Bilingual Analysis in Early Childhood: A Meta-Analysis Study

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Abstract
Mastery of foreign languages is an added value in life. Bilingualism is the focus of attention for researchers and educators. The ability to speak foreign languages is a challenge for alpha generation children to communicate and collaborate with other people both domestically and internationally. Especially in the golden age when children are susceptible to the stimuli and stimuli were given. This article aims to increase understanding of how the bilingual effect can play a role and affect early childhood. This article is a qualitative research study to make a phenomenon or fact easier to understand and produce a hypothesis. Recently used document studies with Crossref Data Search, Google Scholar, Taylor & Francis, and Harzing’s Publish or Perish software. Google This study aims to describe previous research on bilingualism and its relation to early childhood. Changes that occur in society also change language learning and teaching. Language is valued as an important part of social processes and interactions. This point of view has prompted various studies to focus on language learning. This study has presented findings and recommendations to help other researchers and language educators suggest new methods and findings on how to learn bilingually in early childhood. For the next expected study, there is data that discusses parents’ hope for bilingualism practiced in children age early with the reality that happens at school.

Keywords: bilingual, early childhood, linguistics

INTRODUCTION
Children are fast learners in line with Montessori thinking with the term sponge mind, which states that children learn with their subconscious. When learning a language, children absorb words and their structures. Children learn things without realizing that they are learning. This thinking develops rapidly during the first six years of a child’s life, known as the golden age. According to several studies, this era is a golden period of language learning. The provision of bilingual education can be introduced to children as part of literacy education. We often encounter Indonesian as our mother tongue or first language and English, Mandarin, and Arabic as our second language. Mastery of a second language is seen as profitable and becomes one of the tickets to future success because language is a means of communicating between individuals and communities.

The World Economic Forum 2020 states that the skills needed by workers in the 4.0 industrial revolution are 20% technical skills and 80% soft skills mastery. One of the soft skills components needed is communicating in a foreign language, considering the higher the need for international access, the higher the community’s demands to be able to adapt quickly. This thinking is also a priority for ASEAN countries that are members of the Southeast Asian Ministers of Education Organization (SEAMEO) Regional Center for Quality Improvement for Teachers and Education Personnel (QITEP) in Language (SEAQL), stating that English is a priority foreign language that students must master to be able to compete globally. This was determined because English has become the world's language of instruction.

Many schools in Indonesia have offered bilingual programs from an early age. Researchers have studied the pros and cons of this program to see the implications of early bilingual introductions. Some people state that the negative effect of bilingual learning is different structures and procedures for sentences in Indonesian and English (Purba & Yurliani, 2016). This can lead to English, namely the use of English which is still nuanced in Indonesian culture and language. This phenomenon occurs when
the entertainment party uses specific terms and is followed by the community. In the study of sociolinguistics, this event is called code-mixing, where the use of one language is dominant in speech, then it is inserted into another language. The use of code-mixing is driven by compulsion because if it is combined into Indonesian, it will become a long phrase or sentence with multiple meanings. This factor is also supported by speakers feeling prestigious and following the trend (Rakhmawati et al., 2016). Research (Poeste, Müller, & Arnaus Gil, 2019) dismisses the opinion of those who state that children who are taught to speak multilingual can confuse children and cause speech delays when researching code-mixing and language dominance of 122 bilingual, trilingual, and multilingual children raised in Spain or Germany.

Linguistic improvement strategies can be carried out through learning by using direct examples such as phonics, music, and song methods and using books to strengthen literacy skills. If learning is done properly, learning a foreign language early can spur overall child development. Neuroscientists found that the impact of learning a foreign language on brain development can lead to faster cognitive processes, increased creativity, and exploration of solutions compared to monolingual children. Bilingual users have linguistic sensitivity, non-verbal skills, and early-stage reading and writing. A child's language is more cognitively honed (Anderson et al., 2017; Morrison, 2012). Bilingual learning from an early age balances a second language with proficiency levels equivalent to reading in the mother tongue and has shown a positive impact on language proficiency (Kovelman et al., 2008; Sparling & Meunier, 2019; Wagner, 2018). Parents as supporters of the home environment can get used to good and correct foreign-language speakers to support bilingual ability. Meanwhile, the school can organize a bilingual program with a fun learning atmosphere for children (Pransiska, 2020).

Parents and educators have high hopes for children to grow and develop optimally. It is undeniable that foreign language skills are a challenge for Alpha generation children, born in the digital world, and have a more open and progressive perspective than their predecessors to communicate and collaborate domestically and internationally. The right way of introducing foreign languages can be an alternative solution. It does not burden the development process and aligns with the principle of early childhood learning, namely playing while learning. In addition, parents and educators must also provide a supportive environment for the development of bilingual children in communication and social activities. Previous studies have contributed to improving bilingual children's language and literacy. This article describes and analyzes data regarding what happens to bilingual learning in early childhood, why it happens, and the implications of this incident.

**METHODOLOGY**

The main focus of research based on Burns (1999) is on specific and practical issues that directly affect certain social groups or communities. This article uses a qualitative study to make phenomena of fact easier to understand and produce a new hypothesis. Smith, Denzin, & Lincoln (1994) argue that qualitative research is a study that uses a background natural to interpret a phenomenon that occurs and is done using various existing methods. Data selection refers to different sources and ways to provide credible conclusions. Search data using Crossref, Google Scholar, Taylor & Francis, and Harzing's Publish or Perish software. Then identified articles that are closest to the theme and searched the keywords entered. The article was included to evaluate the comparison. Data selection on every Step character by cyclical or repetitive from different sources. According to Miles & Huberman, data analysis has three activities: data reduction, data display, and conclusion. Data reduction was carried out to summarize, choose points, focus on research themes and patterns, and discard unnecessary data to make it easier for researchers to collect data. The data display is presented in a narrative, and conclusions are expected to lead to new findings. Data analysis was carried out in the following steps: 1) reading the data repeatedly, 2) carrying out data relevance, 3) clarifying data that show similarities or compatibility with other data, 4) finding related patterns or themes, 5) determining conclusions obtained from the data (Fadli, 2021).
RESULT AND DISCUSSION

BILINGUAL RESEARCH TRENDS IN EARLY CHILDHOOD

Figure 1. research in 2016-2022 with keywords bilingual early childhood topics

The article's topic in the search for data that discusses bilingual development during 2016-2020 shows a graphic image as above (figure 1). The keywords bilingual child, bilingual education, and early childhood education are widely used in the picture above. This means that researchers are interested in finding out more about bilingualism in early childhood. Changes that occur in society also change language learning and teaching. Language is valued as an important part of social processes and interactions. This point of view has prompted various studies to focus on language learning. Second language acquisition is a phenomenon in which children acquire knowledge of a second language other than their mother tongue. Children who use two languages during language learning are called bilinguals. Breaking the principle of monolingual ideology, William (1994) (Kirsch, Aleksić, Mortini, & Andersen, 2020) introduced the term translanguaging, where education aims to develop English and Welsh skills simultaneously with high standards. The theory was later acquired by (Otheguy, García, & Reid, 2015; Wei, 2018) into a theory that all languages can use because language is not seen as separate but integrated and dynamic while continuously interacting. This concept suggests the use of multiple languages to increase communicative potential. Translanguaging is a form of multilingual learning where children are given equal rights to develop their language, and there is no coercion to learn only one language.

Children's language development, especially foreign languages, can be introduced around 2-6 years. At this age, children are in the preoperational period and begin to imitate everything they see and hear. This opportunity becomes a motivation to provide stimulation and stimulus gradually according to the needs of children to socialize and fulfill children's curiosity to learn languages other than their mother tongue. Scheffler's research (2015) shows that children introduced to English at the age of 21 months and who study it for two years can speak fluent English at four years. Therefore, age is an important factor affecting the long-term performance of the brain's memory when storing information at an early age. In general, introducing a foreign language consists of several programs: grammar, vocabulary, and pronunciation by listening methods (with music, songs, and videos), speaking, reading, and writing are carried out in a comprehensive and integrated manner.

The bilingual program was introduced in 2004 by adopting a national curriculum with an international curriculum. There are various reasons why parents choose schools with bilingual programs; affected social status, wanting their children to master foreign languages from an early age, family backgrounds with different nationalities, and the assumption that schools with bilingual programs are seen as better and make children smarter. Regardless of these reasons, recent research that consistently shows the benefits of bilingual learning can increase cognitive intelligence in children is the biggest factor for parents to decide to choose a school with a bilingual program.

Concepts and Methods in Early Childhood Bilingual Programs

Bilingual is fluency in speaking two languages between the mother tongue and a foreign language. In bilinguals, there are three stages of the process; (1) code-switching is the ability to change the language used with another language correctly. This ability is generally done when the child knows both languages well. For example, children use English at school and use their mother tongue when at
home. (2) *simultaneous language acquisition, also known as bilingual first language acquisition, is language learning carried out simultaneously.* This happens to children born into multilingual families. Parents communicating with two or more different languages affect the amount of language vocabulary heard by children. (3) *successive language acquisition* can occur at home and school. The provision of bilingual programs for early childhood is carried out using a direct method and does not explain grammatically through fun learning concepts (Pransiska, 2020). Quoting Serra’s (2017) statement (Jayanti & Sujarwo, 2019), the earlier the bilingual program is planned and provided, the more profitable it will be.

English is a spoken language when reading requires pronunciation based on the sound of the letters. The phonic method is used in learning English to build the appropriate alphabet principle between letters and their pronunciation (Westhisi, 2019). Melvin Bell used the origin of this method to teach speech from letter sounds instead of letter names. The English alphabet consists of 26 letters with 44 sounds. A sound consists of 5 short vowels, 18 consonants, seven directed graphs, six long vowels, three controlled vowels, and five diphthongs or other special sounds. Some English letters are pronounced irregularly in the context of words. For example, h for "hours and horse," the letter s for "shit, sheet, sit and seat," and the letter b for "bye and by." The use of phonetics to teach reading can make children recognize letters (phoneme recognition) and pronounce letters easily and precisely (Sari, 2016).

![Phonemic Chart](https://www.phonemicchart.com/)

**Figure 2.** Phonemic chart English and vowel mouth position (Taken from https://www.phonemicchart.com/ & (Sari, 2016))

The learning strategies used when applying the phonics method are fairy tales and play. Fairy
tale activities are designed to attract attention and increase children's concentration. This effort also encourages children to love reading and profoundly affects long-term reading (Wagner, 2018). Play activities can support aspects of children's cognitive, motor, social, and emotional development.

In addition to the phonic method, based on previous literature on music is one of the most helpful learning tools to improve language learning. In early childhood learning, composing music and songs can motivate children to make spontaneous movements and learn the language simultaneously. The teacher teaches English with music that involves specific actions in the song during the opening activity (circle time). By learning with songs, teachers can create an effective learning atmosphere, relieve children's anxiety, and foster children's interest and motivation in learning English. The songs used in activities such as; Row Row Row Your Boat, Hockey Pockey, Head Shoulders Knees Toes, London Bridge, Hop Running, Name, and Good Morning are performed using the Total Physical Response Method, which will be called TPR.

TPR is an excellent way to teach kids English, such as vocabulary and short phrases. This activity is a combination of physical activity and movement simultaneously. Intensive practice of this method affects memory processes through verbal and subsequent motor activities. Children actively listen and pay attention to what the teacher says (Uzer, 2019). The use of music and movement impacts learning reading skills (Zafirah & Soh, 2020). The way teachers incorporate elements of music into literacy instruction as part of literacy efforts is based on the theme in the curriculum or the structure of the language being taught (Fisher, 2001). Research (Kultti & Pramling, 2018) reveals that children can understand literal and figurative meanings when singing a song and interpret the meaning behind the song. The use of two languages and providing learning also offers an experience for translanguaging in early childhood education.

After the child can speak, listen and write, the next element of language development is the ability to read. Unfortunately, the reading interest index based on a survey of Indonesian libraries is still low. The best way to instill a literacy culture is to start at an early age so that the Indonesian generation can grow and develop for the better. Parents are the first source of learning for their children. Parental support in providing facilities that can support literacy activities at home, such as books and APE literacy, besides being able to build strong bonds, this activity is also considered good for language development and children's literacy skills to prepare them for the next level of education (Hermawati & Sugito, 2021). These efforts encourage children to love reading and profoundly affect long-term reading (Wagner, 2018).

![Figure 3. Literacy Educational Game Tool (APE)](image)

Learning a foreign language is not easy because of differences in letters, grammar, and vocabulary pronunciation. The more vocabulary is mastered, the easier it is to develop language skills. Early childhood is included in the golden age category at the basic education level. This period is considered the most effective and suitable for introducing foreign languages. Learning foreign
languages does not occur automatically without stimulation, practice, and the use of different strategies and methods given in interesting concepts (Widyahening & Sufa, 2021). Although parties support and reject foreign language learning, the studies and research presented imply that bilingual children have phonological sensitivity that can improve children's language skills more broadly than monolingual children (Bialystok & Herman, 1999; Pransiska, 2020). Giving and learning foreign languages also need to consider factors that affect readiness, such as psychological, physical, intellectual, stimulation programs, and sociocultural environment (Sumarni, Vanity, & Andika, 2021).

**CONCLUSION**

The focus on early childhood bilingualism shows considerable attention to early bilingual learning. In addition to considering children's physical and psychological readiness to learn a new language, the use of methods and media is also adapted to the development of children and the principles of early childhood learning. Environmental backgrounds such as family and school also play a significant role in developing bilingual language. This study has presented findings and recommendations to help other researchers and language educators suggest new methods and findings on how to learn bilingually in early childhood.

**REFERENCES**


