantitative research). According to Nneoma (2023), Qualitative method is used to comprehend how individuals perceive their surroundings. qualitative research generally includes data in form of words rather than numbers (Busetto, 2020). Meanwhile, Quantitative method is an approach for testing objective theories by examining the relationship among variables (Creswell, 2018). The process of collecting this method is and analyzing numerical data to describe, predict, or control variables of interest (Sreekumar, 2023). A mixed method was chosen to gain a comprehensive understanding of the phenomenon under study. Code-switching not only has a linguistic impact, but also affects the reader's cognitive process in understanding bilingual texts. Therefore, quantitative methods were used to statistically measure the extent to which code-switching affects students' comprehension level through tests or questionnaires. Meanwhile, qualitative was applied to dig deeper into the students' experiences, perceptions, and subjective reasons in dealing with texts containing language switching.

The data instrument of this research is use qualitative observation which used to understand the background with different functions between objective, interactive interpretative, and grounded interpretative. Qualitative observation is free to examine concepts and categories in each event and then give meaning to the research subject or observation (Hasanah, 2017).

This research use Triangulation method to increase the credibility and depth of the research findings, this study applied method triangulation, as stated by Patton (2002) who stated that triangulation of sources is checking out the consistency of different data sources within the same method. In this study, triangulation was carried out through; 1) reading comprehension test, which was assessed by giving participants text-based questions after each reading task. 2) perception questionnaire, which records participants' subjective assessments of the clarity, comfort, and relevance of the text content. 3) cross

case analysis, to compare the performance of each participant in understanding the three types of text. The research instruments used in this study consisted of a reading comprehension test, a perception questionnaire, reflective questions, and data recording tables. The reading comprehension test served as the quantitative instrument to measure participants' understanding of two different text formats: a full English text and a code-switching text. Each participant answered five comprehension questions after reading each text, and the scores were recorded in scoring tables to facilitate comparison between the two text conditions.

The perception questionnaire was administered to collect quantitative data regarding participants' opinions on the clarity, difficulty, comfort, and overall preference for each text. The responses were tabulated to identify patterns and calculate the percentage of participants' perceptions toward the two reading materials.

To complement the quantitative findings, reflective questions were employed as the qualitative instrument. These questions allowed participants to explain their reading experiences, the challenges they encountered, and the reasons behind their preferences. The qualitative responses were then organized into data recording tables and analyzed thematically to identify recurring ideas and support the interpretation of the quantitative results.

Since this study adopted a mixed-method approach, the combination of quantitative and qualitative instruments enabled the researchers to obtain a more comprehensive understanding of the impact of code-switching on bilingual text comprehension among English Literature students.

RESULT AND DISCUSSION

How does code switching affect the reading comprehension of English Literature students compared to monolingual texts?

This study involved 6 English Literature students, 2nd semester with different levels of English proficiency. Two of them with basic level, two with intermediate level, and two with upper intermediate level. Each student read 2 texts with the theme “The impact of social media on student productivity” in two language versions: full English and code switching. After reading each text, participants did questions to test their comprehension of the text, then filled out a perception questionnaire.

The comprehension test consisted of five questions per text. Each correct answered awarded one point, resulting 5 point per version. The table below presents the scores of each participant for the two different text formats.

Participant	English Text	Code switching text
M1	5	5
M2	5	5
M3	5	5
M4	5	5
M5	5	5
M6	5	5
Rata-rata	5	5

The results showed that all participants were able to answer all comprehension questions correctly on the code-switching texts. This shows that code-switching significantly improves the reading comprehension of English Literature students compared to monolingual texts. The mixed language format allows students to process information in a deeper semantic way, as

they can rely on their mother tongue (Bahasa Indonesia) to help understand the English content. When compared to the full English text-which resulted in lower scores-the code-switching text appeared to reduce cognitive load, increase comfort, and bridge comprehension, making the text more accessible to students with different levels of language ability. Thus, it can be concluded that code-switching has a positive impact on reading comprehension and can be an effective strategy in the context of bilingual education.

What are students perceptions of texts with code switching compared to monolingual texts?

To support this analysis, the following are the results of responses from respondents.

1. Based on the results of a survey involving six respondents, 66.7% of participants chose Text 1 as the easier text to understand, while 33.3% chose Text 2. This finding shows that the majority of readers still consider Text 1 to be clearer in meaning and structure, although Text 2 is also starting to show a sufficient level of comprehensibility for some respondents. This percentage difference shows that while the dominance of Text 1 remains, Text 2 has the potential to be understood by readers in certain contexts or certain reading styles.
2. Based on the results of a survey involving six respondents, 66.7% of participants chose Text 1 as the easier text to understand, while 33.3% chose Text 2. This finding shows that the majority of readers still consider Text 1 to be clearer in meaning and structure, although Text 2 is also starting to show a sufficient level of comprehensibility for some respondents. This percentage difference shows that while the dominance of Text 1 remains, Text 2 has the potential to be understood by readers in certain contexts or certain reading styles
3. Of the six respondents, 66.7% stated that Text 1 helped them to focus more while reading, while 33.3% chose Text 2. These results show that while the majority still find Text 1 more helpful in terms of maintaining concentration, Text 2 is starting to show effectiveness in supporting reading focus for some readers. This shows that the aspects that influence focus can be subjective, depending on learning styles, individual preferences, or the structure of the text itself.

Of the six respondents who gave responses, their opinions were divided between those who felt helped and those who felt disturbed by the use of mixed language in the second text. A total of three respondents stated that the use of mixed language actually helped them in understanding the content.

of the text. They argued that the mixed language made some foreign terms easier to understand, the presence of mother tongue elements helped in understanding the context of the sentence, and the text felt more familiar because it mixed vocabulary that was familiar to the reader. Meanwhile, three other respondents claimed that the use of two languages in one text interfered with their reading experience. Some of the reasons cited included the difficulty in focusing when reading two languages simultaneously, the need for more effort to understand the overall meaning due to having to switch languages, and the reading experience that felt unnatural and tended to hinder the flow of comprehension.

CONCLUSION

The results of this study show that code-switching texts produced high comprehension scores, but English texts also performed quite well, especially for participants with higher English proficiency. This may be due to the reading order (the English text was read first), or because the participants were already used to reading English texts through academic activities or courses.

Nonetheless, the reflection results showed that participants' perceptions of the code-switching texts were divided. Three participants felt that the presence of Indonesian

helped them to understand the meaning more quickly, while the other three felt annoyed by the language switching which was considered to disrupt the flow of reading. Thus, it can be concluded that code-switching has the potential to improve reading comprehension, especially for readers with intermediate to low English levels. However, its effectiveness largely depends on the order of presentation, reading habits, and individual comfort in interacting with bilingual texts.

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