

THE BENEFITS OF BEING BILINGUAL ACCORDING TO RECENT STUDIES

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ABSTRACT

The 21st century has brought technology that connects people worldwide, creating the necessity for bilingualism to facilitate international and intercultural communications created from global interactions. Yet, there are still disputes on the benefits of bilingualism beyond communications and the need for achievement in language learning. Thus, the present study aims to review previous studies on bilingualism and provide a comprehensive summary of the benefits of bilingualism. The study employed a model of library research from George (2008), where previous studies on bilingualism selected following certain criteria were then critically reviewed to synthesize their arguments on the benefits of bilingualism. The review revealed that bilingualism can benefit students' cognitive development, problem-solving, communicative competence, academic performance, and cultural awareness. Bilingualism is also argued to provide health benefits because it can maintain brain functioning and delay degenerative cognitive function diseases, such as dementia and Alzheimer's. Thus, being bilingual contributes to developing students' 21st Century skills.

Keywords: bilingualism, benefits, cognitive development, communicative competence, cultural awareness

INTRODUCTION

The use of language is one aspect that continues to develop over time. Using two languages is necessary for the community (Jiménez-Gaspar et al., 2017). This phenomenon is associated with the era of globalization that occurs in every country in the world. The era of globalization that is increasingly developing demands the ability of people to improve their abilities, including language skills, which, of course, must be prepared from an early age. Globalization has increased the use of two or more languages (Crystal, 2003). Mastering more than two languages is important today (Rahmatian & Farshadjou, 2013). Most of the world's population speaks and understands more than one language. Thus, much attention has been paid to the potential benefits of bilingualism.

The ability to communicate in two languages and understand both languages, which includes reading, writing, listening, and speaking, is defined as bilingualism (Kokturk et al., 2016). Meanwhile, Nickels et al., (2019) state that bilingualism is the ability of participants to know two or more languages. Zhang (2018), also defines bilingualism as the ability to speak and understand two languages fluently, while biliteracy is the ability to read and write well in two languages. In other words, bilingualism is the condition of being bilingual and the ability of people to speak two languages. Bilingualism and biliteracy are interrelated and beneficial to both, and the development of language and literacy in one language enhances and supports language development and literacy in a new language (Giambo & Szecsi, 2015). Many strategies and activities can be used to recognize the power of biliteracy and seek to promote reading in both languages, writing in both languages and language development that support biliteracy.

Presumptions in society state that people fluent in two languages will be more welcome in the globalization era (Luke et al., 2007). This assumption makes various educational institutions provide education foreign language or second language to improve children's language development, including a bilingual program. Bilingual programs aimed at children from an early age are increasingly emerging. Many children worldwide have become bilingual since learning their first language because of mixed marriages (Artini & Nitiasih, 2014).

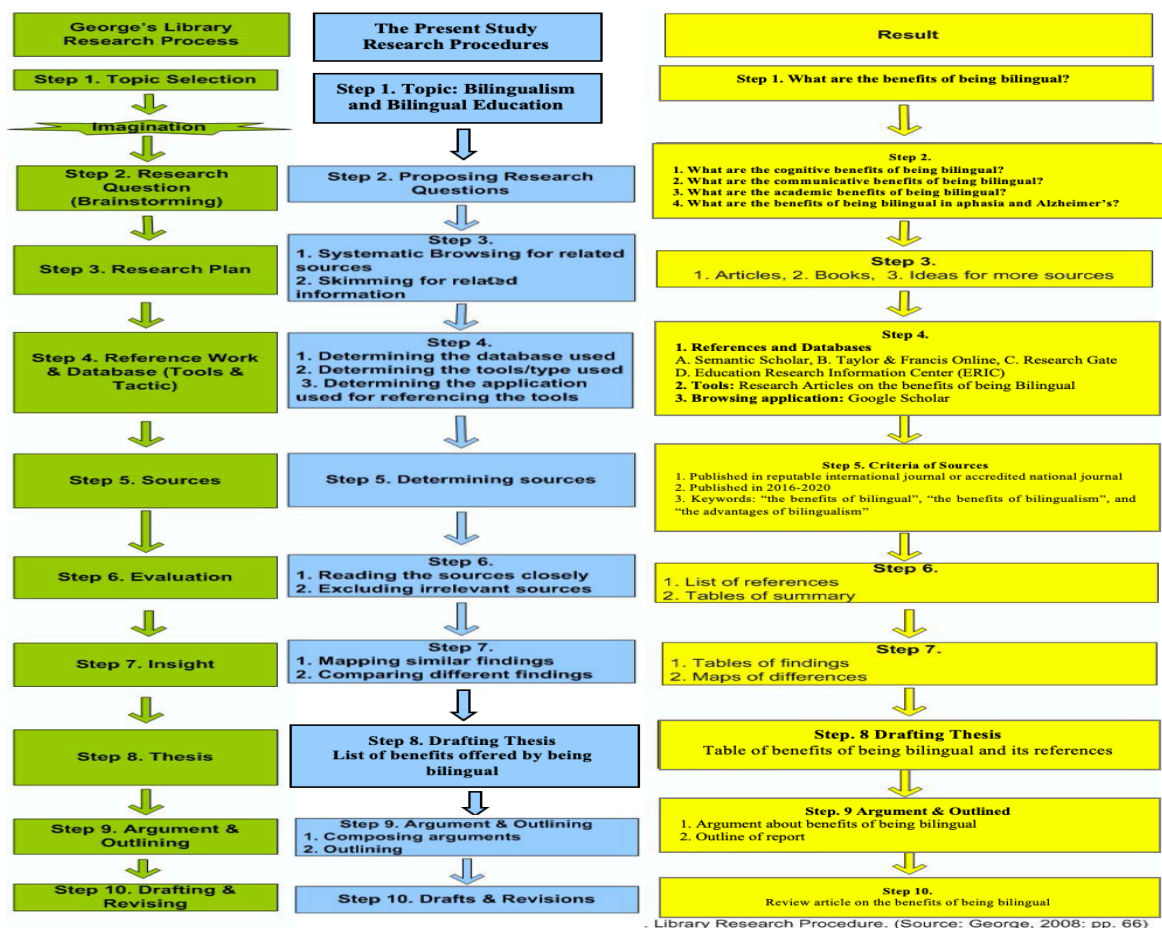
However, bilingual children may come from non-mixed marriages. How often a language is spoken, in what context the language is used in the environment, and with whose conversation partners also influence the bilingual language system (Nickels et al., 2019). Frequent use of language will affect a person's bilingual skills.

Many people have become bilingual. According to Artini & Nitiasih (2014), there are three categories of bilinguals in terms of language dominance, namely balanced bilinguals, who have mastery of two languages are equally good; dominance bilinguals, who have greater proficiency in one language and speak it significantly higher than in another language; and semi-lingual who learns a second language during a phase where the second language is not yet good and mastery of the first language is reduced because it is rarely used. On the other hand, the concept of bilingualism has received both pros and cons. The benefits of bilingualism are still a topic of intense debate (Marzecova et al., 2013). There was a history of positive and negative points of view about raising children in bilingual households; even paediatricians do not recommend exposing children to two languages (Heinlein & William, 2013). There is still disbelief and contradictions that lead to questions about the power of bilingual advantages and some argue that the advantages of bilingualism may be completely false (Antoniou, 2019).

In addition, there were also myths about bilingualism, such as it can hinder the development of language acquisition in children, the language used at home hurts second language acquisition at school, and a bilingual has multiple personalities (Artini & Nitiasih, 2014). Meanwhile, in their study, Oliver and Purdie (2010) found that bilinguals have a clear level of proficiency in using two languages. Due to the negative myths about bilingualism, this study seeks to show the facts about the benefits of bilingualism through previous studies. Therefore, this paper aims to discuss and see the benefits of being bilingual according to recent studies from 2016 to 2020. This research presents an opportunity to develop innovative research paradigms that will enhance scientific understanding of the phenomenon of bilingualism. The present library research is limited to the cognitive benefits of being bilingual, the communicative benefits of being bilingual, the academic benefits of being bilingual, and the benefits of being bilingual in aphasia and Alzheimer's.

RESEARCH METHOD

The present study was library research that followed George's model (2008) of library research based on the results of previous studies to get the data to answer the research questions. This study followed the library research model of George (2008) which was designed qualitatively by Ariantini, Suwastini, Adnyani, Dantes, & Jayantini (2021). There are several processes in making George's library research model, namely the process of selecting topics, asking research questions, designing research plans, deciding on Reference and Database works, determining sources, evaluating, gaining insights, drawing a thesis, compiling arguments and outlines, and compiling and revising reports (Ariantini et al., 2021). The following diagram explains how the diagram of George (2008) discusses the Library Research Process adopted into this study.



Library Research Procedure. (Source: George, 2008: pp. 66)

Figure 1. Research Procedure Adapting George's (2018) Model as Cited in Ariantini et al. (2020)

As a library research, the data sources in this study were collected from online databases such as Semantic Scholar, Taylor & Francis Online (TANDFONLINE), Research Gate, and Education Research Information Center (ERIC). Some keywords were used to get the data, namely "the benefits of bilingual", "the benefits of bilingualism", and "the advantages of bilingualism". From the online databases and the keywords, this study found research findings from previous studies that are open source. The research findings from the previous studies were used to answer the research questions that concern the benefits of being bilingual. Thirty-five articles published from 2016 to 2020 were selected to answer the research questions. Thirty-five were open source articles published in reputable national journals accredited by the Science and Technology Index (SINTA) and international journals accredited by Scopus, and published between 2016 to 2020.

The data was collected by carefully reading the thirty-five articles to answer the research questions. From the data sources of thirty-five articles, the research findings and discussions were noted and summarized to know the detailed information to know the benefits of being bilingual. Data analysis was carried out in this study by synthesizing similar findings and comparing different details. The results from previous studies were then translated into arguments about the cognitive benefits of being bilingual, the benefits of being bilingual in problem-solving, the language development and communicative benefits of being bilingual, the benefits of bilingualism in academics, the benefits of bilingualism in cultural awareness, and the benefits of bilingualism on aphasia, dyslexia, and Alzheimer's disease. The findings were then developed into a draft research report in the form of articles, which were then revised based on the understanding of reading the findings of the previous studies and suggestions from reviewers and colleagues.

FINDINGS AND DISCUSSION

The debate over the effects of bilingualism is likely to continue. But as time passes, more and more studies prove the many benefits of being bilingual. The data sources in this study are from previous studies from 2016 until 2020. Empirical evidence of the benefits of being bilingual can be seen in cognitive development, problem-solving, language development, communicative competence, academic or educational performance, cultural awareness, aphasia and dyslexia recovery and also can delay Alzheimer's disease. The results of reading the thirty-five articles are summarized in the research mapping the benefits of being bilingual.

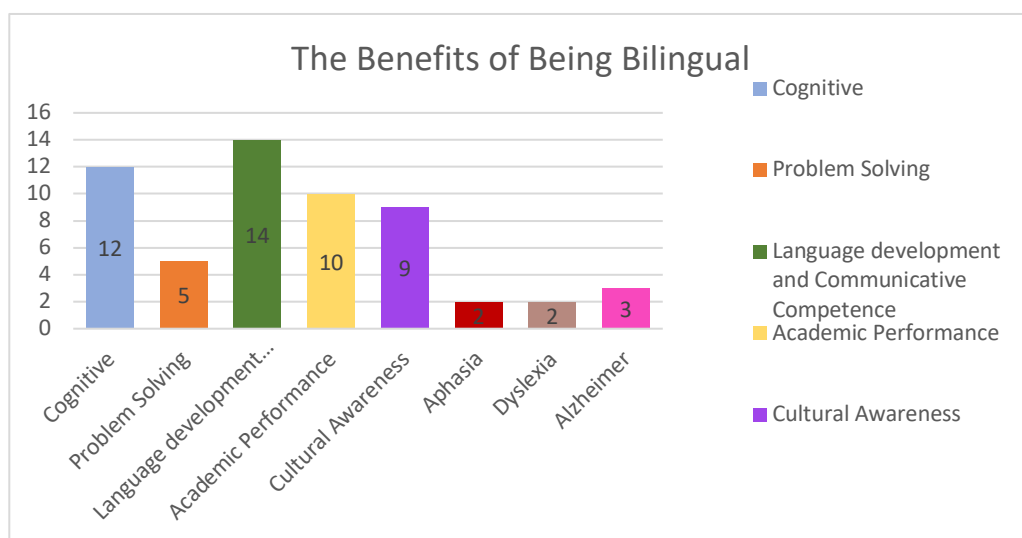


Figure 2. The Benefits of Being Bilingual

Benefits of being bilingual in cognitive development

There are many advantages that people can get from being bilingual. Being bilingual gives a lot of benefits. According to Al-Shujairi, Buba, & Ya'u (2016), Garrity et al. (2016), Blom et al. (2017); Franziska (2017), Chibaka (2018), Tabori et al. (2018); Antoniou (2019); Daubert & Ramani (2019); Nickels et al. (2019); Zeng et al. (2019); and Chamorro & Janke (2020), one of the benefits of becoming bilingual is having cognitive development. Individuals who become bilingual have better cognitive abilities, cognitive control, as well as cognitive development than monolingual individuals (Al-Shujairi et al., 2016; Garrity et al., 2016; Chibaka, 2018; Tabori et al., 2018; Antoniou, 2019; Noort et al., 2019; Chamorro & Janke, 2020). This is because bilingualism affects brain regions that regulate cognitive control.

Nickels et al. (2019) found that the benefit of being bilingual is having a cognitive reserve, defined as the ability to perform a task properly by effectively using the available brain reserves. Increased cognitive reserve is associated with education, literacy, musical skills, general intelligence, physical activity, and increased social networking capabilities. Bilingualism creates a mechanism that is more flexible cognitively applied to the temporal domain and extends to cognitive control processes in social categorization (Nickels et al., 2019; Pransiska, 2017). Bilingual people have better cognitive abilities than monolingual people, as evidenced by experiments in which students who have received foreign language instruction scored higher on tasks involving evaluation, which is the highest cognitive skill, than students who did not receive foreign language instruction (Chibaka, 2018; Blom et al., 2017). Bilingual experience impacts the cognitive ability to selectively allocate attention resources, especially in cognitively demanding tasks or efforts involving conflicting information (Zeng et al., 2019). In addition, bilingual children showed increased cognitive skills and social awareness relative to monolingual children. This can be seen from the results after one year of primary education, where children who attend bilingual education (English-Spanish education) score significantly

higher than monolingual children in terms of cognitive (selective and responsive) and social skills (communication and cooperation) (Chamorro & Janke, 2020). It can be seen that bilingualism can promote healthy cognitive ageing more globally.

Benefits of being bilingual in problem-solving

Bilingual people have better problem-solving (Chamorro & Janke, 2020) because their bilingual exposure gives them multiple perspectives on the problem at hand and better critical thinking skills (Chibaka, 2018; Akgul et al., 2017). Bilingual individuals have better problem-solving abilities, because their bilingualism exposure provides them with multiple perspectives on the problem and better critical thinking skills. It was found that performance was better for bilingual children with two language experiences than for monolingual children on the measure of verbal and non-verbal intelligence (Nickels et al., 2019). This is because bilingual people have the flexibility to ensure that their language is appropriate for every spoken interaction. Bilingual people quickly choose the right word, the right sound, the correct grammar and the correct delivery when interacting with someone. Being bilingual results in changes in the neural organization of the brain (Kroll & Dussias, 2018; Nickels et al., 2019), which is well-proven that the brain has what is known as experience-dependent plasticity that aids bilinguals in problem-solving. In other words, the bilingual brain has more cognitive flexibility that helps them solve better. It can be concluded that bilingual people have good abilities in problem-solving and decision-making. This is because bilingual people are able to process information better and more thoroughly.

Benefits of being bilingual in language development and having communicative competence

Being bilingual is found to have a positive influence on language development and language skills (Wallner, 2016; Akgül et al., 2017; Blom et al., 2017). Understanding the structure of two languages makes it easier for bilinguals to communicate. Bilingual people will be more sensitive in developing the two languages they are learning and some of the pragmatic aspects of the two languages. Bilinguals can easily distinguish two different grammatical systems well, making it easy to switch both languages (Suek, 2017). Bilingual speakers will usually become literate, where they have developed language skills needed to read effectively in both spoken languages (Wallner, 2016; Mulyani, 2017). Akgül et al. (2017) add that being bilingual is capable of developing communication skills, self-confidence, broad vision, useful for professional life and being a global citizen. Bilinguals, especially early active bilinguals, tend to have greater gains in their higher language skills. Bilingual experiences influence how children direct their attention to the environment and understand differences in sociolinguistic settings (Blom et al., 2017).

When bilinguals communicate with other bilinguals, they have the flexibility to choose the language to use and can switch languages quickly. Akgül et al. (2017), Suek (2017), Pransiska (2017), Nickels et al. (2019), and Alqarni & Dewaele (2020) found that another advantage of being bilingual is when bilinguals communicate with other bilinguals, they have the flexibility to choose the language to use and can change languages quickly. This is called language switching. Not only does language switching occur in spoken language, but it can also occur in informal writing such as e-mails, messages and texts (Bautista, 2004 in Nickels et al., 2019). Language switching is a skill of a speaker who is very proficient in two languages (Nickels et al., 2019; García et al., 2018). Bili (2017) adds that the reasons for switching languages depend on some points of view like grammar, psycholinguistics, sociolinguistics, pragmatics perspectives, and the acquisition process. The benefits of being bilingual make it easier for bilingual people to understand language learning, which will be very helpful in learning another language (Worp et al., 2017). It can be seen that bilinguals can have good

communicative competence in using two languages. Bilinguals can develop a stronger awareness of emotional communication than monolinguals because they are aware of the different emotions that are communicated in the two languages (Alqarni & Dewaele, 2020)

Bilingual children have benefited from comfortably making new friends with everyone. That's because they can use their second language and can communicate with more people because they can speak more than one language (Akgül et al., 2017; Pransiska, 2017; Nickels et al., 2019; Alqarni & Dewaele, 2020). This will be very useful and helpful for bilingual people globally. Chibaka (2018) and Kalashnikova, Pejovic, and Carreiras (2020) also state that being bilingual makes people understand linguistics and have communicative competence. The bilingual experience fosters linguistic competence in a variety of verbal tasks in life; the use of bilinguals enables bilinguals to develop proficiency, better language sensitivity, and deeper understanding and control over their mother tongue and their second language (Chibaka, 2018). This causes bilinguals to have better communication skills. In a study conducted by Garitty et al. (2016), 94% of people agreed that a person with a high level of bilingualism can produce better speaking skills, which make practical career-related advantages and create additional job prospects.

Benefits of being bilingual in academic or educational performance

Being bilingual also gives one the ability to increase academic or educational performance. Pransiska (2017) and Akgül et al. (2017) found that children raised in a bilingual environment have better focus and learning competencies than monolinguals when doing assignments. This ability enables bilingual people to concentrate better. Bilingual children showed academic improvement in their learning process where they performed better when doing addition and number identification tasks (Daubert & Ramani, 2019). Bilingual children outperform monolinguals in several areas of mathematical understanding, namely, adding and identifying numbers (Daubert & Ramani, 2019). On the other hand, monolinguals and bilinguals show equality in the comparative assessment of symbolic and non-symbolic quantities. Bilingual children have academic development simultaneously throughout their learning development. People who learn a second language before age five and those who are capable in their second language have strong brains (Pransiska, 2017). In other words, a bilingual brain is a stronger brain.

The resulting study by Chibaka (2018) and Altman, Goldstein, & Armon-Lotem (2018) also found that comparison of performance on measures of cognitive development shows that bilinguals will easily achieve higher scores on tests of creativity, metalinguistic awareness, and reading achievement. Bilinguals are proven to be more creative and precise in terms of their ability to think flexibly. Knowledge of a second language also leads to higher academic achievement than monolinguals because the previous foreign language experience of bilinguals puts them at an advantage in learning another language, which can help bilingual people improve their ability to learn and remember English vocabulary better (Chibaka, 2018; El-Dakhs & Altarriba, 2019).

Bilingualism relies on lexical metalinguistic awareness, which can acquire and understand new words quickly (Altman et al., 2018). Bilingual people performed much better than monolingual people, it is because bilinguals have the best performance recorded on the language assignment produced by the bilingual whose language of instruction was English. It can also be seen from the study that conducted by Zhang (2018) bilingual people outperform monolingual people after a shift from examining the effects of bilingualism on language-related tasks to focusing on cognition, and most of the tasks that demonstrated the superiority of bilingualism were seen as markers of executive functioning, the processes involved with mental control and self-regulation for achieving goals.

In the academics of bilingual people, speaking more than one language can open up great opportunities for children in their education and to enter their favourite universities later on (Pransiska, 2017; Worp et al., 2017). In Indonesia, for example, entering a good university requires a requirement to pass a language test, especially an English test. Being bilingual also creates additional job prospects. This is supported by the finding of Gandara (2018), which states that bilingual employees will usually be indispensable in the world of work, where they will be the key to communicating with customers who use one of the languages they speak. This causes bilingual employees to be very valuable to the world of work so they will be given promotions more often, and their jobs are safer than others.

Benefits of being bilingual in cultural awareness

These findings imply that being bilingual early in life significantly changes the brain's human structure. Bilingual people also can learn a new culture through language (Wallner, 2016; Pransiska, 2017; Akgül et al., 2017; Chibaka, 2018; Butvilofsky & Gumina, 2020). It can be seen that they automatically learn the culture in learning the language. Bilingual education is mastering two languages and recognizing and teaching bilingual and bicultural students. A bilingual learning environment opens up space for students to be aware of existing culture (Abduh & Rosmaladewi, 2018; Butvilofsky & Gumina, 2020). Bilingual has a positive attitude and respect for other cultures and groups as well.

People from different cultures have been found to pay attention to different types of emotional cues. Being bilingual can automatically develop a more metalinguistic and metapragmatic awareness of cultural and linguistic differences (Alqarni & Dewaele, 2020). The way bilingual people express their emotions using a first and second language allows them to outperform monolingual people in English emotion recognition. In addition to identifying themselves as bilingual, bilingual people can learn to identify other people from the language used to get to know their culture (Samuel et al., 2018; Butvilofsky & Gumina, 2020). Bilinguals who have cultural awareness help them to have access to both cultural communities help them improve their social competence skills (Chen & Padilla, 2019). This implies that bilingual people can be multicultural and respect the cultures of others. Being bilingual can help them to become aware of and know the language and culture. The insight and knowledge of bilingual people about the world is getting wider.

The health of benefits of being bilingual

There are also health benefits of being bilingual. The benefits of being bilingual can help with the recovery of aphasia and dyslexia and delay Alzheimer's disease. Lahiri et al. (2020) investigated the severity of post-stroke aphasia among bilingual patients compared with monolingual patients to check the effect of bilingualism on aphasia recovery during the early poststroke phase. Lahiri et al. (2020) found that the chances of recovery are higher for bilinguals than in monolingual patients. The percentage of recovered patients was bilingual patients who showed better recovery than monolingual patients (Chibaka, 2018; Laheri et al., 2020). Bilingual participants experienced better aphasia recovery. It can be concluded that a bilingual has a fast recovery. Yet, the effects of bilingualism on recovery of aphasia can vary depending on the particular type of bilingualism (Lahiri et al., 2020).

Meanwhile, in their study, Vender, Hu, Savazzi, Delfitto, and Melloni (2018) found an advantage of bilingualism in dyslexia. They found a positive effect of bilingualism that compared monolingual and bilingual children in a task assessing their morphological skills. Vender et al. (2018) did a study with 106 children participants of Dyslexic children (according to WHO standard criteria) who were recruited from clinical speech centres or public schools in the Trento and Verona areas in Italy. After a test, it was found that bilingualism had positive effects in children with dyslexia. Bilingual dyslexia consistently performs better in dyslexia

than monolingual dyslexia, and also, bilinguals can transcend one language, as in the most difficult conditions for a child to appear one language without distraction. Monolingual dyslexia children who were underperforming and made more mistakes than Bilingual Dyslexia children. The result of Vender et al.'s study (2018) was supported by Lallier, Thierry, Barr, Carreiras, and Tainturier (2018), who also found a positive effect on the initial bilingual reading experience has a long-term effect on manifestations of dyslexia in adulthood. Another finding concerning the advantages that bilingualism provides is that bilingual children, both dyslexic and controls, performed significantly better than monolinguals in the pluralization of words with a vowel ending in - e. The other results showed the general positive effect of bilingualism in the production of a widespread non-word inflexion of plural nouns. In addition, the result also showed that bilingual dyslexia was endowed with better morphological abilities than monolingual dyslexia (Vender et al., 2018; Lallier et al., 2018).

Chibaka (2018) in his study also found that research conducted on patients with dementia or Alzheimer's disease in memory clinics, using measures of the decline in the Mini-Mental State Examination (MMSE) score, as recorded in the four years range from the date of diagnosis, indicated that there was a significant delay in the symptoms of old age dementia recorded in bilingual, which on the other hand manifested more rapidly in monolinguals than in bilinguals. In addition, Antoniou (2019) found that language can change the brain's structure and the networks that follow various cognitive processes. Investigations for the presence of biomarkers of Alzheimer's disease in cerebrospinal fluid in bilingual versus monolingual show that bilingualism reduces the incidence of preclinical Alzheimer's disease (Antoniou, 2019; Paulavicius, 2020). The superiority of bilinguals in executive functioning has been reported in children. Bilingual children perform better executive functions than monolingual children, which is attributed to the demands that bilingualism places on brain networks and the structures within them that serve as the general executive sub-domain.

CONCLUSION

From the results and discussion above, it can be concluded that being bilingual has many benefits. There has been a great deal of research into bilingualism over the years. Many studies have found various benefits of being bilingual, which means being able to speak more than one language. Based on the findings in this study, the benefits of being bilingual can be seen in cognitive development, problem-solving, communicative competence, academic or educational performance, cultural awareness, aphasia recovery, and delaying Alzheimer's disease.

This study is expected to serve as a reference for other researchers who conduct similar studies which are about the benefits of being bilingual, and other researchers are suggested to explore deeply a phenomenon related to bilingualism, especially bilingualism in Indonesia. This is because there are still few studies on bilingualism in Indonesia. Moreover, this study only gives evidence in terms of the benefits of being bilingual in general by reviewing previous studies. However, the present study has a limited selection of studies included in library research, where older studies might not reflect the most recent understanding of the field. Future studies might be directed toward cross-cultural comparison to assess bilingual benefits across different cultures.

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