Navigating multiple languages: The use and effect of code-switching in children from mixed marriage families

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ABSTRACT

The phenomenon of code-switching manifests as the practice of seamlessly oscillating between two or more distinct languages or language variations within the confines of a singular exchange, be it a sentence or a conversation. Children reared in environments rich with linguistic diversity frequently acquire the ability to proficiently maneuver between languages as a mechanism to convey meaning to varied interlocutors or within disparate situational contexts. This study presents a qualitative case study of two children from mixed marriage parents, one of whom is an Indonesian native speaker and the other is an English native speaker. The aim of the study is to explore the use of code-switching and its impact on the language development and proficiency of children from mixed-marriage families. Interviews were conducted with the parents, while observations were made of the children's language use at home. The results suggest that code-switching facilitates the development of children's language skills in different contexts; however, it also hinders their ability to separate and utilize different languages effectively. Furthermore, code-switching enables children to maintain a connection to their cultural heritage and fosters a sense of comfort in multicultural environments.

Keywords: Bilingual children; children code-switching; children's language development

INTRODUCTION

In the realm of linguistics, code-switching manifests itself as the faculty of transitioning between two or more linguistic systems or registers within a singular interaction or circumstance. In the context of acquiring a second language, code-switching performs a vital function as it facilitates learners to express themselves in a more proficient and productive manner, particularly when grappling with the challenge of language hurdles (Hoffman, 2016). According to Grosjean (2012), code-switching enables individuals to acquire a language to leverage their linguistic repertoire to facilitate more competent communication, particularly when a particular language falls short in terms of the aptness of certain vocabulary or expressions to convey a desired connotation. Moreover, Baker and Jones (1998) contend that code-switching can aid learners in negotiating meaning, disentangling misapprehensions, and establishing cordial relations with their conversational partners.

Regarding children, those who grow up in bilingual or multilingual environments often employ code-switching as a communication strategy to express complex ideas or emotions more accurately, especially when one language lacks the appropriate words or expressions to convey certain meanings. Heller (2011) highlights the pervasiveness of a particular phenomenon, which can boost children's skills in two languages. Piller (2002) concurs, positing that greater proficiency in both languages is demonstrated by children partaking in code-switching.
switching compared to those who abstain. Grosjean (2012) further enumerates the myriad purposes code-switching serves for bilingual children, encompassing enhanced communication, identity development, and cultural conservation. As a communicative tactic, code-switching facilitates bilingual speakers’ expression, allowing for more effective and precise communication. This bears particular importance for children who might struggle to find suitable words or phrases in one language but can adeptly switch to another to convey their meaning fully (Grosjean, 2012). Furthermore, code-switching empowers bilingual children to traverse diverse linguistic and cultural spheres, thereby enabling more efficient expression of their thoughts and emotions (Yow et al., 2017). They argue that bilingual children strategically employ code-switching to achieve their communicative goals, such as emphasizing a point, conveying affect, or seeking clarification. They also contend that code-switching serves as evidence of the bilingual child’s adaptability in diverse contexts.

Furthermore, in the classroom environment, Chitiga (2021) found that students permitted to engage in code-switching within the classroom possess a greater capacity to effectively communicate their comprehension of subject material to both their peers and instructors.

While the phenomenon of code-switching has been touted for its capacity to enhance children’s communicative abilities in multilingual contexts, its use is not without consequences. Code-switching may engender confusion, linguistic insecurity, and language dominance, thereby posing a formidable challenge to novice language learners who are seeking to navigate divergent linguistic systems and attain proficiency in a single language (Ferguson, 2018). Similarly, Grosjean (2012) argues that code-switching, if abused or utilized in an unbecoming manner, can elicit unfavorable outcomes on language development. Should children become excessively dependent on code-switching, it may impede the cultivation of robust language skills in either language, and possibly engender confusion and decreased proficiency in both. Furthermore, code-switching can be stigmatized within certain cultural milieus, resulting in feelings of embarrassment or shame among children who engage in such practices (Simpson, 2013). Hence, if code-switching is employed in contexts that contravene accepted social or cultural norms, children may be susceptible to disparaging attitudes or discriminatory behavior from those who are unable to grasp or approve of their employment of multiple languages (Grosjean, 2012). It is thus incumbent upon parents and educators to take stock of the potential pitfalls of code switching and provide targeted support to children in their quest to achieve both linguistic diversity and fluency.

In Indonesian context, the intricate and diversified linguistic terrain of the Republic of Indonesia has been the subject of extensive study and research in recent times. The Ministry of Education and Culture’s report (2020) highlighted that Indonesia boasts an impressive 746 languages and dialects, comprising 652 regional tongues and 94 foreign languages, besides its official language, Indonesian. This veritable treasure trove of languages has elevated Indonesia to the esteemed position of the second most linguistically diverse nation globally (Zein, 2019). Education experts have argued that the promotion of bilingualism in Indonesia’s education system could foster the accessibility of education. The recommendation by Sundaryani (2015) posits that simultaneous instruction in Indonesian and local languages during early education could greatly enhance the pedagogical experience. Such an approach not only strengthens linguistic proficiency but also engenders cultural sensitivity and understanding. Thus, the incorporation of multilingual education into the Indonesian curriculum stands as a promising and productive endeavour for the country’s future educational landscape.

In this light, code-switching is a commonplace phenomenon in Indonesia, particularly among children. The youth of this country are exposed to code-switching due to cultural diversity and the widespread use of various languages in society. As such, code-switching reflects the social and cultural realities of bilingualism in Indonesia, and it is often driven by pragmatic factors, such as the need to establish solidarity with peers. However, it is important to note that code-switching can have both positive and negative effects on language development, as Astuti (2020) has observed. Moreover, a recent study conducted by Sihombing and Rani (2022) on an American-Indonesian mixed marriage couple residing in the United States has revealed that code-switching was utilized by the family, including their children, to overcome communication barriers and linguistic challenges inherent in intercultural families. Yet another investigation conducted by Siswanto et al. (2022) discerns that children exhibit a proclivity to engage in code-switching as a strategic measure to cultivate a sense of familiarity and closeness with their companions who are conversant with the language. Furthermore, Hidayaturrohman (2019) believes that the phenomenon of code-switching may transpire because of a speaker’s endeavour to harmonize their communication with their conversational partner’s linguistic competencies, as well as being an inherent aspect of their habitual linguistic practices.

**Grosjean’s Framework on Code Switching**

It is widely acknowledged that numerous experts on bilingualism have discussed the use and impact of code-switching on children. However, this study
specifically concentrates on the theory presented by Grosjean (2012), which highlights the four primary uses and impacts of code-switching on children's language development: code-switching for communicative function, linguistic development, cultural identity, and cognitive flexibility. The decision to adopt Grosjean's paradigm for code-switching in this research is dictated by a number of profound elements. Baker and Wright's (2021) assertion of the necessity for an encompassing perspective in code-switching inquiries underscores a condition satisfyingly met by Grosjean's theoretical structure with its meticulous examination of communicative purpose, linguistic evolution, cultural identity, and cognitive adaptability. With its empirical grounding, this theory fortifies the analysis, thereby permitting constructive juxtapositions with relevant research (Bullock & Toribio, 2009). A salient attribute of Grosjean's model, corroborated by Canagarajah (2013), lies in its affirmative disposition towards code-switching, considering it an instrumental resource for cognitive, communicative, and cultural augmentation—a perspective that harmonizes with our investigative focus on offspring of mixed Indonesian and native English marriage. Lastly, the inherent versatility of Grosjean's theory guarantees its pertinence across diverse scenarios and its capacity to yield subtly differentiated insights (Matras, 2009), thus establishing it as an optimal selection for this investigation.

Code-switching represents a communicative function employed by multilingual speakers to enhance the efficiency of their intended message delivery. Grosjean (2012) highlights that individuals are prone to alternate between languages or dialects in response to situational demands, such as conversing with interlocutors who employ a distinct linguistic code, or conveying emotions that are more suitably expressed in each language. The ability to adeptly engage in code-switching can engender effective communication and surmount communication obstacles, thereby signifying an indispensable device for communication.

Concerning linguistic development, code-switching has been demonstrated to foster language acquisition and augment bilingual proficiency. As per Grosjean's (2012) account, code-switching fosters language acquisition by affording bilingual speakers manifold opportunities to employ multiple languages across diverse social contexts. Such opportunities confer the capacity to develop refined linguistic skills and attain superior levels of language proficiency.

Cultural identity represents a significant facet of code-switching. For numerous bilingual speakers, the languages they employ are intimately linked with their cultural identities. As explained by Grosjean (2012), code-switching presents an avenue for individuals to assert their cultural identity by assimilating exclusive lexical items, phrases, or idioms that pertain to a particular language or culture. This ability enables individuals to uphold a profound affiliation with their cultural heritage and background, even as they navigate through disparate languages and cultures.

Furthermore, code-switching has been associated with cognitive flexibility, denoting the faculty to transition between varied modes of thinking and problem-solving. According to Grosjean (2012), code-switching necessitates an acute sensitivity to linguistic and social surroundings, culminating in the augmentation of cognitive flexibility and problem-solving proficiencies. Moreover, the cognitive mechanisms engendered by code-switching, such as selecting the pertinent language for a given context, can potentiate neural networks and upgrade overall cognitive function.

Given the considerable interest in the subject of code-switching, numerous studies have been conducted on the topic. This study aims to fill a significant research gap by focusing on bilingual children from mixed Indonesian and native English marriages, a demographic that has been largely overlooked in the exploration of code-switching impacts. This investigation represents a novel extension of Grosjean’s 2012 framework of code-switching to a context not previously explored, thereby expanding our understanding of the phenomenon and testing the framework's applicability in new settings. Adding to its novelty is the dual-method approach of combining parent interviews with direct observations of children's language use at home, which offers a more detailed and nuanced perspective on code-switching. Furthermore, by considering not only the beneficial effects of code-switching but also its potential to hinder the clear separation and utilization of different languages, this study provides a balanced and comprehensive exploration of code-switching's role in the language development of children from mixed marriages.

**METHOD**

This research adopted a qualitative methodology by means of an exploratory case study, with the purpose of scrutinizing an enigmatic or neglected research inquiry (Cohen et al., 2017). Moreover, such an investigative method facilitates the comprehension of the said phenomenon through deep engagement within an authentic setting, thereby discerning crucial variables for further elucidation (Cresswell, 2018). After collecting consent forms filled out by the participants, including the parental consent form, an investigation was carried out through a semi-structured interview with both parents, totaling four adults of the two
mixed marriage children. This approach was deliberately selected, as it provides me, as the researcher, the unique opportunity to delve into the informants’ perspectives, experiences, meanings, and emotions pertaining to the subject of inquiry (Kvale, 1996). Furthermore, the flexible nature of the semi-structured interview allows for an in-depth exploration of specific topics or issues, and the possibility of pursuing novel lines of inquiry as they surface during the interview process (Galletta, 2013). Moreover, this methodology permits the acquisition of intricate and unforeseen data that can generate novel insights and deepen our comprehension of the topic at hand (Galletta, 2013). The formulation of the interview questions derived from the conceptual framework developed by Grosjean (2012) on the intricate phenomenon of code-switching in children. Thus, six primary interview questions were developed and administered to the parents of both children, with each interview lasting approximately 30 minutes per person.

To triangulate the data gathered from the interviews, an observation was conducted on two mixed-marriage children, Mawar (pseudonym) aged 7, and Budi (pseudonym) aged 8 after the interview data was collected from the parents. According to Miles and Huberman (1994), observation can be an important source of data to complement interviews, documents, and other research methods. By combining multiple sources of data, I can develop a more complete and accurate understanding of the phenomenon under investigation, enhancing the validity and reliability of their findings. This observation took place in their house, where they were interacting with their parents and playing with friends by using CCTV camera with audio built-in installed in their homes. The observation only took place in the afternoon for a week period. Given that the households in the study had pre-existing CCTV systems in place, I sought permission from the parents to utilize their systems for observational purposes. These observations were conducted for a duration of three hours each afternoon, specifically from 3 pm to 6 pm. During this interval, the CCTV cameras were actively recording, with the management of the recording equipment falling under the purview of the homeowners (the parents). The parents were responsible for transferring the data recorded within the specified timeframe. In accordance with established ethical guidelines and protocols, all data collection endeavors were carried out post-receipt of informed consent from the parents. The parents were made aware of their right to retract their participation from the study at any point. Furthermore, the camera’s positioning ensured the exclusion of any private or sensitive regions within the household. I remained vigilant to ensure the children's experience was not negatively affected due to the presence of the recording device. An additional layer of anonymity was implemented by referring to the children under pseudonyms throughout the study. In terms of data storage, the recorded footage was securely held on a server with password protection, access to which was limited strictly to the research team. As per standard research conventions, the data will be preserved for a duration of five years post-study completion, post which it will be securely eradicated. The purpose of this observation was to gather rich, detailed, and first-hand information about the phenomenon under investigation, as it can offer insights into how people behave and interact in real-world settings, and capture crucial nuances and details that other research methods may overlook (Yin, 2018). By observing people’s language, behavior, and interactions, researchers can develop a deeper understanding of the values, norms, and practices that shape social life in a specific context.

The deliberate and purposeful selection of participants in this study was executed purposively to delve deeply into the phenomenon under investigation by selecting cases or participants with specific characteristics that are germane to the research question (Cohen et al., 2017). Moreover, as Creswell (2018) underscores, the selection of cases or participants is often predicated on particular criteria, including their expertise, experience, or distinctive perspectives on the phenomenon under scrutiny. In this study, the selected participants were chosen based on a set of stringent criteria designed to fit the research question precisely. Specifically, the parents of the participants were required to consist of one Indonesian native speaker originating from Bali living in one of the villages in Badung, Bali, and one English native speaker, while their children were expected to be in the beginning stages of elementary school, as it was believed that they had already acquired the communicative skills necessary to engage with their family and peers.

As Cohen et al. (2017) Yin (2018), and Creswell (2014) elucidate, the task of scrutinizing data from interviews and observations in case study research necessitates an exhaustive and methodical approach. As such, the present study embarked on a data analysis procedure commencing with the transcription of the interview and observation data into written format. Upon transcription, the data was subjected to a rigorous coding process involving the identification (Creswell, 2014) and labeling of themes, concepts, and patterns using thematic analysis (Braun & Clarke, 2006). Subsequently, the
coded data was comprehensively categorized into broader themes, in alignment with Yin's (2018) assertion that data organization and pattern recognition are crucial components of the analytical process. Once the categorization was complete, data interpretation became pivotal, involving a comprehensive analysis of connections and correlations between themes and categories. Ultimately, synthesizing the data by drawing insightful conclusions and recommendations from the interpretation was a mandatory final step (Cohen et al., 2017).

**FINDINGS AND DISCUSSION**

The section presents the use and effects of children's code-switching behaviours as evidenced in both observational and interview data pertaining to selected participants. To accomplish this task, the analysis employed Grosjean's (2012) theoretical framework (communicative patterns, linguistic development, cultural identity, and cognitive flexibility), which offers an invaluable perspective on the complex and multifaceted phenomenon of code-switching.

**Communicative function**

According to Grosjean (2012), the use and effects of code-switching for communicative function pertain to the potential for children to employ this linguistic strategy as a mechanism for effectively articulating their cognitions and sentiments to divergent interlocutors, including parents, siblings, or friends with contrasting linguistic or dialectical proficiencies. By means of code-switching, children are bestowed with a heightened degree of accuracy and eloquence in their linguistic output. Additionally, Romaine (2000) suggests that code-switching in children can be a means of achieving communicative goals, such as maintaining conversational flow, negotiating power dynamics, and conveying different levels of formality or intimacy. Subsequent to conducting interviews with the parents of both Mawar and Budi, it has come to my attention that their offspring frequently engage in the practice of code-switching whilst engaged in negotiations with their parents, seeking permission, providing recommendations, or expressing their affection and emotion.

*Excerpt 1 (Interview)*

"Budi usually switches to English when he speaks to me, especially when he wants something like food, chocolate, or toys at the minimarket, after his attempt to ask his mom has failed. He went from, Mami boleh ya satu aja (Mom, can I have one at least?), to Dad please just one, okay? While looking at me and giving me his puppy eyes” (Budi’s father).

*Excerpt 2 (Interview)*

“Budi Bahasa nya masih campur campur, kadang pake Inggris kadang Indonesia, jarang dia pake Bahasa Bali karena saya juga seringnya ngobrol sama dia pake Bahasa Indonesia soalnya Daddynya juga sambil belajar Bahasa. Tapi kalo mau minta sesuatu dia kadang ngomong sama Daddynya, Daddy Aku mau nonton kartun ini, Daddynya ngerit tapi kadang dibilang sama Daddynya ga boleh. Terus dia bilang, please Daddy I really wanna watch the cartoon, please, sampai dibolehin Daddynya”. (Budi’s mother).

Translation:

“Budi mixed his languages, as he alternates between English and Indonesian, with Balinese being a seldomly employed language. This is because I usually communicate with him in Indonesian, as his father is currently learning Indonesian. However, when Budi desires something, he occasionally converses with his father by requesting, “Daddy, Daddy Aku mau nonton kartun ini.” Although his father comprehends his request, he may occasionally refuse it. Nevertheless, Budi persists by pleading, “Please Daddy, I really want to watch the cartoon,” until his father eventually grants his wish.” (Budi’s mother).

*Excerpt 3 (Interview)*

“On one occasion, I was hospitalized, and during my stay, Budi paid me a visit. At the time, one of my American colleagues had also come to see me. As my colleague spoke Bahasa Indonesia, Budi employed this language to converse with him. However, when my colleague misunderstood him and requested clarification, Budi switched to English to ensure clear communication.” (Budi’s father).

*Excerpt 4 (Interview)*

“Mawar generally speaks better English than me, and she usually speaks English at home. However, I recall one time when I cooked her rendang and it turned out to be too spicy for her. Despite struggling to eat it, she managed to say, 'Ibu, pedas mampus ini' (Mom, this is extremely spicy).” (Mawar’s mother).

*Excerpt 5 (Interview)*

“Depending on who she is speaking to, Mawar adapts her language when making requests. She often uses Indonesian due to her strong bond with her mother, but will also switch to English when necessary.” (Mawar’s Father).

*Excerpt 6 (Observation)*

The observation took place the living room between Budi and his father before dinner time.

Budi : Dad, boleh nonton kartun ini dulu sebelum dinner? (Dad, can we watch this cartoon first before we have dinner?)

Father: nanti setelah makan. (Not now, later after dinner.)

Budi : Please, just this one episode.

Father: Alright, but only one episode, and then we’ll have dinner, okay?

Budi : Oke, thank you, Dad! Love you! quick kok, Cuma (only) thirty minutes.
Excerpt 7 (Observation)
The observation took place the living room between Mawar and her friends at her house during playtime. In this excerpt Mawar used English, Indonesian and Balinese.

Mawar: let's play hide and seek, yuk! (Friends, let's play hide and seek, come on!)
Friend 1: Main apa itu? (What game is that?)
Mawar: Hide and seek... sembunyi-sembunyian loh. (it is hide and seek)
Friend 2: Sing jani, kita main! Aku mau jaga pertama. (Okay, I understand now. Let's play now but I want to be the seeker first.)
Mawar :Hmm, unfair. how about kita main rock-paper-scissors dulu, kita suit dulu dong! (Unfair. How about we do rock-paper-scissors first)
Friend 1: Iya ayo! (let’s do it!)
Mawar: Good luck ya, eh ngelah berhasil, betul? (Good luck, eh it’s good luck right?)

As demonstrated in excerpts 1, 2, 3, and 6, both interviews and observation reveal that when seeking permission or engaging in negotiation, Budi exhibits a propensity to switch to English, employing the terms "please" or "boleh" in Bahasa Indonesia with considerable frequency. Grosjean (2012) contends that such practices are commonplace among children engaging in code-switching, as they form an integral component of the communicative approach to achieving comprehension within a conversation. Corroborating this notion, Heredia and Altarriba (2014) elucidate that children often resort to code-switching to negotiate meaning and uphold efficacious communication across diverse social contexts. Moreover, Genesee et al. (1996) discovered that children strategically employ code-switching as a communicative function to negotiate and facilitate understanding, adjusting their linguistic choices in accordance with the proficiency of their interlocutors. By selecting the language in which their conversation partner demonstrates greater competence or comfort, children can communicate more effectively and preserve their social relationships.

Excerpt 7 further illustrates how Mawar attempted to negotiate with her friends to play hide and seek with her friends, opting to code-switch to Bahasa Indonesia. As evidenced by the excerpt, Mawar engaged in extensive code-switching in order to retain control of the conversation. Antoniou et al. (2016) assert that children who frequently code-switch exhibit superior executive control, which in turn facilitates the negotiation of meaning and effective communication across a variety of social contexts. This excerpt additionally reveals how Mawar proffered suggestions, proposing that her friends participate in a round of rock-paper-scissors before commencing the game, and transitioning to Bahasa Indonesia in response to her friends' lack of comprehension regarding the concept of rock-paper-scissors. Mawar's adaptation of her linguistic choices based on her friends' language proficiency aligns with the findings of De Houwer and Bornstein (2016), emphasizing the role of code-switching as a communicative function in the negotiation of meaning and the preservation of effective communication.

Grosjean (2012) posits that code-switching, as exhibited by children, fulfills a communicative function, thus indicating that they engage in this linguistic maneuver to convey emotions or sentiments. This phenomenon is exemplified by Excerpts 4 and 6, wherein Budi's transition to English in expressing "love you" to his father, following the grant of permission to view his favoured cartoon, serves as a display of endearment. Concurrently, Mawar articulates her disquietude to her mother, as she encounters unease whilst partaking in spicy cuisine. This result aligns with Zentella's (1997) exploration of bilingual Puerto Rican children in New York, who employ code-switching to express emotions and feelings, utilizing varied linguistic resources to forge a sense of identity, belonging, and emotional expression. Dewaele (2016) further expounds upon the notion that bilingual children might use code-switching to communicate their emotions more effectively, given that each language potentially harbors unique emotional nuances or specific cultural associations. Moreover, Williams et al. (2019) contend that bilingual speakers may engage in code-switching to modulate emotional intensity and foster enhanced understanding (Sekerina et al., 2019). Consequently, in these instances, both Mawar and Budi strategically code-switch to the language they perceive as more comprehensible to their interlocutors, thereby revealing their extant emotions during the conversation.

In preserving the continuity of conversation, Mawar, as evidenced in Excerpt 7, alternates between Balinese and Indonesian languages to sustain the conversational flow and foster efficacious communication with her two Balinese compatriots. Gafranga (2000) posits that children deploy code-switching as a mechanism to uphold the seamless progression of discourse, permitting the oscillation between languages in accordance with their interlocutors’ requirements and predilections. In essence, Mawar facilitates unencumbered dialogue with her friends by transitioning between languages, thereby bridging gaps in comprehension, catering to the interlocutors' needs, and navigating the linguistic obstacles they encounter (Fitts, 2006; Gafranga, 2000; Lanza, 1992; Pupier, 1992; Toribio, 2001).

Linguistic development
One of the applications of code-switching in children, as delineated by Grosjean's (2012) framework, lies in its potential to confer benefits
upon their linguistic development. It is posited that code-switching facilitates differentiation between languages for children who engage in this practice (Grosjean, 2012). As they oscillate between languages within a discourse, their aptitude for discerning the appropriate language for a specific context is honed (Grosjean, 2012; Romaine, 2000), thereby augmenting their overall linguistic competence. Grosjean (2012) further contends that code-switching permits children to access and cultivate vocabulary from both languages, thereby fostering lexical expansion. By drawing upon the resources of each language, children can express themselves with heightened accuracy and efficacy (Chitiga, 2021), thereby enhancing their communicative capabilities (Grosjean, 2012). Ultimately, engagement in code-switching empowers children to practice and refine the grammar of both languages (Grosjean, 2012). Through the alternation between languages, they gain familiarity with the distinct grammatical structures and rules characteristic of each language, culminating in heightened proficiency (Grosjean, 2012; Romaine, 2000). This section aims to ascertain the applicability of this theoretical framework to the children featured in the present research.

Excerpt 8 (Interview)
“Certainly. My son has been exposed to both English and Indonesian languages from a very young age, as I’m a native English speaker and my wife is Indonesian. However, we’ve noticed that he’s been struggling a bit with English grammar.
“On common mistake he makes is with subject-verb agreement. For instance, he might say “The dogs is playing” instead of “The dogs are playing.” Another issue is with irregular past tense verbs. He often says things like “I goed to school” instead of “I went to school.”
“It’s possible that the influence of the Indonesian language is making it more challenging for him to grasp certain English grammar rules, especially since the grammatical structures of the two languages can be quite different.” (Budi’s father)

Excerpt 9 (Interview)
“She borrows words from one language and tries to use them in the other language without adjusting the grammar. She might say something like “I mau main game” instead of “I want to play a game” or “Saya ingin bermain game.” She’s mixing English and Indonesian in the same sentence, but the grammar doesn’t quite work.” (Mawar’s father)

Excerpt 10 (Interview)
“Mawar pernah cerita ke saya, adah Ibu, si Ani, ngomongin temenanya yang agak nakal dan suka ribut di kelas. She is annoying. Tapi pas saya tanya, annoyance bahasa Indonesia nya apa dia bingung terus bilang, she irrigates me Bu”
Translation
“Mawar once told me, “Oh, Mom, Ani, (she was talking about her friend who’s quite mischievous and often causes a commotion in class). She is annoying. But when I asked her what ‘annoying’ means in Indonesian, she got confused and then said, She irritates me, Mom.” (Mawar’s mother).

Excerpt 11 (Observation)
This conversation is between Budi and his friend when they were doing homework together
Budi: Tadi aku tanya mami, bu Yanti (their teacher) kirim homework nya di whatsapp mami
Teman: Gambar aja kan FNYa?
Budi: Iya, tapi painting atau gambar pensil?
Teman: mewarnai saja loh (just colouring)
Budi: ohh gitu, I have many crayon, I get it now.

Excerpt 12 (Observation)
This observation took place at Mawar’s house, the dialogue is between Mawar and her mother
Mawar’s mother: oh what’s that sound outside?
Mawar: oh people cutting the trees. Pake massive chainsaw, Bu! (They use massive chainsaw)
Mawar’s mother: sebesar apa gergajinya? (How big is the saw?)
Mawar: not just a saw, it’s a massive chainsaw, Bu! This big! (She tried to use her two hands to show her mother the size of the chainsaw)

As evidenced by excerpts 8,9, and 11 both Budi and Mawar encountered difficulties with the grammatical structures of the languages they were using, challenging Grosjean’s (2012) framework, which posits that code-switching refines the grammatical structures of both languages. Genesee et al. (1995) suggest that children exposed to multiple languages at an early age may experience a temporary period of confusion, during which they make grammatical errors or mix elements from both languages. Lanza (2004) further notes that children who code-switch may grapple with the grammatical structure of each language, particularly when employing complex or infrequent grammatical forms, leading to the creation of ‘hybrid’ structures that do not adhere to the grammatical rules of either language. Paradis et al. (2011) emphasize that bilingual children might face difficulties in their grammatical development when exposure to each language is imbalanced, as exemplified by Budi's primary use of Bahasa Indonesia and Mawar's predominant use of English, which could be influenced by their respective schools (Budi studied at public school while Mawar studied at international school). Consequently, children's dominant language plays a significant role in shaping their understanding of grammatical structures, and code-switching has a more substantial impact on children who have not yet achieved balanced proficiency in both languages (Argyri & Sorace, 2007). Moreover, Unsworth (2016) contends that code-switching has a more limited impact on children's grammatical development when they are exposed to balanced language input.

Moreover, as illustrated in excerpts 10 and 12, Mawar demonstrates her lexical expansion by adeptly code-switching to the language she is more
familiar with, thereby expressing herself more effectively. These excerpts indicate that code-switching enables Mawar to choose more precise and efficacious English vocabulary, enriching the conversation (Grosjean, 2011). Numerous studies support this perspective. For example, Bialystok (2009) discovered that bilingual children who engage in code-switching exhibit heightened metalinguistic awareness, facilitating access and utilization of vocabulary from both languages. This heightened awareness empowers them to select the most appropriate words and expressions, resulting in enhanced communication skills. Additionally, Yow and Li (2015) found that children who participate in code-switching possess larger vocabularies in both languages, fostering increased lexical knowledge that allows bilingual children to communicate more effectively in diverse contexts. Furthermore, code-switching practices within the home environment, as exemplified by Mawar, may contribute to promoting vocabulary development in bilingual children (Hoff et al., 2018).

Cultural identity

Code-switching in children can play a significant role in shaping their cultural identity, as it allows them to navigate between different linguistic and cultural contexts. Grosjean (1982) emphasizes the importance of code-switching in bilingual individuals, as it enables them to express their dual cultural identity by switching between languages depending on the context. Zentella (1997), Tannenbaum and Berkovich (2005) add that children used code-switching strategically to signal their affiliation with different cultures they have as a means to express their dual or multiple cultural affiliations and navigate their complex social environments. Therefore, the excerpts below will demonstrate that code-switching in children can be a crucial factor in the development and expression of cultural identity, as it allows them to navigate the complex linguistic and cultural landscapes they inhabit.

Excerpt 13 (Interview)
“Sure. For instance, when he’s talking to his Indonesian friends, he mainly speaks Indonesian but often incorporates English words or expressions that are culturally significant or widely understood, like “cool” or “awesome.” This shows his connection to the English-speaking culture, even while engaging with his Indonesian peers. When he’s speaking with our English-speaking family members, he usually speaks English, but he’ll sometimes switch to Indonesian for certain words or phrases that don’t have a direct translation or carry a unique cultural meaning. For example, he might use the Indonesian word “gotong-royong,” which refers to a community working together for a common goal, because there isn’t an exact English equivalent.” (Budi’s mother)

Excerpt 14 (Interview)
“Oh she loves using the word “kepo” to me, she loves that! You know, it’s hard to find an English counterpart for that. And children these days, especially in Indonesia, are exposed to that Indonesian slang culture. But, when she chats with her Indonesian buddies, she mostly uses Indonesian, but she’s also fond of throwing in some cool English lingo that has cultural significance or is widely recognized, like "selfie" or "chill." (Mawar’s father)

The excerpts above demonstrate how children engage with diverse cultural influences in distinct ways. For instance, in excerpts 13 and 14, Mawar and Budi employ code-switching with specific English and Indonesian words, embracing their roots depending on their interlocutors. As numerous studies have established, code-switching plays an integral role in bilingual children’s lives, serving as a medium to showcase their cultural identities (Jørgensen, 2003; Creese & Blackledge, 2010). Garcia (2019) underscores the significance of code-switching in enabling children to express and preserve their cultural identities while simultaneously fostering their bilingual skills. Remarkably, Mawar and Budi, despite having distinct dominant languages, can maintain their innate cultural identities and adeptly code-switch based on conversational context, a finding that aligns with Piller and Gerber’s (2018) research. Their study posits that code-switching assists children in preserving their cultural identity while also acquiring the predominant language. Furthermore, Mawar and Budi’s ability to comprehend and utilize vocabularies from multiple
languages, adjusting their code-switching based on cultural circumstances and surroundings, echoes Gumperz and Hernández-Chávez’s (1972) findings, which assert that children use code-switching to express their cultural identities relative to their environments.

**Cognitive flexibility**

Drawing upon the foundational tenets of generative linguistics, it becomes imperative to acknowledge the role of code-switching in children as a facilitator of cognitive development across two primary dimensions. On the one hand, bilingual children who partake in code-switching demonstrate a pronounced capacity for cognitive flexibility, skillfully adjusting their linguistic choices in response to contextual nuances or interpersonal dynamics (Grosjean, 1982). This malleability transcends the confines of language, extending into other cognitive spheres such as problem-solving and task-switching. On the other hand, code-switching serves as a driving force for the enrichment of metalinguistic awareness, encompassing the ability to dissect and manipulate the architecture of language (Grosjean, 1982). As a result, bilingual children who routinely engage in code-switching are more likely to develop an amplified comprehension of their languages’ underlying structures, ultimately leading to elevated language proficiency. The following excerpts delineate the discoveries of this study, which examines the utilisation of code-switching as a means to foster the cognitive development of two subjects, Mawar and Budi.

**Excerpt 16 (interview)**

“Budi kalau di sekolah pakai Bahasa Indonesia di rumah juga, tapi kalau ada Daddy nya dia langsung ganti Bahasa Inggris seringnya” (Budi’s mother)

Translation

“When Budi is at school, he primarily uses Indonesian, and this continues at home as well. However, in the presence of his father, he spontaneously transitions to English considerably.”

**Excerpt 17 (interview)**

“karena kalau di sekolah internasional kan ngomongnya pake Bahasa Inggris, ke gurunya, ke temen. Kalau di rumah ya seringnya pake bahasa Inggris juga tetangga juga banyak bule, tapi kalau ada ibu saya dari Karangasem main kesini, Mawar tau dia harus pake bahasa Indonesia atau Bahasa Bali” (Mawar’s mother)

Translation

“Given that Mawar attends an international school, she naturally communicates in English with her teachers and peers. At home, she frequently employs English as well, especially since there is a substantial expatriate presence among our neighbors. However, when my mother from Karangasem visits, Mawar is acutely aware that she must switch to either Indonesian or Balinese.”

**Excerpt 18 (interview)**

“Budi masih sering salah grammar Inggrisnya, kalo di bahasa Inggris kan ada tenses gitu, di bahasa indonesia kan kita ga pake yang kayak gitu, ini yang sering salah sama Budi, kata kerjanya salah.” (Budi’s mother)

Translation

“Budi frequently makes grammatical errors in his English, particularly with regards to the usage of tenses. Unlike Indonesian, which does not employ such a system, English requires adherence to tense rules. This is a common source of errors for Budi, particularly with verb conjugation.”

**Excerpt 19 (interview)**

“Ya Mawar kan masih belajar, masih kecil juga jadi masih banyak yang salah itu wajar. Tapi, dia pintar loh bisa bedain kalau di Bahasa Inggris kan adjective dulu baru noun, misalnya red blood, di Bahasa Indonesia kan kebalik, noun dulu lan “Darah Merah”, nah Mawar tahu ini. Gak salah ngomong.” (Mawar’s mother)

Translation

“Considering Mawar is still learning and relatively young, it is understandable that she makes numerous mistakes. However, she is quite astute in discerning the differences between English and Indonesian, particularly in terms of word order. For instance, in English, adjectives precede nouns, as in ‘red blood.’ Conversely, in Indonesian, nouns come first, such as ‘Darah Merah.’ Mawar is well aware of this distinction and does not confuse the two when speaking.”

**Excerpt 20 (observation)**

(Budi and his father sitting on the couch together)

This conversation took place at Budi’s house between Budi, his father and mother.

(Budi and his father sitting on the couch together)

Budi : No homework today, I can play games Dad.

Father : Yeah sure but not too long.

(his mother came from the back overheard their conversation)

Mother : No no, Budi, no game today. Read.

Budi : Ih mami, kan ga ada pr… (But mum, there is no homework).

**Excerpt 21 (observation)**

This conversation took place at Mawar’s house between her and her Indonesian friend.

Mawar : Did you bring the books?

Friend : Iya.

Mawar : Mana lihat buku-bukunya? (Let me see those books).

As evidenced by excerpts 16, 17, and 20, Mawar and Budi demonstrate the development of cognitive awareness through their engagement in code-switching. They instinctively adapt to the contextual demands they encounter, employing code-switching as a means of facilitating smoother communication. By altering words, dialects, phrases, or sentences to better suit their conversational partner’s understanding, they exhibit heightened cognitive flexibility. Numerous prior studies corroborate this phenomenon, revealing that bilingual or multilingual children engaging in code-switching exhibit greater cognitive flexibility compared to their monolingual counterparts (Adesope et al., 2010; Barac & Bialystok, 2012; Bialystok, 2001; Carlson & Meltzoff, 2008; Crivello
et al., 2016; Poarch & van Hell, 2012). Mawar and Budi seamlessly transition between languages as they navigate diverse linguistic environments. For instance, Budi shifts to Bahasa Indonesia in Excerpt 20 after conversing in English with his father. As posited by Barac and Bialystok (2012), cognitive flexibility can be assessed through tasks or conditions necessitating attention shifting and inhibitory control.

As seen in the field of metalinguistic awareness, interviews with Budi’s and Mawar's mothers in excerpts 18 and 19 reveal contrasting results. Prevailing research posits that bilingual children engaging in code-switching exhibit enhanced metalinguistic awareness compared to their monolingual peers, such as recognizing differences in linguistic rules between their two languages and demonstrating superior executive control, including facets related to metalinguistic awareness (Antoniou et al., 2016; Bialystok, 1988; Galambos & Goldin-Meadow, 1990; Kuo & Anderson, 2010; Nicoladis & Genesee, 1996; Ricciardelli, 1992; Sekerina & Trueswell, 2011; Yow & Li, 2015.). In excerpt 19, Mawar's mother acknowledges Mawar's burgeoning metalinguistic awareness, as evidenced by her facile differentiation between the ordering of adjectives and nouns in Indonesian and English. Moreover, observations in excerpt 21 indicate that Mawar can seamlessly switch to Bahasa Indonesia while employing the correct Indonesian noun forms. Mawar's metalinguistic awareness is demonstrated in her effortless switching between languages without committing errors. Galambos and Goldin-Meadow (1990) contend that code-switching children display heightened metalinguistic awareness, encompassing the capacity to discern and manipulate linguistic structures such as syntax and semantics. Goetz (2003) asserts that bilingual children's code-switching is linked to metalinguistic awareness development, enabling them to better comprehend and manipulate linguistic structures and rules across languages.

Conversely, Budi appears to grapple with metalinguistic awareness, exhibiting a lack of verb conjugation knowledge and producing ungrammatical language when code-switching. This suggests that code-switching has not facilitated Budi's development of metalinguistic awareness as an aspect of cognitive growth. In alignment with this notion, Paap and Greenberg (2013) conducted an extensive review of studies examining bilingual advantages in executive processing, which pertains to metalinguistic awareness. They discovered that evidence supporting a bilingual advantage is inconsistent, implying that code-switching’s impact on cognitive development, including metalinguistic awareness, might be more nuanced than previously assumed. Additionally, Duñabeitia et al. (2014) explored the inhibitory advantage in bilingual children, closely associated with metalinguistic awareness. Their findings revealed that bilingual children did not consistently outperform monolingual children on inhibitory control tasks, suggesting that code-switching may not invariably promote metalinguistic awareness development.

Furthermore, Lehtonen et al. (2018) conducted a meta-analytic review investigating the relationship between bilingualism and executive functioning in adults. While this study primarily focuses on adults, it remains pertinent as it questions the widely held belief that bilingualism confers an advantage in executive functioning, which relates to metalinguistic awareness. The authors concluded that the bilingual advantage, such as code-switching, in executive functioning may be diminished or even nonexistent, contingent on the specific cognitive task assessed.

CONCLUSION
Code-switching, the capacity to seamlessly alternate between languages within a singular discourse, is prevalent among bilingual children, serving multifaceted purposes such as communicative function, linguistic development, cultural identity, and cognitive adaptability, underscored by Grosjean’s (2012) framework. This research scrutinizes the utilisation and ramifications of code-switching among children from mixed Indonesian and native English marriages employing a qualitative exploratory case study. Data acquisition encompassed semi-structured interviews with parents and observation of the children (Mawar and Budi), utilizing purposive sampling to select participants. The analysis involved transcription, coding, categorization, interpretation, and synthesis to derive conclusions and recommendations.

Using Grosjean's (2012) model to analyze children's code-switching reveals its significance in communication functionality. Children, such as Mawar and Budi, modify their language choices based on the language skills of the person they are talking to. This helps improve communication and strengthen social relationships. Although code-switching can enhance linguistic competence and promote lexical expansion, Budi and Mawar's instances reveal difficulties with grammatical structures due to factors such as transient confusion and imbalanced language exposure. Furthermore, code-switching assists children in preserving cultural identities, and modifying language usage based on cultural contexts. Ultimately, it affects cognitive development in cognitive flexibility (adapting linguistic choices) and metalinguistic awareness (language manipulation).

This research on code-switching among bilingual children from mixed Indonesian and native English marriages has several limitations, including a small sample size, limited generalizability,
potential researcher bias, and reliance on retrospective accounts from parents. To address these limitations and expand on the present findings, future research could conduct a longitudinal study to examine the developmental trajectory of bilingual children’s code-switching behaviours, include a larger and more diverse sample, employ quantitative methods such as standardized language assessments, investigate the role of contextual factors in shaping bilingual children’s language development, and explore the potential benefits and drawbacks of code-switching in educational settings to inform effective bilingual teaching practices.

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