

THE BENEFITS OF MULTILINGUALISM TO THE ACADEMIC ACHIEVEMENTS AND COGNITIVE PROCESS

*Xolbayev F.U.*¹, *Abdurazzoqova M.O.*²

Abstract:

Multilingualism – the ability to speak fluently and understand effectively more than one language. And the people who are able to do that are called polyglots. The purpose of this article is to discuss the process of translating multiple languages in the mind from three perspectives: linguistics, psychology, and education. The researchers explore how being multilingual impact on the cognitive development, the main factors for observing numerous languages, and in the educational field, when the best time or age to learn them is. The effects and benefits to the brain, and academic performance, opportunities it may create, as well as the problems that occur are the main points of this article. Besides, emotional changes are also included, with the studies discovering how multilingualism may impact on the emotional intelligence and socio-emotions.

Key words: polyglots, multilingual, bilingual, task shifting, cognitive mechanism, metalinguistic awareness, code switching, emotions.

Introduction

The world is almost becoming one, similarly, once upon history about a hundred ages before, because of the globalization currently happening. Cultures, traditions, behaviors are being exchanged, and relationships are strengthening with the help of languages. Billions of people, researchers assume more than half of the planet, are bilingual or multilingual. The domain language in international communication and business is believed to be English due to its easy-to-learn grammar and structures. "The English language offers a rich system of communication tools, allowing the speaker or writer to choose the most suitable way to express their ideas based on the situation and intended purpose" [Esirgapov, 2024]. They switch to one language to another in one conversation or even in one sentence without too much effort, which experts usually refer to "code-switching". Code-switching is also described as "cheating" compared to sticking to one language. It is becoming increasingly normal worldwide and in fact, has multiple positive sides, such as cognitive advantage. Indeed, the act of learning languages helps the development of competencies such as tolerating ambiguity and managing emotional skills. Developing one's tolerance to ambiguity is not only useful when learning languages, however, as it has also been shown to improve performance in cross-cultural endeavours and settings, such as working environments, and to contribute to successful leadership [Herman et al. 2010; Tang, Yin, and Nelson 2010; Lee, Gettman, and Swanson 2013]. However, there are some conflicts related to bilingualism, because of abandonment of the native language, which is the reason of language extinction. Some linguists estimate that between 50% and 90% of them will be severely endangered or dead by the year 2100. The 20 most common languages, each with more than 50 million speakers, are spoken by 50% of the world's population, but most languages are spoken by fewer than 10,000 people. [Austin, Peter K; Sallabank, Julia 2011. "Introduction". In Austin, Peter K; Sallabank, Julia].

THE LINGUISTIC SIGNIFICANCE

Early exposure to multiple languages fosters an enhanced metalinguistic awareness, allowing individuals to develop a deeper understanding of language structures and facilitating the transfer of this knowledge to various domains. Research conducted by Grin, Sfreddo, and Vaillancourt (20110) highlights the positive impact of multilingualism on both individual and business economic development. Furthermore, multilingualism has beneficial effects not only on cognitive functions that are directly related to language but also on "narrow" cognitive mechanisms such as working memory, information inhibition, or task shifting [Festman et al., Reference Festman, Czapka, Winsler, Kersten and Winsler2023; Paap, Reference Paap2023]. During the observation and professionalization of a language, learners are required consistency in submitting the tasks that demand them being disciplined, and also by memorizing new words, structures, unfamiliar meanings, they work on their memory extension. Additionally, they not only acquire a valuable tool for effective communication but also gain insights into different worldviews, traditions, and perspectives. This exposure to multiple languages broadens their horizons and encourages them to embrace cultural diversity with curiosity and respect.

¹ *Xolbayev Farrux Uskanovich, Teacher of SamSIFL*

² *Abdurazzoqova Munajat Otabekovna, Student of SamSIFL*

Another research study conducted by Nicole Chang, an international freelance journalist and editor, wrote an article about this topic as a multilingual learner and provided some of the information she collected: "From research we know that as a bilingual or multilingual, whenever you're speaking, both languages or all the languages that you know are activated," says Mathieu Declerck, a senior research fellow at the Vrije Universiteit in Brussels. "For example, when you want to say 'dog' as a French-English bilingual, not just 'dog' is activated, but also its translation equivalent, so 'chien' is also activated." [BBC, Nicole Chang, 20 July 2022]. That means it significantly improves our flexibility and metalinguistic awareness.

Multilingualism provides students' confidence when it is faced various nations from diverse societies, as well as people from different backgrounds. When students embark on the path of language learning, they open doors to new connections and friendships across the globe. By mastering different languages, they gain the ability to engage in meaningful conversations, understand cultural nuances, and truly appreciate it. Language learning becomes a powerful tool for fostering global connections and promoting international mindedness.

MULTILINGUALISM'S CLINIC ADVANTAGE

It was a research study conducted by Bialystok that documented bilingualism has an extraordinary impact, which is a delay of four to five years in the onset of Alzheimer's symptoms for bilinguals relative to age and education-matched monolinguals [Bialystok, Craik, & Freedman, 2007; Perani et al., 2017]. Of course, bilingualism does not directly affect the disease, but research has shown that it does have an impact on the symptoms of the disease: a bilingual's life provides protection from the consequences of memory loss, perhaps in the same way that previous, sustained physical exercise may help a person deal with an injury. When cognitive resources are stressed by the presence of pathology, a life of bilingualism may provide the same sort of protection. Multilingualism leads to personal development and confidence. Personal development aids in gaining a variety of skills through the learning process, such as time management, problem-solving, and critical thinking [Buriboev & Umidaxon, 2024].

A recent study in India on a very large sample of patients who were diagnosed with dementia reported that there was a 4.5-year delay in the onset of symptoms for bilinguals relative to monolinguals. Most critically, the observed delay was independent of education, literacy, and other socioeconomic factors [Alladi et al., 2013, p. 1939].

THE CONNECTION WITH EMOTIONS

While some consider language is only a cognitive process, some researchers, to our knowledge, only two studies have looked beyond cognitive abilities and tested for possible emotional advantages of multilingualism so far [Alqarni & Dewaele, Reference Alqarni and Dewaele2018; Dewaele, Reference Dewaele2019]. The assumptions that bi-/multilingualism is connected to emotions are already proved, for instance, regarding its role in learning a foreign language [Derakhshan, Reference Derakhshan2022]. Yet, Alqarni and Dewaele [Reference Alqarni and Dewaele2018] found a higher emotional intelligence for multilinguals (Arabic-English) than for individuals who only spoke English.

Multilingualism does not encompass only speaking in multiple languages, but it is the capability of an all-inclusive notion that comprehends various cognitive, psychological, and affective dimensions that come with possessing this linguistic knowledge. Jessner opines that multilingualism is the individual's ability to practice more than one language, encompassing the cognitive, psychological and affective effects and experiences that accompany this knowledge [Jessner, 2008]. Multilingualism has noticeable impact to an individual's psychological development. Observing and applying several languages can shape their identity and the way they perceive the world. It might influence their self-concept, as they navigate different linguistic and cultural contexts, leading to a more nuanced understanding of their own cultural background and that of others. People often have emotional connections and attachments to languages based on personal experiences, cultural affiliations, or memories associated with a particular language.

A very popular field in research on bilingualism and multilingualism is how bilingual and multilingual people perceive and express their feelings and which languages they prefer each time [Pavlenko, 2012]. She expresses that every language has different emotional connotations and cultural emotions through languages, and native one is more automatic, than others, so a multilingual speaker is required to change their inside mentality. Thus multilingualism is not merely a practical skill of comprehending multiple languages, but a complex phenomenon that shapes the very core of an individual's cognition, psychology, and emotions.

WHEN AND HOW LEARN NUMEROUS LANGUAGES

When it comes to learning a language, it is said that the younger, the better. As the young have better memorizing and plasticity, meaning their brain can connect neurons faster and more effectively, their best age to learn a language is considered from birth to age 10. A 2018 MIT study analyzed an English grammar quiz given to more than 670,000 people of various ages who started learning English at different points of their

lives. The study found that the optimal time to learn a language is the period mentioned above, which is known as a “critical period”. However, grammar is still a demanding task until 18, perhaps because of the lack of knowledge of their own language. [Andrea Byaruhanga, 2024]

Adults still have more time and energy to enhance language acquisition. In fact, they have more advantages to improve their knowledges. For example, they are great at listening to a native speaker and imitating their accent, essentially absorbing linguistic skills. This is known as implicit learning. What adults are better at is learning a language explicitly: for example, learning grammar rules in a classroom setting. Young children lack the cognition and attention span to be effective explicit learners.

Since curiosity to speak many languages is higher in adults, the paper supports some useful tips and strategies to efficiently acquire more than one language at once. Liendie Botes, a polyglot, who speaks 12 languages, made a special blog about learning many languages simultaneously. Here you can see some best suggestions for the procedure of acknowledgment:

Learn one language to intermediate – it is vital especially if you are a new language learner. It might be tricky to commence several languages at once from beginner.

Split your time (pareto principle) – you can consider the 80/20 approach if you’re learning 2 languages at once. Spend 80% of your time on one (main) language, and then 20% of your time on the other language. This works best when they are two different languages or if you are intermediate+ in both.

Create a flexible schedule – if you are the type to get stressed about all the languages you want to study, try to create a loose schedule. You might have the tendency like me to not feel in the mood for studying a certain language on the day. If that’s you, rather make a list of activities you can do in multiple languages, and do those in the languages you feel like.

Get rid of perfectionism – perfectionism is a negative mindset that does nothing to help you achieve your goals. If you’ve decided to learn more than one language at once, you’ll have to face the fact that you are going to progress slower in all of the languages than you would learning one at a time. I receive lots of comments like “you are not gonna get anywhere learning 12 languages at once”. While that is untrue, it is true that my progress will be slower since I’m focusing on so many. With learning any language comes making lots of mistakes. You’re in the position of sounding and speaking like a baby again.

THE NEGATIVES

However, as the coin has two sides, being a multilingual speaker triggers some disadvantages to verbal communication and thinking system of the speaker. Multilinguals commonly juggle the languages they know with ease. But sometimes, accidental slip-ups can occur. And the science behind why this happens is revealing surprising insights into how our brains work. [Nicole Chang, BBC, “How our brains cope with speaking more than one language”]. Just like the journalist who is living in Paris, fluent in French, English and native in Mandarin, unexpectedly apologize in Mandarin instead of French. Another good example is a Korean actor, a singer and a dancer, Jang Jun-woo giving an interview in Korean on a stage, unconsciously started talking in English.

When a bilingual volunteer is asked to name a colour shown on a screen in one language and then the next colour in their other language, it is possible to measure spikes in electrical activity in parts of the brain that deal with language and attentional awareness.

When this control system fails, however, intrusions and lapses can occur. For example, insufficient inhibition of a language can cause it to “pop up” and intrude when you’re meant to be speaking in a different one. In fact, language-switching scenarios – albeit in a laboratory rather than on a train – are often used by researchers to learn more about how multilingual people control their languages. And errors can be a great way to gain insight into how we use and control the languages we know.

Tamar Gollan, a professor of psychiatry at the University of California San Diego, has been studying language control in bilinguals for years. Her research has often led to counterintuitive findings.

“I think maybe one of the most unique things that we’ve seen in bilinguals when they’re mixing languages is that sometimes, it seems like they inhibit the dominant language so much that they actually are slower to speak in certain contexts,” she says.

CONCLUSION

Multilingualism is the proficiency in several languages, become even more widespread nowadays. Learning and utilizing numerous languages can have several advantages to the learners’ whole life by effecting on the cognitive development, inner emotions, and even save their lives with postponing the symptoms of the disease. Besides, as it was mentioned earlier, languages are like gateways to the world, thus they have a lot to do with the way we see the outdoors and receive information from there.

In order to be a professional language user, the earlier you start, the stronger you become a competent speaker. While babies observe quickly the language, adults have strong language explicitness due to grammar classes.

As it assists in many fields, it provides some disadvantages as well, such as mixing-up different grammar structures, words and so on. In addition to these, there is a compliment that acknowledging in numerous languages can be a reason to the language extinct, which prevents children and adults from a foreign language acquisition.

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