# Sociolinguistic Factors of Language Mixing Frequency in Mandarin-English Bilingual Children

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*Abstract:* Globalisation has established interdependent relationships between nations and allowed more cross-cultural connections. The two outcomes increase the demand for English-proficient individuals and the number of bicultural and bilingual families, respectively. The paper suggests the sociolinguistic factors of language mixing frequency in Mandarin-English bilingual children in Mandarin-based societies. Sociolinguistic factors are defined as the influence of community/society and identity on one's language use in this paper. By reviewing the literature, this paper suggests parental, pedagogical, and contextual factors. Parental factors refer to how parental bilingual discourse strategies can influence the language mixing in EFL learning influence children's language mixing patterns in the future. Contextual factors refer to the consideration of changing language mixing frequencies according to the context of the conversation. Contextual factors will be split into three categories: interlocutor's preferences, social connections, and cultural expression. After discussing sociolinguistic factors, this paper also points out the limitations of the reviewed research.

*Keywords:* language mixing, bilingual children, EFL learning, parental discourse strategies, sociolinguistic factors.

#### 1. Introduction

Current developments of globalisation have made nations more interdependent with each other, which makes English proficiency one of the most valuable assets that an individual in China can have, enabling them to access more prestigious forms of education, like university undergraduate studies, and opening windows for more desirable job opportunities; English proficiency is seen as crucial for socioeconomic mobility (e.g. [1,2]). According to Zhong et al. [3], English is the most embedded language in Mandarin conversations among Mandarin-dominated Chinese individuals, mostly in conversations with English-speaking addressees and used with message-intrinsic considerations, like hedging or idioms. This shows how English is being used among mainland Chinese speakers of Mandarin, with influences from advances in information technology and connections with foreign non-Mandarin-speaking communities.

Globalisation also continues to promote more and more cross-cultural connections, increasing the number of bicultural and bilingual families. These families might foster bilingual children because of a constant bilingual linguistic environment at home. However, in mainland China, children might only have access to English input from home and school; mainstream media is still strongly Mandarin-based. As a result, Mandarin-English bilinguals might have difficulty developing English

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proficiency and, in turn, establish linguistic dominance in Mandarin because of limited English input in society [4]. In Huang and Zhang's [5] study, Mandarin-English bilingual children in Singapore also show a higher likeliness of code mixing while using their non-dominant language, Mandarin. Research has been conducted to study the language use patterns of Mandarin adult speakers. Language use patterns of bilingual children of different language pairs or Mandarin-English bilingual children of non-Mandarin-dominated regions were analysed in existing research.

This paper suggests the sociolinguistic factors influencing language mixing frequencies in Mandarin-English bilingual children in Mandarin-based societies. In this paper, sociolinguistic factors refer to the influence of community/society and identity on one's language use. It first addresses parental factors and evaluates whether parental bilingual discourse strategies influence children's language use. Then, it will discuss pedagogical factors, where children find language mixing useful to clarify ideas while tutoring peers in educational situations. Finally, it will discuss the contextual factors, where children control their language use based on the language preferences of their interlocutors, the establishment of social connections, and cultural expression.

Clarifying linguistic terms is needed before analysing sociolinguistic factors in depth. The terms "code mixing" (CM) and "code switching" (CS) remain controversial in linguistics on whether the grammatical and syntactical differences between the two are significant enough to be classified as two separate phenomena. However, because this topic's grammatical issues are beyond the scope of this paper, it will use "language mixing" instead. The term "language mixing" was also used in this manner by Ritchie and Bhatia [6] – "as a cover term for both code mixing and code switching." Note that "code mixing" and "code switching" will still appear if used in referenced studies in this paper.

#### 2. Parental factors

Numerous studies have been conducted to see if parental language use patterns and bilingual discourse strategies affect children's language use. Nicoladis and Genesee [7] studied the speech of first-born boys in French-English families in Montreal. The educational background and employment of parents varied across families. The parents had at least a high school education, and their employment status ranged from staying home full-time to working outside full-time. The research team visited the families eight times over six months, and a trained observer filmed conversations with either one or both parents and later transcribed the footage. The study was modelled after Lanza's [8] study on Norwegian-English bilingual two-year-olds. However, the results did not directly support Lanza's [8] hypothesis that certain parental acts encourage children's continual code mixing and show that parental language use has a limited effect on children's language use patterns. Parental speech acts can affect children's language mixing: it can only shift surface features of their children's language when they are at a young age. The researchers have suggested that children in the study might not understand the subtle implicatures of parents' direction of the children's language choice: children might repeat what they have said instead of reiterating in the targeted language. Nicoladis and Genesee [7] also pointed out that differences in sociolinguistic communities led to differences in the findings: Montreal is a bilingual city, yet Norway, where Lanza's [8] study is conducted, is a monolingual society; parents may choose to control the flexibility of their discourse strategies whether the minority/heritage language proficiency of the children is at risk. Children of bilingual families all speak the majority language, whereas their minority/heritage language proficiency hugely depends on parental language input patterns [9]. Qiu and Winsler [10] paid attention to the use of the "one-parent-one-language" (OPOL) principle in a Mandarin-English family in the United States. The study used observations, interviews and assessments to examine the language proficiency, language use, and differentiation of the 3;4 child in the family. From tracking conversations, it was clear that the child was dominant in Mandarin, often embedding Mandarin into a conversation with his English monolingual father. However, the language use patterns of the child are more mixed during triadic conversations because of different variables. Firstly, the mother has to translate what she says from Mandarin into English for the father, decreasing the rate of her Mandarin usage. Secondly, the stricter OPOL requirement of this household also contributed to the patterns. Most families use one language consistently during triadic interactions. Meanwhile, the child is expected to switch languages according to the parents he is talking to in this household.

Two claims are made from discussed studies relating to parental influence on children's language mixing. Firstly, sociolinguistic communities affect parental bilingual discourse strategies: parents will focus on training their children to speak the minority/heritage language because the children's proficiency in the language could be at risk. Secondly, because the OPOL principle is challenging to maintain and the minority/heritage language input is restricted to conversations with one parent, bilingual children have a higher tendency to develop majority language dominance. Putting these conclusions into the case of Mandarin-English children in Mandarin-based societies, it is suggested that they have a higher possibility of Mandarin dominance over English and are more likely to perform language mixing in English-based conversations. In household situations, children will mix language use according to the strictness of parental discourse: children might consistently use one language (Mandarin or English) or talk in Mandarin and English interchangeably according to who they are talking to.

#### 3. Pedagogical factors

Although many may believe that EFL should be conducted entirely in English, allowing EFL students to have maximum exposure to English, it is possible for language mixing to benefit an EFL student in learning English. Wang and Hyun [11] collected data consisting of field notes and transcriptions in a Mandarin-English bilingual preschool, trying to find "the essential characteristic of peer-talk in a Mandarin-English preschool classroom." The participants include 3;0 to 5;0 EFL-speaking children fluent in Mandarin, and two native English-speaking children. Results show that peer talk was crucial in the Mandarin-English preschool EFL setting. The young students in the study have been shown to develop peer-tutoring abilities, helping each other with English words by reiterating in Mandarin what the teacher said. The language mixing in peer talk has become a crucial tool for them to understand what the teacher is saying and consider their peers' perspectives of what they do and do not understand. Language mixing in EFL classrooms might benefit preschoolers and EFL college students in Mandarin-based societies. Moradi and Chen [12] conducted questionnaires and interviews to gather information on the attitudes of Chinese undergraduate students toward Chinese-English CS/CM. Results show that Chinese undergraduate students have positive attitudes toward CS/CM, claiming that CS/CM is a "communicative strategy and a learning approach to improve their competence in English." However, Moradi and Chen [12] pointed out that future research should be done to identify how CS/CM facilitates EFL learning: how can CS/CM help enhance their English proficiency, and which language skills can CS/CM improve?

Language mixing can be seen as a tool for learning EFL in both studies. Bilingual preschoolers help each other understand their teachers' speech by reiterating it in Mandarin and translating it into a familiar language [11]. This action facilitates the English lexical development of these preschoolers. Because of the advantage language mixing gives to English learning, it could be possible that bilinguals grow up talking with mixed language use. They subconsciously treat language mixing as beneficial to themselves and their peers and adopt it as a speaking habit, using it in high frequencies, especially in educational situations.

Furthermore, with more and more bilinguals treating language mixing as a convenient way of communication, less people will discourage the act, which normalises language mixing in daily communication. However, it is essential to put school language policies into consideration. Some international schools ban the use of native languages for a purely English learning environment.

English-only policies inhibit students from mixing languages. Hence, language mixing in educational situations is submissive to contractionary language policies.

We can then conclude the following as variables of language use patterns in Mandarin-English bilingual children in Mandarin-based communities. The educational programme bilingual children attend strongly affects their use of language mixing. If children were to participate in a Mandarin-dominated public school programme, they would most likely speak almost entirely Mandarin with teachers and peers. Considering the time bilingual children spend in public schooling and the people they meet through school daily, language mixing is discouraged because there are no apparent benefits anymore. Conversely, if children were to attend a Mandarin-English bilingual education programme (e.g. English immersion or international education), English use would increase. The strictness of English-only policies will also play a role: the school might allow language-mixing conversations or completely ban the use of Chinese dialects, preventing any form of language mixing.

#### 4. Contextual factors

Contextual factors refer to the consideration of changing language mixing frequencies according to the context of the conversation. This section is divided into interlocutor's preferences, social connections, and cultural expressions. Note that the three variables are interrelated in real life. This division is meant to show the considerations of changing language mixing frequencies from different perspectives.

#### 4.1. Interlocutor's preferences

Zhang et al. [13] analysed the conversations between Mandarin-English bilingual preschoolers in Hong Kong to "investigate language choice and code-switching." Participants included three Mandarin-English preschoolers who spoke Mandarin as a native language and migrated from the mainland to Hong Kong and one Cantonese-English preschooler. They are friends from the same class in school, and their only common language is English. Results showed that English was used the most, followed by Mandarin and Mandarin-English language mixing utterances for the Mandarin-English preschoolers. Mandarin-speaking preschoolers tend to speak English more because of their Cantonese peer's presence, and the setting reminds them of school, prompting them to use English as the medium of communication. Both Zhang et al. [13] and Wang and Hyun [11] recorded bilingual preschoolers understanding their peer's linguistic proficiency and shifting their use of language accordingly. Mandarin-English bilingual children attending bilingual education might initially mix Mandarin and English casually while trying to see if their interlocutors understand. If they sense interlocutors' proficiency in a specific language (either Mandarin or English), they might continue the conversation with more or less language mixing.

#### 4.2. Social connections

Zhang et al. [13] pointed out that "bilingual children can choose language differently when communicating with peers who speak the same languages as them (in-group members) and interlocutors whose language differ from theirs (out-group members)." With this assumption, bilingual children can label in-group and out-group peers by the language that they talk to. For example, in a Mandarin-based school, bilingual children might speak together in English, not in Mandarin, as a mark to tell people that bilingual children are a group. Mandarin monolingual EFL learners might have lower English proficiency than bilingual children and, therefore, not understand as much of the conversation between bilinguals and sense a difference. However, when bilingual children speak with monolingual peers at school, they might decrease language mixing or even talk

purely in Mandarin to make their interlocutors understand well and, simultaneously, remove the linguistic difference that monolinguals may sense, making the conversation continue easily.

#### 4.3. Cultural expression

It is shown that different languages mirror different cultural identities. Wang et al. [14] examined the relationship between languages and a cultural self by interviewing Hong Kong bilingual children ranging from ages 8-14 in either English or Chinese, for which the dialect used depended on which dialect the interviewee was the most comfortable with. Interviews conducted in Chinese and English asked interviewees to recall autobiographical memory and self-concept, but the responses received in Chinese and English interviews differed. English interviews showed responses agreeing to Western independent values: interviewees gave more extended responses on themselves and their anecdotes. Meanwhile, Chinese interviews showed responses agreeing to Chinese interdependent values: interviewees provided less detailed personal experiences. This finding shows how using a different language can introduce different sides of oneself and proves that different languages can show different cultural values. With language mixing, bilinguals might want to bring out both cultural sides because bilinguals want to highlight their unique bicultural background. It also allows them to create a sense of belonging to their bicultural identity. In addition, because English is treated as a language needed for socioeconomic mobility and it requires more resources for children to develop Mandarin-English bilingualism, especially in China (e.g. [1,2]), bilingual children might intentionally show or feign a high socioeconomic background through language mixing, but this phenomenon might not appear because of influence of cultural values.

### 5. Conclusion

Language mixing in Mandarin-English bilingual children is common in day-to-day conversations. This paper reviews research and suggests that parental bilingual discourse strategies, the advantages of language mixing in language learning, and contextual factors like interlocutor's linguistic preferences, social connections, and cultural representation influence bilingual children's language mixing frequency. These factors have levels of influence that can differ between social and linguistic environments. However, current research still lacks empirical work studying Mandarin-English bilingual children in Mandarin-based societies. This paper often uses results from Hong Kong, where Mandarin is not the majority language, and from other language pairs. Also, many studies focus on participants with relatively high socioeconomic status (SES). Future research should focus on Mandarin-English bilingual children in regions where Mandarin is the majority language and participants, desirably, have relatively lower SES and attend public schooling. This way, we have more data from a broader population and arrive at more conclusions and hypotheses that can benefit public EFL learning.

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