## Critical Period Success

## Thesis

Acquiring a second language during the critical period of ages $0-12$ offers several distinct advantages, therefore parents should immerse their children in a second language as early as possible.
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## Intro

The global world of the $21^{\text {st }}$ century requires a multitude of languages just to have everyday interactions. Talking with people halfway around the globe has become a common occurrence. Nahoko Collis, a Japanese teacher in Rhode Island, mentioned that learning a language earlier in life is an indispensable skill that can undoubtedly be carried on through adulthood. Having immediate access to more than one language allows for a broader audience and a better understanding by the listener and speaker. It has become clear that acquiring a second language during the critical period of ages $0-12$ offers several distinct advantages, therefore parents should immerse their children in a second language as early as possible.

Becoming bilingual as a child opens the door to a myriad of advantages that would not otherwise be possible. Overall, bilingualism leads to success, and that success comes from being able to acquire a job more easily than a monolingual person. Later on in life, it is easier to reach more people to make the company prevail over the competition. The benefit in brain function comes from exercising the brain by switching between languages. Finally, bilingualism in
children leads to an easier understanding and use of the second language. Learning during the critical period allows for quick and accurate acquisition.

## Background

To truly understand the importance of bilingualism at an early age, knowing the term "critical period" is essential. The critical period is the time, usually before age eleven, when a person can learn a second language and have virtually no accent (Nora). Young learners will pick up the language extremely quickly, as well. This is largely the result of children having less anxiety about learning the language. They do not get embarrassed and can speak easily in front of a group, all for the sake of learning. The experience acquired from learning another language is more important than being perfect, so children are not often concerned with embarrassment.

Still, one of the more prevalent difficulties with learning a second language is anxiety. The different types of anxiety that may occur (both inside and outside a classroom) include test anxiety, fear of negative evaluation, and communication apprehension (Gursoy, 830). With test anxiety, although the child may know the language well enough to speak it informally, on tests they second guess themselves and overthink the rules they have learned. It is especially true with those only learning a language in a classroom. Research conducted at the University of Illinois suggests that those who arrive in the United States at a younger age do better on English grammar tests (Johnson, 78), and as their age increases, people do progressively worse on the same tests. This could be attributed to the test anxiety becoming more of a problem with age.

Fear of negative evaluation at any age consists of not wanting to talk in front of others and not wanting to practice. Embarrassment is a large factor in why language students do not practice a their new language as much as they should. This is especially true with adults
because they are too concerned with reputations and how others view them. Dr. Nora stated, "Everyone has some fear of evaluation, but it's less with [children]." For them, the experience of making mistakes and being corrected is an accepted part of the journey of learning a language.

Normally, children are simply better able to absorb a second language than adults. Being able to pick up a second language extremely quickly can be the result of children's more malleable brains (Johnson). They can find a way to make the sounds of words more natural in conversation, and they can find it easier to pick up a second language in the first place compared to adults all because their brain has not fully closed the door to language.

People from different backgrounds live together everywhere in the world. They speak different languages and have different religions and cultures. Traveling abroad and trying to learn from the people who represent a new life style can be hard without the knowledge of their language. It is an unavoidable part of life that groups of people will be unique in their ways and someone will want to figure out the factors affecting their culture. Knowing that other language, children will be more prepared than someone else for travel, work, and life in general. In today's society, a second language for a child will be more beneficial in the long run than a diploma alone used to be.

## Section 1: The Brain

Language is often thought of as something used only to communicate with others. It may be surprising, but language can help more than just one's social life. One distinct advantage of knowing a second language is how it affects the body.

A child's brain is much more flexible than an adults' because, "having reached its adult values by puberty, [the brain] has lost the plasticity and reorganizational capacities necessary for acquiring language," (Johnson). This means that it is harder to learn a language after the critical period. The adult brain is set, and the old saying, "old dogs can't learn new tricks," becomes very real. This is not to say that it isn't impossible, but it is much harder for the brain to acquire language proficiently after puberty.

Early acquisition has many advantages for the brain. A study through the International Journal of Bilingualism found that, "since [early multilinguals] seem to develop distinct phonological representations early in life, the control of phonological recall processes may be less important in these participants," (Wattendorf, 60). The participants in the study who learned a second language earlier in life needed less of their brain to distinguish between the phonology, or sounds, of either language. Overall, it takes less work to recognize and produce sounds if a second language is acquired during the critical period. This means that the second language comes more naturally to the children who learn it during the critical period. The language is easier for them to formulate in their heads and use in real life situations, like in conversations with native speakers.

Language helps in more than just in social situations. People who know and speak two languages have the benefit of increased brain health. In bilingual people, the onset of dementia, for example, was found to be delayed by 4.5 years compared to monolingual people (King, 1). This is thought to happen because in a bilingual person there is the need to switch from one language to another, and that encourages plasticity. It does not matter whether a person speaks more than two languages, however, because the process reaps the same results as it would in a bilingual person, nothing more. Moreover, research has found that in bilingual people, "the
probability of being later free on CIND increased up to 4 times," (Perquin, 5). CIND is a cognitive impairment that isn't dementia. Compared to the reduced risk of dementia, reduced risk of CIND goes up with each language actively practiced, and plateaus only after four languages. Moreover, the younger that a person acquired more than one language, the better the protection against CIND.

Language is integral to brain health. Knowing a second language can help the brain stay young because it needs to deal with multiple tasks at once and always be ready to switch to another language. Acquiring a language at a young age helps people become less likely to develop a disease later on in life.

## Section 2: A Comparison

Research conducted at the University of Illinois suggests that those who arrive in the United States at a younger age, and whose first language is not English, do better on English grammar tests later on. As the subjects' ages increase, they tend to do progressively worse. For example, those who arrived in the United States between the ages of 3-7 got an average score of nearly 270 on the English test. This is very close to the score that native English speakers got. As subjects' age upon arrival to the United States became older, subjects did progressively worse on the test. Those who arrived between the ages of 17-39 only got an average score of 210 (Johnson, 79). If children, who are less concerned with correctness and more concerned with getting their point across, can do better on a grammar test than adults, who are often too concerned with correctness, then it shows that children pick up languages more easily, as long as they use the language. This is not to say that no adult can learn English grammar and get a score
of 270 (Johnson, 79). It is possible, but it is more common for it to be the children with the higher scores.

The critical period is the time when the brain is most accepting of a new language. This simple fact gives children the edge over adults. With more pliable brains that denote virtually no accent, children are powerhouses when it comes to language acquisition. Once they are out of the critical period, though, they lose their advantage, and researchers at the University of Illinois stated that, "for adults, later age of acquisition determines that one will not become...near-native in a language," (Johnson, 81). Those who have trouble speaking a language even near natively have a stigma surrounding them that they are not as good, or that the form of the language they speak is second rate.

There exists the theory that adults can learn another language more effectively than children can. Dr. Nora, who promotes second language acquisition at an earlier age, said that it is a myth that adults cannot learn another language as well as children can (Nora). There are, of course, the people who have successfully learned a language after the critical period and therefore demonstrate that it is possible to learn a second language after the critical period. These adults, however, often use technology and programs specifically designed for adults' use. Some include iPhone apps like Mirai Language, or software like Rosetta Stone. In comparison, learning a second language as a child means that the need for expensive programs, apps, and classes is essentially eliminated. The only necessary ingredient is someone to frequently speak to the child in another language. The need for outside assistance is a hindrance when compared to the need only to listen to another human to pick up a language.

Just because it is possible to do something later in life does not mean that it is the best option. Learning a second language as an adult can be expensive, time consuming, and may not have the best results, while children are often able to pick up a language almost perfectly just by being exposed to it enough. In the case of language acquisition, it is easier to begin younger because of not only brain malleability, but also because less time, effort, and money is required to do so.

## Section 3: Success

People may choose to learn another language so they can speak with relatives, but language isn't only about connecting with family. It's about connecting with a culture and being able to communicate with people anywhere in the world. As we move into the future, the idea of being able to speak to a broader range of people in their own language becomes more appealing because of interactions with people from all over the world that happen every day.

Even people in the business world have begun to look into the value of a second language. In 2010 in Japan, the CEO of Rakuten, Inc. had his entire company begin to undergo "Englishnization," (Matsutani, 3), where every worker had to learn English and speak and write only English while at work. Even in meetings where everyone's native language was Japanese they were required to speak English. The CEO's reasoning for the drastic change was that English is a global language. In the expansion of the company, interaction with a wider variety of people was more commonplace. By having all of his employees speak English, he could reach more potential customers and make them feel more comfortable more easily. This could have meant a skyrocket in sales and popularity. For Rakuten, English seemed like a good place to start.

In a way, Mikitani, the CEO, was ahead of his time. The global goals he had set made it necessary that he and his company be able to communicate with a wider range of people. He knew that if his employees stuck to only Japanese, his company would suffer. No one would learn Japanese for the sake of his company, so he had to take the initiative and have his company learn to speak English instead.

This line of thinking goes both ways. If a company already utilizes English, they need people who speak other languages to communicate with the rest of the world more effectively. Companies often prefer employees who are proficient in more than one language because, "English dominance isn't guaranteed," (Berdan, 4). Then, because true fluency is better achieved in a second language if it is learned during the critical period of ages $0-12$, teaching children another language will lead to a higher level of expertise, and therefore a higher chance of getting a job over someone else.

Even without the premise of business, there is reason to learn another language. Collis said, "Language will help learners to expand their world and to gain new perspective toward the world around them." It has been suggested that schools do not prepare children to have cultural awareness or sophisticated communication and collaboration (Suarez-Orozco, 62). Language can set children on the fast track to acquiring these skills. One cannot truly be fluent in a language unless they know about the culture that comes with it. Schools are usually taught in only one language, where the student is presumably already fluent in the language and part of that culture. Language can prepare children to communicate and collaborate by giving them the opportunity to view and possibly experience a way of life other than their own, which promotes tolerance.

Opening the doors to a whole new world of experience is just the beginning of what language can do. With awareness, for example, if another language were used in a real life setting, people would be getting the full experience of an area. Culture and lifestyle can be analyzed in a depth that a translator could just never provide. Using the language of a place to read a newspaper or watch the news also makes for an even more authentic experience. There are subtleties in language that can only be recognized first hand, and the same problems aren't often covered with the same rigor in news of different languages. Expanding horizons is increasingly essential as the world leaks different cultures into each other.

## Section 4: Counterargument

There have almost always been disputes over which group-children or adults-can learn a language better, and for whom it can be more helpful. First, there is the theory that adults can learn another language more effectively than children can. Even Dr. Nora, who promotes second language acquisition at an earlier age, said that it is a myth that adults cannot learn another language as well as children can (Nora). Again, Anne Merritt explained that children and adults have different levels at which they are considered fluent (Merritt, 9). There is a supposed double-standard when it comes down to what fluency actually is, but as children learn their second language, and continue to speak it, their vocabulary grows just as it did in their first language. The double standard begins to disappear as the children reach adult age. As the children grow, so does their vocabulary. Each year that passes, children speaking any language are held to a higher standard vocabulary and grammar-wise until they reach adulthood. Starting learning a second language at a younger age means that children need more time to progress.

Next, accents are usually included in the measure of how well a person can speak a language. This, however, does not directly relate to fluency (Merritt, 7). So, although children can learn a language without the accent, as long as the adults can be understood, it is said to not matter. Then, taking into account the fact that adults already know how their native language works-including its sentence structure and verb conjugations-it becomes clear that being an adult and learning a second language is not so awful. The advantage, however, still lies with the children. Because accents are usually included in measures of fluency, there is a stigma against those without the proper accent. The children who learn during the critical period are the ones who are taken more seriously by the general public because, without accents, they look like they are more knowledgeable in the language than their competitors are.

There is also the mentality that, "This is America, so you had better learn English!" This mindset may have passed as valid in the past, but it must be understood that America is diverse and the world has become global. As demonstrated in Coca Cola's Super Bowl XLVIII commercial, the United States has a unique diversity; it is a melting pot of different religions, cultures, and therefore languages (Coca-Cola). Protesters were rampant, however, and made a point that they were uncomfortable with English not being dominant. They must realize that no matter how much they may oppose other languages, they exist. Companies consider people skilled in more than one language assets, and opt to hire them before someone who knows only English.

## Conclusion

Looking back at what Mikitani did for his company, it is clear that although adults can realize a second language is important, that does not necessarily mean that they can successfully
learn a second language when needed. Mikitani gave his company two years to learn English completely, but his plan fell apart. Few workers in his company had learned English by the deadline (Neeley). This could very well be the result of the employees being adults. Their brains were not as flexible and could not absorb the language as well as a child could have.

A second language learned during the critical period of ages $0-12$ produces opportunity for a child that will last a lifetime. People have a better chance at completely learning a second language as children than as adults. Children's brains are simply more receptive to language. If parents took the initiative and allowed their children to practice two languages frequently, it would be the start of their children's journey through almost endless possibilities. Jobs open up because many employers are looking to expand their reach to more people all across the globe. Brain health increases and there is less chance for disease. This allows for a better chance at survival to an old age. There are no drawbacks, either, except fear and jealousy from those without the same advantage of knowing a second language.

Home is unarguably the primary place for children to learn a new language, but school is also helpful. It makes giving children without multilingual parents the same opportunity as children who do much easier. There is more of a variety of languages to be taught, as well. There are many places, like apps, software, and classes, to learn a new language so the excuse that a parent does not know a second language to teach their child is irrelevant. It is truly in children's best interest to be bilingual, but this cannot happen without the help of their parents.

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