

Patterns of Code-Switching in English Speaking Practice: A Descriptive Analysis of University Students

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ABSTRACT

Many university students experience difficulties in academic English speaking due to limited vocabulary, grammatical problems, nervousness, and the need to convey ideas clearly. To cope with these challenges, students often switch between English and Bahasa Indonesia during speaking activities. This study aims to examine the frequency of code-switching in academic speaking and to identify the main factors influencing its use among EFL university students. This study employed a quantitative descriptive design involving 32 third-semester students in an English for Public Speaking course at Tadulako University. Data were collected through a 20-item questionnaire covering linguistic, psychological, communicative, and social factors, supported by semi-structured interviews. Descriptive statistics were used to analyze the data. The findings reveal that code-switching occurs very frequently, with 96.88% of students reporting frequent use. Linguistic factors were the most dominant, followed by social and communicative factors, while psychological factors had the lowest influence. Interview data confirmed that students use code-switching to maintain fluency, clarify meaning, and support interaction. Overall, code-switching is a common and strategic practice that helps students manage academic speaking challenges in multilingual EFL classrooms.

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1. INTRODUCTION

Oral communication skills in English remain a central benchmark of communicative competence in higher education, as emphasized by the Council of Europe through the Common European Framework of Reference for Languages (CEFR), which conceptualizes speaking as an integrated ability requiring mastery of lexical, grammatical, phonological, and pragmatic components [1]. Despite its central role, empirical evidence in the Indonesian context consistently shows that university students continue to experience persistent difficulties in English speaking performance. These difficulties include limited vocabulary,

grammatical inaccuracies, pronunciation problems, and psychological barriers such as anxiety and fear of negative evaluation [2], [3]. Such challenges frequently disrupt fluency and coherence in academic communication, particularly during speaking activities that require real-time processing, such as presentations, class discussions, debates, and interactive tasks [3], [4]. Consequently, learners often employ compensatory strategies to maintain interactional continuity and prevent communication breakdowns [5].

One of the most commonly observed compensatory strategies in multilingual EFL contexts is code-switching, which refers to the alternation between two or more language codes within a single communicative event [6]. In recent decades, code-switching has emerged as one of the most prominent linguistic behaviours in multilingual EFL classrooms [7], [8]. Contemporary research no longer conceptualizes code-switching as a linguistic error or a marker of deficient proficiency; rather, it is understood as a strategic communicative resource employed by bilingual and multilingual speakers to manage linguistic limitations, cognitive load, and social interactional demands [9]. In Indonesian higher education settings, students frequently alternate between English and Bahasa Indonesia during academic speaking activities to compensate for lexical gaps, clarify complex ideas, ensure audience comprehension, and adapt language use to peer norms and shared sociocultural identities [10], [11].

Previous studies have also highlighted the pedagogical value of code-switching in EFL learning. Research indicates that the strategic use of learners' first language can function as scaffolding that supports comprehension, reduces speaking anxiety, and sustains learners' confidence during performance-based speaking tasks [4], [12]. Furthermore, code-switching facilitates collaborative learning by enabling peer explanation, meaning negotiation, and cooperative problem solving [9]. Importantly, several studies argue that when employed judiciously, code-switching does not significantly reduce exposure to the target language but instead enhances understanding of academic discourse and task completion [13].

The present study is theoretically grounded in Vygotsky's Sociocultural Theory and Hymes's concept of Communicative Competence. From a sociocultural perspective, language is viewed as a mediating tool that supports cognitive development through social interaction. Within this framework, code-switching functions as verbal scaffolding that enables learners to operate within their Zone of Proximal Development (ZPD), allowing them to express ideas that exceed their independent linguistic ability [14], [15]. In contrast, Hymes's theory of communicative competence extends beyond grammatical accuracy to include sociolinguistic, discourse, and strategic competence. From this viewpoint, code-switching is interpreted as a legitimate strategic resource that speakers employ to maintain interaction, negotiate meaning, and adapt language choices to contextual and social demands [5].

Several previous studies in Indonesian EFL higher education have examined code-switching from different perspectives. Yusuf et al. [9] investigated types of code-switching among university students and highlighted the influence of social background and language exposure. Syaputra, Nisa, and Helmanda [16] reported that students frequently switched

between English and Bahasa Indonesia during classroom interaction to support comprehension and express ideas. Taufiq et al. [17] found that code-switching was commonly used in academic discussions to maintain fluency and reduce communication breakdowns. Other studies also emphasized the pedagogical and psychological roles of code-switching, particularly in helping students manage anxiety and participate more actively in class [3], [4]. Although these studies provide valuable insights, they mainly focus on general classroom interaction, specific functions, or qualitative descriptions. As a result, there is still limited quantitative evidence that systematically measures how often code-switching occurs in academic speaking activities while examining linguistic, psychological, communicative, and social factors together. This gap highlights the need for a more comprehensive, data-driven investigation of university-level academic speaking contexts.

This limitation is particularly evident in multilingual academic environments such as Tadulako University, where students routinely interact using regional languages, Bahasa Indonesia, and English. Although classroom observations suggest that code-switching occurs naturally and frequently in such contexts, systematic quantitative investigations that examine both the frequency of code-switching and its multidimensional motivating factors, linguistic, psychological, communicative, and social, are still scarce. Accordingly, this study offers novelty by providing quantitative evidence on the frequency of code-switching in academic speaking activities at the university level while simultaneously integrating multiple influencing dimensions within a single analytical framework. Unlike previous studies that predominantly emphasize qualitative descriptions or isolated factors, the present research examines code-switching as a multidimensional communicative phenomenon situated in a multilingual higher education context.

To address this problem, the present study adopts a quantitative approach, complemented by qualitative explanations, to systematically examine both the frequency of code-switching and the multidimensional factors that motivate its use during academic speaking activities. Specifically, this study aims to quantify how often students engage in code-switching and to identify the dominant linguistic, psychological, communicative, and social factors motivating this behaviour. By integrating quantitative analysis with qualitative insights from students' explanations, this research is expected to provide a comprehensive and empirically grounded account of code-switching as a communicative, cognitive, and pedagogical resource in EFL higher education. In addition, this study, which draws on empirical evidence on both the frequency and motivating factors of code-switching in academic speaking, is expected to refine theoretical understanding of code-switching as a strategic and pedagogical resource in EFL contexts. Practically, the findings may inform more balanced instructional practices that encourage sustained English use while allowing strategic first-language support to enhance clarity, confidence, and communicative effectiveness in higher education.

2. METHOD

This study employed a quantitative descriptive research design. This method was chosen because it allows researchers to describe linguistic phenomena as they naturally occur in instructional settings without introducing experimental treatments or manipulating

variables. A non-experimental framework was considered appropriate because the primary objective of this study was to document the frequency and underlying factors of students' code-switching behaviour during authentic academic speaking activities rather than to test causal relationships. Quantitative descriptive designs are widely recommended for capturing naturally occurring behavioural patterns in educational contexts, as they enable systematic measurement while preserving real classroom conditions [18]. In addition, we opted for a quantitative approach because it facilitates the transformation of complex communicative behaviours into interpretable numerical data, allowing for objective and transparent analysis of code-switching phenomena [19], [20].

The research procedure began with the development of a structured questionnaire. We opted to use a questionnaire because it enables efficient data collection from multiple respondents and allows for the quantification of behavioural tendencies consistently [21]. The main variable, code-switching in academic speaking practice, was operationalized into observable indicators adapted from established theoretical frameworks [3], [4], [9], [17]. Code-switching was defined as the alternation from English to Bahasa Indonesia during speaking activities such as presentations, discussions, debates, and question-and-answer sessions. The indicators were grouped into four dimensions: linguistic, psychological, communicative, and social factors.

The questionnaire consisted of 20 items measured using a four-point Likert scale. The number of items was determined to be sufficient to represent each indicator across the four dimensions while avoiding respondent fatigue, which could reduce response accuracy and reliability. Multiple items were used for each dimension to ensure adequate content coverage and internal consistency. Prior to data collection, the instrument underwent expert validation to ensure content relevance, followed by a pilot test to evaluate clarity and reliability. Reliability analysis was conducted using Cronbach's alpha, and items that negatively affected internal consistency were revised or removed in accordance with established reliability criteria [22], [23].

The participants consisted of 32 third-semester students enrolled in the English for Public Speaking course at Tadulako University. This group was selected because third-semester students had received sufficient exposure to academic speaking tasks while still demonstrating observable variability in language proficiency and strategic language use. Although the sample size was limited, it was considered sufficient for a descriptive quantitative study focusing on pattern identification rather than statistical generalization. Purposive sampling was opted for because the study required participants who were actively engaged in structured speaking activities relevant to the research focus. Although the sample size was relatively small, it was considered adequate because descriptive quantitative studies emphasize pattern identification rather than population generalization.

Data collection involved two techniques: questionnaire administration and semi-structured interviews. Interviews were included because they enabled triangulation and provided qualitative explanations that complemented the numerical findings. Questionnaire responses were compiled and processed using Microsoft Excel for data cleaning and organization.

Data analysis employed descriptive statistical procedures, including frequency distributions, mean scores, and percentage calculations, to identify patterns in students' code-switching behaviour. Responses regarding the causes of code-switching were categorized into linguistic, psychological, communicative, and social dimensions, and total and percentage scores were computed for each category. Interview data were analysed qualitatively and compared with questionnaire findings to enhance the credibility of the results through methodological triangulation [24]. This analytic approach ensured a comprehensive representation of multilingual language use during academic speaking activities.

3. RESULTS AND DISCUSSION

The findings present a clear overview of how frequently students engage in code-switching and the key factors that shape this behavior.

3.1. Result

A. Instrument Validity and Reliability

The instrument testing indicated that all questionnaire items met the required psychometric standards. The validity test showed that each of the 20 items obtained an item–total correlation coefficient exceeding 0.349, confirming that all items adequately measured their intended constructs. Reliability analysis further demonstrated strong internal consistency, with a Cronbach's Alpha value of 0.87, which falls within the excellent reliability range. These results indicate that the instrument was statistically sound and suitable for measuring the frequency of code-switching and its influencing factors, namely linguistic, psychological, communicative, and social dimensions.

B. Frequency of Code-Switching

Table 1. Frequency of Code-Switching

Component	Result / Value
Very Often	22 students (68.75%)
Often	9 students (28.13%)
Rarely	1 student (3.13%)

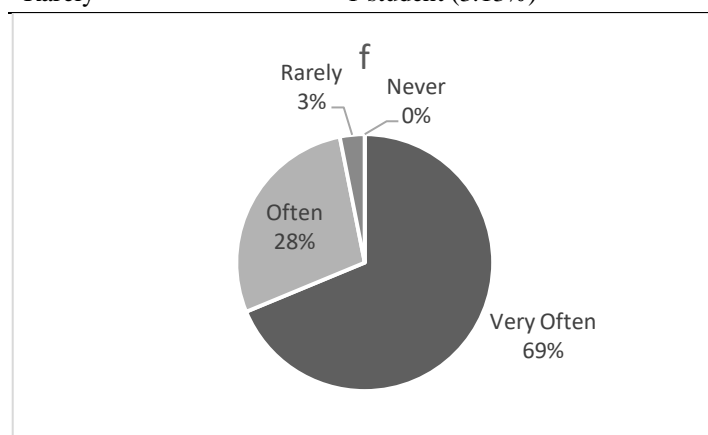


Figure 1. Frequency of Code-Switching

The most striking result of this study is the overwhelmingly high frequency of code-switching during academic speaking activities. As shown in Table 1 and Figure 1, 22

students (68.75%) reported switching languages very often, while 9 students (28.13%) reported switching languages *often*. Only one student (3.13%) indicated *rare* code-switching, and none reported *never* switching. Overall, 96.88% of participants reported frequent use of code-switching during classroom speaking activities.

C. Factors of Code-Switching

Table 2. Factors of Code-Switching

Factors	Aspects	Score
Linguistic Factor	limited vocabulary, grammatical difficulties, forgetting terms, difficulty translating certain ideas/concepts.	(75.63%)
Psychological Factor	nervousness, fear of mistakes, embarrassment, lack of confidence, confusion/blank moments while speaking.	(65.31%)
Communicative Factor	clarifying meaning, emphasizing important points, maintaining fluency, ensuring audience comprehension, and repeating/rephrasing information. helping peers during group discussion, following peers' language use, encouraging group participation, supporting less proficient classmates,	(70%)
Social Factor	switching language in Q&A sessions to align with peers or ensure understanding.	(70.94%)

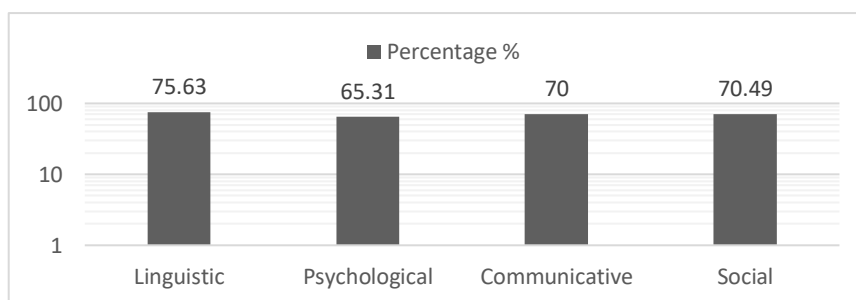


Figure 2. Factors of Code-Switching

Descriptive analysis revealed consistently high scores across all four influencing factors. The linguistic factor emerged as the most influential dimension, with the highest percentage (75.63%), followed by the social factor (70.94%), the communicative factor (70%), and the psychological factor (65.31%), as presented in Table 2.

These quantitative results are reinforced by interview data, which reveal that linguistic difficulties are a trigger of code-switching during academic speaking activities. One participant explained, “Usually, I use Bahasa Indonesia because I do not know certain words in English. When my vocabulary is not enough to explain something in detail, I tend to switch to Indonesian” (R1), (R2) also stated, “I forgot the word for ‘pengelompokan’, so I explained it briefly in Indonesia.” Another student highlighted grammatical challenges, stating, “If my grammar already gets messy, I switch to Bahasa Indonesia so my explanation can still connect” (R1).

Psychological factors also contributed to code-switching behavior, particularly anxiety and fear of making mistakes. One respondent noted, “When I get nervous, it is like I automatically switch to Indonesia. Instead of going blank, it feels safer” (R5). Similarly, another student reported, “If the idea is not familiar, I can even start trembling, and then I switch to Bahasa Indonesia” (R2).

From a communicative perspective, students reported using code-switching to maintain fluency and ensure message clarity. One participant stated, “*If I force myself to speak full English, sometimes I get stuck. But if I mix a bit of Bahasa Indonesia, my speaking becomes more connected*” (R5). Another added, “*I switch when I feel my friends do not really understand what I mean, just to make sure*” (R1).

Social factors further influenced students’ language choices, particularly during group interactions. One student remarked, “*I usually follow the language my friends use. If they mix languages, I mix too*” (R5). Another emphasized its effect on participation, stating, “*When we switch to Bahasa Indonesia, the discussion becomes more lively, and everyone wants to speak*” (R2).

Overall, the integration of questionnaire results and interview data confirms that code-switching among EFL university students is a frequent and purposeful practice shaped by linguistic limitations, psychological pressures, communicative demands, and social interactional needs. This qualitative evidence strengthens the quantitative findings by illustrating how students strategically employ code-switching to manage the cognitive, affective, and interactional demands of academic speaking.

3.2. Discussion

This study aims to identify the frequency of code-switching among EFL students and to determine which linguistic, psychological, communicative, and social factors most strongly influence their code-switching practices. This discussion integrates quantitative findings with interview data to provide a comprehensive interpretation of students’ language behavior in academic speaking contexts.

Statistical analysis reveals that code-switching occurs at a very high frequency during academic speaking activities. Most participants were categorized as *Very Often* and *Often*, with only one student classified as *Rarely* and none selecting *Never*. These results indicate that code-switching constitutes a regular and embedded communicative practice in classroom interaction. This finding is consistent with previous research showing that EFL students frequently engage in code-switching to maintain comprehension during academic interaction [16].

However, the findings differ from those of studies reporting lower code-switching intensity in academic contexts than in digital media [9]. In contrast, the present study demonstrates a higher frequency of code-switching in face-to-face academic speaking activities. This difference may be attributed to the spontaneous and real-time nature of oral academic tasks, which require immediate language production. Under such conditions, students tend to rely on Bahasa Indonesia as a supportive linguistic resource to avoid prolonged pauses and maintain continuity of ideas. This interpretation is supported by interview data, as one participant stated, “*If I suddenly go blank, I switch to Indonesia first so I do not stop for too long*” (R1).

Regarding influencing factors, linguistic factors emerged as the most dominant, as indicated by the highest questionnaire scores. Most respondents reported that limited vocabulary, difficulty selecting appropriate academic terms, and grammatical problems prompted them to switch to another language. This finding supports previous studies identifying linguistic limitations as the primary trigger of code-switching among EFL

learners [11], [17]. Interview data further reinforce this pattern. For example, R2 stated, “*I forgot the word for ‘pengelompokan’, so I explained it briefly in Indonesia,*” while R1 noted, “*If my grammar gets messy, I switch to keep the explanation connected.*” These responses indicate that code-switching serves as a compensatory strategy when students lack sufficient linguistic resources in the target language.

In addition to linguistic factors, social factors emerged as the second most influential dimension shaping students’ code-switching behavior. Questionnaire results indicate that peer influence, group norms, and classroom dynamics strongly affect students’ language choices. These findings are consistent with previous studies emphasizing the role of social interaction in code-switching practices [9], [13]. Interview data further support this pattern, as students reported adjusting their language use to match that of their peers. R1 stated, “*I follow the language that my group uses,*” while R2 explained that discussions become more lively when Bahasa Indonesia is used because more students are willing to participate. In contrast to studies that emphasize identity construction, the present study suggests that social code-switching in academic contexts primarily serves to increase participation and enhance interactional comfort.

Communicative factors also exerted a strong influence, ranking after linguistic and social factors. Questionnaire results showed high levels of agreement with statements indicating that code-switching is used to maintain fluency, clarify meaning, and emphasize important points. This finding aligns with earlier research suggesting that EFL learners often switch languages to ensure listener comprehension [4]. However, unlike studies that frame code-switching primarily as a response to communicative breakdowns, the present study demonstrates that code-switching is also used proactively to sustain fluency. This is reflected in R5’s statement, “*If I force myself to speak full English, sometimes I get stuck, but if I mix a bit of Bahasa Indonesia, my speaking becomes more connected.*” Thus, code-switching functions not only as a repair strategy but also as a fluency-maintenance strategy in academic speech production.

Although earlier studies emphasized psychological anxiety as the dominant trigger of code-switching [3], the present study reveals a different pattern among university students. Questionnaire results show that psychological factors had the lowest percentage score among linguistic, communicative, and social factors. While some respondents associated code-switching with anxiety, as indicated by R5’s statement, “*When I get anxious, it automatically switches to Indonesia. It feels safer,*” such responses occurred less frequently than those related to linguistic and communicative difficulties. This contrast suggests that greater academic exposure and more intensive speaking experience may reduce students’ affective dependence on code-switching, while linguistic challenges persist. This interpretation is supported by findings indicating that higher emotional intelligence is associated with better regulation of foreign language speaking anxiety [25].

Overall, the findings indicate that although code-switching patterns share similarities with previous research, notable differences exist in terms of frequency, dominant factors, and functional orientation. Linguistic challenges remain the primary driving force, supported by communicative and social needs, while psychological factors play a more limited role. Viewed through Vygotsky’s Sociocultural Theory, code-switching functions as cognitive

and social scaffolding that enables students to operate within their Zone of Proximal Development, where tasks that cannot yet be performed independently can be accomplished through mediational support [14]. In this context, Bahasa Indonesia serves as a mediational tool that helps students organize ideas, maintain cognitive flow, and meet the demands of academic speaking when the exclusive use of English is insufficient.

In line with the concept of Hymes' communicative competence, the use of Bahasa Indonesia reflects students' strategic ability to select the most effective linguistic resources to achieve communicative goals [5]. Therefore, code-switching should not be interpreted solely as an indicator of limited English proficiency, but rather as a form of strategic competence that supports fluency, clarity, and interactional success. Consequently, code-switching in this context can be understood as an adaptive and pedagogically meaningful strategy that enhances academic speaking performance in multilingual EFL classrooms. These findings suggest that controlled and purposeful code-switching can be pedagogically beneficial in academic speaking classes. Rather than strictly prohibiting the use of the first language, lecturers may allow limited code-switching as scaffolding while gradually increasing students' exposure to English-only tasks.

4. CONCLUSION

This study examined code-switching in academic speaking activities among EFL university students, focusing on its frequency and the multidimensional motivating factors. The findings indicate that code-switching is an inherent aspect of academic speaking practice. It functions as a strategic resource that enables learners to manage linguistic constraints, sustain fluency, and maintain interactional effectiveness in real-time speaking tasks.

The study contributes to theory by reinforcing sociocultural and communicative competence perspectives, demonstrating that code-switching serves as cognitive and interactional scaffolding in multilingual academic settings. Pedagogically, the findings suggest that rigid English-only policies may overlook the strategic role of learners' first language in supporting clarity, confidence, and participation. Allowing controlled and purposeful code-switching may therefore enhance the effectiveness of academic speaking instruction.

This research is bounded by its descriptive design, limited sample size, and focus on a single institutional context, which restricts broader generalization. Future studies are encouraged to employ experimental or longitudinal designs, involve larger and more diverse populations, and examine the impact of regulated code-switching on the development of speaking proficiency. Beyond academia, this study offers insights for educators, curriculum designers, and policy stakeholders by highlighting code-switching as a practical and adaptive communicative strategy that can support more inclusive and effective English-speaking instruction in multilingual higher education contexts.

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