

The Power of Bilingualism in Developing Children's Cognition

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Abstract

Bilingualism is the ability to speak two languages. Although it may cause minor language proficiency delays, I argue that bilingualism is extremely beneficial for children because it boosts metalinguistic awareness, enhances task switching abilities, and expands communication skills. Bilingualism boosts children's metalinguistic awareness because it enables children to compare and contrast various linguistic aspects. In addition, bilingualism contributes to enhancing children's task switching abilities arising through their frequent code-switching practices. Furthermore, bilingualism expands children's communication skills as they are more exposed to communicating with individuals that have multiple backgrounds. Bilingualism also has other benefits including long-term effects on children's development because it increases children's cognitive stability, cultural diversity, and future job opportunities. This paper is important because it helps share awareness not only within bilingual societies but also in monolingual societies. By clarifying the myths surrounding bilingualism, this paper contributes to cultivating a more informed society that embraces linguistic diversity.

Keywords: Bilingualism, simultaneous bilingualism, bilingual children, child cognition, cognitive development

The Power of Bilingualism in Developing Children's Cognition

In this paper, I argue that bilingualism improves children's cognitive development. I define bilingualism as a second language acquired by children during their earlier developmental phase. According to Byers-Heinlein and Lew-Williams (2013), around a quarter of the global population acquire at least two languages. Considering this large population, bilingualism is significantly common and acceptable across various societies. However, researchers are still conducting studies and collecting data to assess whether bilingualism is effective and beneficial for children. The upcoming information provides readers with a deeper insight into the benefits of bilingualism as well as the potential disadvantages it may cause.

I support my position on bilingualism with the following four arguments. First, bilingualism improves children's metalinguistic awareness. Bialystok and Barac (2012) suggest that bilingual children demonstrate improved metalinguistic awareness caused by the continuous necessity of concentrating on multiple aspects of two languages during learning. Second, bilingualism improves children's communication skills. According to Liberman et al., (2017), the frequent exposure of bilingual children to multiple linguistic environments lessens the possibility of them having miscommunications. Third, bilingualism sharpens children's task-switching skills. Prior and Macwhinney (2009) report two studies that provide evidence on bilingual children's mental flexibility that enhances their task switching skills. Finally, bilingual children have significant long-term benefits. Ljungberg et al., (2013) conducted a longitudinal study revealing that bilingual individuals, across diverse age groups, consistently outperform monolingual individuals in certain memory-related tasks.

I also considered three opposing views to my position. First, some people argue that acquiring a second language can cause children confusion (Hoff & Core, 2013). Second, others insist that bilingualism restricts children's first language proficiency (Iluz-Cohen &

Armon-Lotem, 2013). Third, many argue that acquiring a second language also results in vocabulary delay within both languages (Bialystok et al., 2010). I show that the claims above have some validity, but they may not be considering the broader understanding of this matter. For instance, bilingual children may have a smaller vocabulary in each language compared to monolingual children, but their combined vocabulary can be equal to or greater than that of a monolingual child (Bialystok et al., 2010).

This paper is important because it addresses an array of questions that may facilitate our understanding of bilingualism. These questions include “How does bilingualism improve children’s cognitive development,” “Why should parents consider the benefits of bilingualism when acquiring a second language on their children’s cognitive development,” “What is the difference in cognitive development of bilingual children compared to monolingual children,” and “What are the short-term and long-term benefits of bilingualism for cognitive development in children.” Through addressing these questions, the goal of this paper is to help reduce the myth or stigma attached to bilingualism and encourage parents to consider the benefits following bilingualism.

Negative Impacts of Bilingualism on Children’s Cognition

Some people argue that bilingualism generates negative impacts on children’s cognitive development. For example, people claim that bilingualism can cause their children confusion and some delays that decreases language proficiency. Additionally, many argue that acquiring two languages delays children’s vocabulary acquisition. While the strengths of these arguments need to be discussed, their possible weaknesses will be further clarified.

Confusion and Low Language Proficiency

Many parents restrict their children from acquiring two languages to protect them from perceived linguistic delay and confusion. Parents insist that this confusion is caused when children borrow words from one language to incorporate them into sentences in the

other language during communication. More specifically, as bilingual children often combine grammar rules from both languages into a single sentence (Byers-Heinlein & Lew-Williams, 2013), many people argue that children are confused and lack fluency. However, according to Isaacs (2021), this belief is mainly a myth rather than based on science. For instance, this belief has also been associated with a thought suggesting that bilingual children are prone to developing schizophrenia. Because of the widespread existence of these misconceptions, it is understandable that such concerns can often arise, particularly among parents.

This misconception surrounding bilingualism can better be described as code-switching. Code-switching is a linguistic phenomenon where bilingual or multilingual individuals switch between two or more languages within a single conversation. While code-switching depends on using words or phrases from one language in another, bilingual children can keep their languages separate when needed. Byers-Heinlein and Lew-Williams (2013) affirm that code-switching is a natural method that is used by bilingual children to express themselves when uncertain about a word in one language. This approach, according to research, shows their linguistic creativity and flexibility rather than their confusion and lack of proficiency. Byers-Heinlein and Lew-Williams have also revealed that children, regardless of their language background, have a strong capacity to distinguish between various languages. Therefore, children exposed to multiple languages from an early age have equal or higher sensitivity in recognizing linguistic variations compared to monolingual children.

Bilingualism and Vocabulary Delay

Bilingual children may experience minor delays in language development, including vocabulary acquisition, which can raise concerns among parents. Some parents worry that these delays could impact their children's linguistic abilities and comprehension skills. One reason for these concerns is that bilingual children often start speaking their first words

slightly later than children who are learning only one language (Byers-Heinlein & Lew-Williams, 2013). Another reason for these concerns is the fact that compared to monolingual children, most bilingual children have a smaller vocabulary in each language they acquire. However, when both languages are combined, the vocabulary of bilingual children will either be equal to that of the monolingual children, or even larger. (Bialystok et al., 2010; Byers-Heinlein & Lew-Williams, 2013).

Following the minor vocabulary delays discussed above, acquiring two languages does not cause harm to children's cognition. Studies by Friesen et al., (2022) indicate that bilingual children have similar conversation skills to monolingual children in terms of comprehension. In fact, the study claims that if someone uses unclear words or sentences, bilingual children are able to effectively address these challenges and repair the conversation, just like monolingual children. The authors explain the role of bilingualism in strengthening the cognitive abilities of children and lacked any evidence suggesting the negative effects of bilingualism on their cognitive development. Based on these results, it is reasonable to assume that acquiring two or more languages does not cause linguistic delays in children. On the other hand, the regular exposure of bilingual children to diverse linguistic environments and their daily practice of switching between languages contribute to their enhanced cognitive flexibility and metalinguistic awareness. As a result, bilingualism ensures developing exceptional linguistic abilities and smooth interactions with others.

Bilingualism Improves Children's Cognitive Development

Bilingualism has a wide array of benefits on children's cognitive development. Some of these benefits include the high metalinguistic awareness developed through the continuous comparison of languages. Similarly, bilingualism contributes to enhancing powerful communication skills through the daily exposure to various situations. Because of the various bilingual brain activating factors, bilingualism facilitates the development of task-switching

skills. In addition, bilingualism has many longitudinal benefits that help children succeed in later life. Although some minor problems could occur when acquiring two languages, bilingualism has multiple positive attributes that some people may be unaware of.

Enhanced Metalinguistic Awareness

Metalinguistic awareness is the linguistic ability that helps comprehend any acquired language. According to Altman et al., (2018) metalinguistic awareness is characterized by the ability to analyze the structure of language rather than focusing on the literal meaning of speech. The study's findings imply that the continuous comparison and contrast of languages enables bilingual children to develop an increased awareness of language structure, grammar, and vocabulary. Altman et al. support the fact that bilingual children exhibit a notable distinction in the level of metalinguistic awareness compared to monolingual children. Consequently, the study demonstrates the significant impact of bilingualism on the development of cognitive abilities and the acquisition of enhanced metalinguistic awareness.

In addition to the explanations regarding consequences of metalinguistic awareness, it is one of the most essential elements contributing to language comprehension. Bilingual children experience enhanced metalinguistic insights that contribute to their academic and educational success (Barac & Bialystok, 2011). Studies have further demonstrated that bilingual children evolve an enhanced ability to focus their attention on essential information by filtering out any sort of distractions ("Bilingualism in Young Children," n.d.). Because metalinguistic awareness contributes to better comprehension, it may also develop good reading and writing skills in children. Therefore, these results imply that the combination of a high level of metalinguistic awareness and the ability to filter out distractions can have a positive impact on bilingual children's performance.

Strong Communication Skills

Having strong communication skills is essential to express ourselves and understanding the people surrounding us within our social environment. In addition, communication skills are represented through both verbal and nonverbal aspects, both of which are vital to building better relationships, working effectively in teams, and presenting our ideas with clarity. However, communication skills vary among individuals based on their knowledge and life experiences. For instance, bilingual children, compared to monolingual children, enjoy numerous advantages when it comes to communication (Brojde et al., 2012). Therefore, children's exposure to two distinct languages provides them with a broader vocabulary. This wide range of vocabulary can enable them to express themselves more precisely and effectively. Being bilingual may also enable children to better understand and connect with individuals from almost all cultures (Chen & Padilla, 2019). This comprehension and connection develops a deeper appreciation for diverse perspectives. As such, bilingualism opens up a world of opportunities for children by expanding their vocabulary, cultural understanding, and creative thinking.

The cultural understanding in bilingual children enhances their communication skills and cognitive abilities. Friesen et al., (2022) demonstrate that despite the slight delay in language development compared to monolingual children, bilingual children that acquire two languages simultaneously still follow similar developmental stages in their language acquisition journey as monolingual children. Additionally, Friesen et al. indicate that children, who are fluent in two languages, previous to attending school show stronger abilities in comprehending some thoughts, desires, and intentions of the people around them compared to children who only speak one language. The research shows that bilingualism triggers various beneficial skills in children, such as communication skills, which improve their cognition abilities and enhance their brain growth.

The Development of Task Switching Skills

Task switching refers to the cognitive process of shifting attention between various tasks or activities. Therefore, bilingual children often practice code-switching that triggers the same functions in the brain as task-switching. Code-switching often comes along with translanguaging, which is the dynamic use of multiple languages with multilingual individuals. According to Song et al., (2022), translanguaging plays a vital role in improving all the benefits suggested in this paper, such as metalinguistic awareness and communication skills that generates flexible cognitive ability. The authors explain that translanguaging enhances code-switching, which makes task-switching skills more reliable and practical. Song et al., also argues that task-switching skills gained through translanguaging are constantly surpassing and developing in children that acquired two languages.

Task-switching ability plays a crucial role in children's academic performance and daily functioning. According to Wiseheart (2016), and Byers-Heinlein and Lew-Williams (2013), bilingual children, who switch between languages depending on the situation or the context, gain valuable practices that enhance their cognitive control along with task-switching flexibilities. The researchers demonstrate that these skills, developed through language switching, provide long-term benefits that can positively impact various aspects of their lives, such as multitasking, problem-solving, and adapting to changing circumstances. Indeed, these studies affirm that bilingual children tend to have superior performance compared to monolingual children in tasks that require constant switching between activities.

The Long-Term Benefits of Bilingualism

Bilingual children are prone to having a multitude of long-term benefits that extend beyond their language skills. The first longitudinal benefit of bilingualism on children's cognitive development is the strong episodic memory and brain functions. According to Ljungberg et al. (2013), bilingual individuals display distinct brain activation abilities compared to those who speak only one language. The study demonstrates some advantages

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showing enhancement in the memory processes, which are associated with activation in the prefrontal cortex among bilinguals. The prefrontal cortex is the front part of the brain that is responsible for almost all cognitive functions. According to Mendis et al., (2021), lifelong bilingualism can function as a cognitive reserve, leading to positive outcomes on memory and brain health. For example, the study indicate that bilingual individuals tend to show clinical signs of Alzheimer's disease at a later age compared to those who speak only one language. Alzheimer's disease is a commonly known brain disorder that causes memory loss and some difficulties with thinking and performing daily tasks. The authors suggest that the cognitive decline associated with aging can be prevented by bilingualism on the long-term.

Another longitudinal benefit of bilingualism on children is the advanced social life and diversity. Bilingual children's exposure to multiple languages and cultures contributes to their cultural sensitivity and appreciation for diversity, which develops a unique ability to adapt and engage with people from various backgrounds. These experiences will possibly enrich their understanding and acceptance of diverse viewpoints, beliefs, and traditions across the lifespan. Chen and Padilla (2019) argue that bilingual individuals tend to display a greater embrace of diversity, whether it be cultural or linguistic, in comparison to those who only speak one language. Chen and Padilla suggest that this form of diversity may contribute to lessening the stereotypes and biases that are spread across societies around the world. The study clarifies that bilingual children, compared to monolingual children, develop a broader worldview and gain a deeper understanding of diverse perspectives, contributing to a more inclusive and harmonious society.

In addition to these long-term benefits, the last longitudinal benefit of bilingualism is the children's increased future job opportunities. In today's workplaces, employers often seek individuals with good communicating skills, and the ability to understand the diverse range of given tasks to satisfy their customers (Bhattacharjee, 2012). These skills align perfectly

with the abilities that bilingual individuals possess, which enables them to effectively address the needs and concerns of customers from distinct cultural and linguistic backgrounds.

According to Bright and Filippi (2019), the reason that many companies seek bilingual or multilingual individuals is to create a diverse working environment. The study also suggest that diverse working environment increases business opportunities such as contracts and market shares with various companies. As such, it is evident that the ability to speak two languages or more increases the chances of getting jobs.

Recommendations

Considering all the advantages mentioned in this paper regarding bilingualism, it is clear that it benefits children's cognitive development. By exposing their children to multiple languages from an early age, parents can enhance their children's cognitive abilities and contribute to an improved quality of their life. In addition to these cognitive advantages, bilingualism fosters cultural and societal understanding. In today's world bilingualism is important because the majority of the population are either bilingual or multilingual (Gratton, 2023). Thus, by raising bilingual generation that understands and appreciates various languages and cultures, parents contribute to the creation of a harmonious and diverse future society.

Although exposing children to multiple languages is beneficial, following certain steps may result in better language acquisition and comprehension. Therefore, in order to effectively raise bilingual children, parents could consider specific rules and strategies. One popular strategy is the (OPOL) "one parent, one language" method, where each parent solely speaks one language to the child (Venables et al., 2014). This method helps children differentiate between the two languages and minimizes possible confusion. Furthermore, parents could possibly benefit from expanding language exposure by incorporating multiple practices such as reading books, watching cartoons, or TV shows in both languages. Thus,

the more exposed the children are to a certain language, the more natural and proficient their language skills become. Overall, by implementing effective language-learning strategies and creating strategic language environments, parents can ensure successful bilingual acquisition for their children.

Conclusion

In this paper, I argued that bilingualism is beneficial for children's cognitive development. Both bilingualism and cognitive development play significant roles in building children's strong personalities and contributing to brain growth. One of the benefits that bilingualism delivers to children is enhanced metalinguistic awareness. Another benefit is the development of strong communication skills from an early age. Task-switching skills is also a possible benefit caused by one of the habits generated through bilingualism. Bilingualism, in addition to these benefits, has other multiple longitudinal benefits that supports children's future.

Despite the advantages it has, bilingualism still has a small range of concerns from parents and some other individuals. On top of that, some people assist that bilingualism causes confusion and leads to errors that could affect children's language fluency and proficiency. However, these concerns do not contribute to any harmful consequences on children. Research suggests that bilingualism increases children's ability to comprehend and differentiate between distinct languages compared to monolingual children. As such, many people argue that bilingualism causes vocabulary delay in children. Despite the fact that this argument has some validity, bilingual children compared to monolingual children have at least the same number of acquired words in both languages combined.

There are two recommendations for parents to consider when teaching their children two languages simultaneously. First, parents should consider the (OPOL) method, where each parent exclusively speaks one language to their child. This approach will protect their

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children from the possible linguistic confusion. Second, parents may consider implementing some practices into their children's daily routine. Examples of such practices involve reading bilingual books, and watching either bilingual cartoons or TV shows. Thus, these practices will expand children's language exposure and improve their linguistic skills. Collectively, these recommendations will foster a sense of identity and linguistic confidence in children, which in turn may increase their cognitive development.

Although research shows the positive impact of bilingualism, there will always be people opposing the idea of simultaneously acquiring two languages. Individuals should consider reading and learning more about bilingualism and understanding both its positive and negative consequences. Thus, this paper serves to educate and inform readers about the importance of bilingualism and encourages parents to consider the cognitive benefits of raising bilingual children. Overall, the information provided in this paper will help individuals, particularly parents, reduce the possible stigma surrounding bilingualism and gain more awareness regarding the topic.

References

- Altman, C., Goldstein, T., & Armon-Lotem, S. (2018). Vocabulary, Metalinguistic Awareness and Language Dominance Among Bilingual Preschool Children. *Psychology of Language*, 9. <https://doi.org/10.3389/fpsyg.2018.01953>
- Barac, R., & Bialystok, E. (2011). Cognitive development of bilingual children. *Language Teaching*, 44(1), 36-54. <https://doi.org/10.1017/S0261444810000339>
- Bhattacharjee, Y. (2012). Why bilinguals are smarter. The New York Times, 17(03), 201-220. https://www.wis.edu/uploaded/Admissions/Dual_Language.pdf
- Bialystok, E., & Barac, R. (2012). Emerging bilingualism: Dissociating advantages for metalinguistic awareness and executive control. *Cognition*, 122(1), 67-73. <https://doi.org/10.1016/j.cognition.2011.08.003>
- Bialystok, E., Luk, G., Peets, K. F., & Sujin, Y. A. N. G. (2010). Receptive vocabulary differences in monolingual and bilingual children. *Bilingualism: Language and cognition*, 13(4), 525-531. <https://doi.org/10.1017/S1366728909990423>
- Bilingualism in Young Children: Separating Fact from Fiction.*
(n.d.). [https://www.hanen.org/helpful-info/articles/bilingualism-in-young-children--separating-fact-fr.aspx#:~:text=Bilingualism%20causes%20language%20delay.,child%20\(10%2C%2015\).](https://www.hanen.org/helpful-info/articles/bilingualism-in-young-children--separating-fact-fr.aspx#:~:text=Bilingualism%20causes%20language%20delay.,child%20(10%2C%2015).)
- Bright, P., & Filippi, R. (2019). Perspectives on the “bilingual advantage”: Challenges and opportunities. *Frontiers in Psychology*, 10, 1346. <https://doi.org/10.3389/fpsyg.2019.01346>

Brojde, C. L., Ahmed, S., & Colunga, E. (2012). Bilingual and monolingual children attend to different cues when learning new words. *Frontiers in Psychology*, 3, 155.

<https://doi.org/10.3389/fpsyg.2012.00155>

Byers-Heinlein, K., & Lew-Williams, C. (2013). *Bilingualism in the Early Years: What the Science Says*. PubMed Central (PMC).

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6168212/>

Chen, X., & Padilla, A. M. (2019). Role of bilingualism and biculturalism as assets in positive psychology: Conceptual dynamic gear model. *Frontiers in psychology*, 2122.

<https://doi.org/10.3389/fpsyg.2019.02122>

Friesen, D. C., Schmidt, K., Atwal, T., & Celebre, A. (2022). Reading comprehension and strategy use: Comparing bilingual children to their monolingual peers and to bilingual adults. *Frontiers in Psychology*, 13, 986937.

<https://doi.org/10.3389/fpsyg.2022.986937>

Gration, E. (2023). How many people are bilingual? Which US states speak the most languages? Discover many Bilingualism statistics, facts & figures in 2022 from the US, UK & worldwide. *Bilingualism in 2022: US, UK & Global statistics*.

<https://preply.com/en/blog/bilingualism-statistics/#:~:text=However%2C%20current%20estimates%20predict%20that,more%20than%20one%20language%20fluently.>

Hoff, E., & Core, C. (2013). Input and Language Development in Bilingually Developing Children. *Seminars in Speech and Language*, 34(04), 215–226. <https://doi.org/10.1055/s-0033-1353448>

- Iluz-Cohen, P., & Armon-Lotem, S. (2013). Language proficiency and executive control in bilingual children. *Bilingualism: Language and Cognition*, 16(4), 884-899.
<https://doi.org/10.1017/S1366728912000788>
- Isaacs, D. (2021). Bilingual children. *Journal of Paediatrics and Child Health*, 57(3), 316–317. <https://doi.org/10.1111/jpc.15051>
- Liberman, Z., Woodward, A. L., Keysar, B., & Kinzler, K. D. (2017). Exposure to multiple languages enhances communication skills in infancy. *Developmental science*, 20(1), e12420. <https://doi.org/10.1111/desc.12420>
- Ljungberg, J. K., Hansson, P., Andrés, P., Josefsson, M., & Nilsson, L. G. (2013). A longitudinal study of memory advantages in bilinguals. *PloS one*, 8(9), e73029.
<https://doi.org/10.1371/journal.pone.0073029>
- Mendis, S. B., Raymont, V., & Tabet, N. (2021). Bilingualism: A global public health strategy for healthy cognitive aging. *Frontiers in Neurology*, 12, 628368.
<https://doi.org/10.3389/fneur.2021.628368>
- Prior, A., & MacWhinney, B. (2010). A bilingual advantage in task switching. *Bilingualism: Language and cognition*, 13(2), 253-262.
<https://doi.org/10.1017/S1366728909990526>
- Song, J., Howard, D., & Olazabal-Arias, W. (2022). Translanguaging as a Strategy for Supporting Multilingual Learners' Social Emotional Learning. *Education Sciences*, 12(7), 475. <https://doi.org/10.3390/educsci12070475>
- Venables, E., Eisenclas, S. A., & Schalley, A. C. (2014). One-parent-one-language (OPOL) families: is the majority language-speaking parent instrumental in the minority language development?. *International Journal of Bilingual Education and Bilingualism*, 17(4), 429-448. <https://doi.org/10.1080/13670050.2013.816263>

Wiseheart, M., Viswanathan, M., & Bialystok, E. (2016). Flexibility in task switching by monolinguals and bilinguals. *Bilingualism: Language and Cognition*, 19(1), 141-146.

<https://doi.org/10.1017/S1366728914000273>