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Multilingualism and Personal Health Benefits: Connecting the Dots

Mohammed H. Al Aqad

Abstract

Being multilingual is a valuable advantage in today's global society, which is right at everyone's doorstep. Language and the ability to communicate are important skills to possess. These skills are particularly useful for healthcare professionals because without effective communication, it is tricky to collect reliable information, inform patients of a diagnosis, and/or engage them in developing a management plan. This chapter discusses the connection between speaking several languages and speaker's mind health. New research on multilingualism has impacted the author insight into the effect of learning and using two or more languages on cognition, the brain, and success and well-being across the lifetime in the last twenty years. The notion of learning various languages expose the linguistic and cognitive development in the community, the latest findings imply that people gain a swathe of health benefits, becoming more open to different languages and new learning in general. An old saying says, speaking more than one language inevitably means that one's have access to more than one culture, the person tend to have a better understand of intercultural differences and the nuances of different subcultures within an entire culture. The finding of the study shows that knowing several languages support ones life style, boost to live longer and the speaker become a certain kind of personification of cultural dynamicity and cross-culture exchange. Consequently, multilingualism has a range of social, psychological, and lifestyle benefits. Furthermore, experts are discovering a slew of health benefits from learning multiple languages, including quicker stroke recovery and delayed dementia development.

Keywords: Multilingualism, global society, cultural dynamicity, personal health benefits, stroke recovery

1. Introduction

Multilingualism is a complex phenomenon, alive and always. Today, the importance of multilingualism has gone beyond its private local roles to have a much broader global importance. It is one of the most essential social practices in the world. The term multilingualism is used here to denote the use of three or more languages and distinguishes, in the case of bilingualism, the use of two languages. From this perspective, bilingualism is considered as a particular of multilingualism rather than the other way around.

The answer to the question "What is multilingualism?" is not as straightforward as it appears at first glance. Decades have passed with intense debates over what

type of person a bilingual is. The narratives of various multilingual communities differ in their definitions and depictions. Researchers' core understandings of what multilingualism is often differ due to their diverse backgrounds and views.

Multilingualism was documented in ancient Greece, Egypt, and Rome, and included languages such as Hebrew, Aramaic, Egyptian, Lycian, Greek, and Latin. This is demonstrated by the iconic Rosetta stone. 'Multilingualism is the presence of numerous languages in one country, community, or city,' 'Multilingualism is the use of three or more languages,' and 'Multilingualism is the ability to speak several languages,' according to the definitions. Multilingualism is often recognised as a "natural state of humankind" in this last sense [1]. Furthermore, neuroscientists explore multilingualism in the context of how people who speak multiple languages organise their brains.

The aforementioned accounts are sufficient for a general understanding of multilingualism's various dimensions. Despite this, there has yet to be a straightforward, short, and universally applicable solution to the question "What is multilingualism?" This talk will demonstrate why we should not expect one. Rather, it will introduce the reader to the various forms, manifestations, and key characteristics of multilingualism. It will go over the fundamental terminology and concepts of multilingualism, introduce the fundamentals that have been established in the field thus far, mention some theories and concepts that have been proposed and used for the study of multilingualism, and provide an update on recent developments.

Multilingualism refers to the presence of more than one "variety of language" in a geographical area, whether large or small, i.e. the mode of speaking of a social group, whether formally recognised as a language or not; individuals in such an area may be monolingual, speaking only their own variety.

2. Attitudes to multilingualism

Multilingualism is often unnoticeable. Even in major multilingual cities, a huge number of languages are mostly spoken in the home or community (the private sphere) and only come out in public on rare occasions. Then it may become an integral part of many people's urban experience, including those from other language groups. In various ways, persons are practically unwittingly exposed to multilingualism in their daily lives. The most common example is commercial - for example, a local business managed by members of various language communities (Bengali, Turkish, Kurdish, Chinese, Polish, and Italian) but serves the entire community.

The image of multilingualism is as different as the realities of multilingualism. There is a strong desire in many areas to regard multilingual identity as a sign of global vitality, something to be proud of. For example, the city of Utrecht in the Netherlands promotes itself as a "multilingual hotspot," where people speak more languages than anywhere else in Europe, and the municipal administration promotes this as a good thing and an indication of a better way of life. Melbourne defines itself as a richly cosmopolitan city with residents from more than 140 nationalities, whose history, economy, and current identity are all intertwined with migration.

This concept is powerfully defined in Melbourne's city centre's Sandridge Bridge development, which depicts the history of all the nations and individuals who have influenced the city's (and state's) contemporary character. Cities from Johannesburg to Kuala Lumpur are proud of their multilingual assets - 'Kuala Lumpur is an ethnically diverse city with well-educated, multicultural, multilingual residents.' However, the importance of English in this equation is also emphasised: 'Even if the official language is Bahasa Malay, most people speak good English.' All schools require students to take English as a subject.'

Many towns today claim to encourage multilingualism as a beneficial factor in a globalised society, which is undeniably relevant. Other areas, mainly newcomers to the globalised table, are not regarded multilingual by its residents in the same way that more traditionally diverse cities like London, New York, Mumbai, or Melbourne are. People living there may see this as practically accidental, if not transient, despite the fact that people may cover multiple languages. Individual residents may also hold a different viewpoint than the city government.

For many people, London, the most iconic example of a European cosmopolis, is the quintessential bustling, cosmopolitan, creative metropolis of over 200 languages. It is the location in which one's wish to reside, and linguistic diversity plays a role in that decision. However, some people find the environment unpleasant because there are so many languages spoken on the train that one's feel "a little strange." Multilingualism, on the other hand, is a part of their new and broader identity for others, as David Block's book *Multilingual identities in a global city: London stories* demonstrates. 'And sometimes I think to myself, Oh my God, she's so cruel... and it's because I'm used to the English way of communicating, and when I go back to France, I think to myself, "They're so rude," because they never say "sorry." "I believe that combining English and Bengali makes me truly me.' One's get completely absorbed in another person once he/she communicate with a new language', [2].

2.1 Linguistic processing in multilinguals

2.1.1 Parallel use of languages

In multilingual communication (with or without a translation or interpreter), utterances are frequently received in a language other than the one in which interpreters are created, therefore language processing in various mental and cognitive phases becomes a multilingual procedure in and of itself. In terms of psycholinguistics, reception and production are not two polar opposites in the sense of a "bottom-up" versus "top-down" method. The possible receivability of linguistic forms, as well as the producibility of linguistic forms, is relevant here, since it is linked to the transient nature of the communicative act and the interactant's co-construction of it [3].

A logical possibility for the structure of a bilingual mind is that it is made up of two independently represented language systems that are accessed differently depending on the situation: A fluent French-English bilingual ordering coffee in a Parisian café has no need to think about how to phrase the request in English, while a Cantonese-English bilingual studying psychology in Boston has no need to recast the subject in Chinese. Despite this, extensive research suggests that the bilingual mind is not organised in this way. Fluent bilinguals, on the other hand, demonstrate some activation of both languages and some interaction between them at all times, even in situations where only one of the languages is used.

Psycholinguistic studies show the influence of the currently unused language for cross-language priming (in which a word in one language facilitates retrieval of a semantically related word in the other language) and lexical decision (in which participants decide whether a string of letters is a legal word in one of the languages), according to Beauvillain, and Grainger [4], Crystal [5] and De Groot and Kroll [6].

More evidence comes through Patient studies demonstrating incursions from the irrelevant language or improper language switches, cited in Fabbro et al. [7], as well as imaging studies showing non-target language participation while conducting a linguistic task in the targeted language according to, Martin et al. [8]. Marian et al. [9], used eye-tracking technology to find that English-Russian bilinguals performing an English task in which they had to choose the named picture from four alternatives were distracted by a picture whose name shared phonology with

Russian, despite the fact that there was no connection to the meaning of the target picture and no contextual cues indicating that Russian was related.

The most likely mechanism for understanding the effects of bilingualism on both language and nonlinguistic processing is parallel use of languages or what so called, Joint activation. Joint activation causes an attention hurdle in linguistic processing that does not present in monolinguals. Besides, constraint on register, collocation, and synonymy, the bilingual speaker need to choose the appropriate language from a pool of competing choices.

“Vocal planning,” “stages of the action process,” and other elements of the production are examples. (Like the differences in written and spoken processing of word order, complicated sentence structures, and so on, the monitoring process for reading and writing requires separate linguistic planning processes.) Prior knowledge is addressed to the perceived (linguistic) forms in an ongoing interpretation of the words said by the speaker during the process of receiving a message. Understanding, establishing a hearer plan, and post-history are all important aspects of reception. Participants must follow the specific processing processes for discourse or text in both production and reception for a cross-section. (For a cross-cultural German-Japanese study employing this conceptual framework, see [10]).

There are changes in how information is processed in verbal communication depending on the language constellation: eralisations that are nearly difficult to get from an abstract comparison of language systems [11]. Recent research into the impact that a dominant language (global English) can have on other languages via translation processes has revealed that changes in the use of particular types of connectives are causing incipient changes in indigenous information dissemination [12]. Interpreters must be able to use language-specific hearer and speaker techniques. A reciprocal accommodation to the variety utilised by the interactant(s) leads to a mental process of accommodation in regard to the language during multilingual conversation (cf. articles in [13]).

A studies by Blumenfeld, and Marian [14] have found a link between inhibition and ability in verbal and nonverbal tasks by demonstrating a link between Stroop task performance and competing word selection.

3. Globalisation as a framework and driving factor for multilingualism

Multilingualism has spread over the world to the point where it now covers the entire planet. Even countries that were formerly assumed to be exclusively monolingual, such as Japan and Iceland, are now seeing an influx of languages and multilingual speakers. Multilingualism is widespread today, and it is a part of practically every human activity. In late postmodern times, multilingualism has steadily evolved into a phenomenon of vital importance in terms of its role in and impact on human civilisation. It is necessary for modern society’s progress and survival [15].

What has caused such fundamental shifts in how people use their languages around the world? The term “globalisation” is widely used in this context, and present multilingualism is linked to basic globalisation dynamics including mobility, diversity, and technological innovation. These ideas were hotly debated in the late twentieth century and are frequently referred to as being unique to more modern times.

Many social processes and events that we consider to be fresh have, in reality, experienced transformations over time. The journey of Christopher Columbus to the New World in 1492 is regarded to be the beginning of globalisation. As a result, it’s critical to comprehend how today’s technology breakthroughs, as well as mobility, diversity, and complexity, play a role in the reality of multilingualism.

Mobility is one of the qualities linked to modern multilingualism’s diversity. Scholars, on the other hand, contend that people have always been mobile. Human language existed before our species’ globe journeys, according to a new anthropological research. ‘When humans first arrived in Australia, people brought language with them, having used it during their migration and following their fortuitous settlement on the continent,’ Barnard [16] writes ([16]: 134). Pilgrims, monks, and roving troops, as well as carriages moving families and their goods from villages to towns and back, packed Europe’s highways during the Middle Ages. Al Aqad [17], shows how improved language skills in the classrooms allowed students to speak freely, resulting in large improvement gains in some classes. Large-scale exchanges of people, products, and ideas across Europe are also documented in early modern history (see, for example, [18, 19]).

4. Current trends and issues of modern multilingualism

It is commonly acknowledged how important language and communication are in the educational process. It has long been a subject of concern in the English-speaking world. The famous Bullock Report (A Language for Life) from 1975 asserted that language was more than just a school subject, but rather a road to learning across the curriculum. Language is used in every discipline to convey and acquire knowledge and understanding. Bullock put it this way: “Every teacher is a language instructor.” The Bullock Report has had a huge impact on educators and policymakers in the English-speaking world. Multilingualism today differs from previous social linguistic arrangements in numerous ways. Ignoring the changes is like to stating that technology has remained constant throughout history since we still use the wheel, which was allegedly invented in the late Neolithic period. In the following sections, we’ll look at the elements of postmodernity that are intimately linked to current language practises and the key features of current multilingualism.

In order to cope with multilingualism practically and intellectually, it is important to come to certain conclusions about whether multilingualism existed in the past or if it is a completely new occurrence. Consider the fields of anthropology, ethnology, and history to begin answering this question. Multilingualism, people believe, is a distinctively human trait that dates back thousands of years. Language is a trait that separates our species from others and plays a vital role in human evolution. To be sure, several languages have been spoken since the dawn of human interaction. Barnard [16] claims that with Homo sapiens and possibly Neanderthals, who had larger brains than Homo sapiens, “[m]ultilingualism was the norm, and multilingual peoples were made up of individuals from different linguistic backgrounds, whose groups intermarried and passed on both their genes and their linguistic diversity.” Looking further back in time, we can see how the social nature of language and our beliefs about it fundamentally mirror stages of society evolution and organisation, with the latter altering depending on historical conditions (see **Table 1**).

Stage of societal organisation	Language crucial as
Tribal	A language
Nation-states	The language
Globalisation: centralization and localization	Languages

Source: After Aronin [20].

Table 1.
Stages of societal organisation and language patterns.

The existence of human language was crucial in and of itself for the first communities, as shown in this table. Whether in the form of a proto-language or covering many diverse communication systems, it served humans as a tool of communication and cognition and distinguished humans from other creatures at the time.

5. The personal health benefits for multilinguals

5.1 Sharpens the mind

Multilingual people are better at observing their environment, according to a study from Spain's Pompeu Fabra University. Anything useless or dishonest is immediately detected by polyglots. Trilingual are better at spotting false information than their monolingual counterparts. Learning a new language not only sharpens the mind, but it also causes it to grow. The bilingual brain's cortical thickness, which is often associated with higher intellect, is only affected when language learning occurs later in life, after gaining proficiency in the first language, according to a study by McGill University, [21] titled "Age of language learning alters brain anatomy."

The study discovered that learning a second language later in life has a higher impact on brain structure growth. As cited in a study from Georgetown University Medical Center, [22], multilingual speakers who use both languages often had greater grey matter in the brain regions important for attention, inhibition, and short-term memory.

5.2 Improves decision-making

Multilingual persons have an easier time making decisions, based on a study from the University of Chicago, [23]. A language student must not only acquire the norms and vocabulary of a new language, but also its subtleties and regional phrases. The learner of a language must continuously assess appropriateness and hidden meanings. Multilinguals are more confident in their decision-making choices as a result of this experience, not only in their language use, but in all aspects of their lives. Because multilingual persons are better able to pick up on nuances and subtleties in any given circumstance, polyglots have a greater understanding of the situation's intricacies. Multilinguals may make more sensible decisions as a result of this. Monolingual people, on the other hand, are more likely to make decisions based on feelings.

5.3 Helps to improve the first language

"One's can never grasp one language unless he/she understand at least two," stated Geoffrey Willans [24]. Learning a new language really improves one's understanding of his/her own tongue by making him more aware of its laws and nuances. When terminology like conjugation, syntax, and sentence structure become commonplace while learning a new language, people start applying them to their native tongue and considering its underlying structure. While most of the people's first language is learned through intuitive absorption, learning a new language involves intentional learning. One's may come to think about the first language in different ways when learning a new language.

One's may improve his/her writing, speaking, and communication skills by improving understanding and respect of his/her native language. Because language speakers are proficient at separating meaning from distinct sounds, people have a superior ear for listening.

5.4 Increases networking skills

Learning a new language entails much more than just studying the language itself; it also entails learning the culture connected with that language. People begin to respect others' thoughts and acts when one's open up to a new culture. As a result, multilingual people are better able to understand the world from various perspectives, which improves their capacity to communicate in today's global economy, according to Burgaleta et al. [25].

One of the first steps in establishing a long-term, secure international business connection is to communicate directly with new clients and organisations in their native language. When one's speak to somebody in their native language, his/her break down boundaries and make them feel more at ease and confident. In a commercial situation, it is critical to facilitate these types of partnerships. Knowing client's native language will improve bilinguals relationship and help one's achieve better commercial results.

5.5 Enhances memory

It is indisputable that the more one's brain is used, the better it performs. Learning a new language necessitates not only acquaintance with a foreign vocabulary and set of norms, but also the ability to recall this material. Because one's may spend more time learning new material rather than re-teaching him/herself, absorbing and retaining more information can drastically decrease one's learning curve.

But the storey does not end there. People 'll be able to learn other languages faster once learning one. This is because human brain contains crucial language-learning skills stored in it. If one's recently studied Spanish, for example, he/she's automatically entered the realm of Latin-based languages such as Portuguese, Italian, French, and Romanian.

The study is not only talking about the advantages of short-term memory here. According to study conducted in Luxembourg by Bialystok et al. [26], people who speak more than one language had a lower risk of developing cognitive issues such as Alzheimer's and dementia. Indeed, according to study titled, 'Bilingualism and aging: Why research should continue' by Del Maschio et al. [27], multilingualism has a "protective effect on memory in seniors who learn foreign languages over their lives or at the time of the study," according to the research. The advantage appears to be compounding, as individuals who are fluent in four or more languages had the lowest risk.

5.6 Be a better global citizen

Whether one's noticed or not, learning another language has a lot of advantages that will help one's become a better global citizen. It's essentially a superpower.

In an increasingly interconnected society, many would argue that multilingualism is vital. Having the skill and inclination to interact with a diverse range of people can help one's better comprehend and address global issues such as poverty and inequality based on a study conducted in Luxembourg by Bialystok et al. [26].

Didn't have the opportunity to learn a second language as a child? It's never too late to learn something new! Even if one's just learn for 5 minutes a day, with consistent practise, one's can lay a solid foundation for language study. It will be beneficial to his/her brain!.

6. Multilingual and multicultural interaction

Many people believe that in the new world order, multilingualism and multilingual communication will be unnecessary because everyone would be able to speak in a lingua franca, presumably English. In a variety of ways, this argument is flawed. Assume that the resources are available to teach this lingua franca to everyone. There is a naïve belief that joyful homogeneity will result in a return to the pre-Babel condition of affairs. However, the usage of a 'lingua franca' is by definition intercultural communication since people transfer the pragmatic and discourse patterns of their native languaculture⁴ into their lingua franca [28].

The expanding circle of countries adopting English in a limited number of domains (such as Denmark, Sweden, the Netherlands, Lebanon, and Israel) now outnumber L1 English speakers in the non-traditional English-speaking countries, which Kachru [29, 30] refers to as the outer circle (the nations of the New Englishes, such as India, Singapore, Fiji, Nigeria, and the Philippines). As this disparity grows, it will become ever more critical for L2 users to be given the opportunity to codeetermine the language's usage rules.

Otherwise, their academic work, enterprises, and diplomatic efforts will continue to be discounted due to the diversity of their English [31, 32].

It will be even more critical for English speakers in the inner circle to learn about and accept other people's communication styles. Unless an extraordinarily high level of biculturality can be attained, pushing learners to change their pragmatic and discourse patterns as part of the acquisition and use of a lingua franca is an infringement of human rights. Furthermore, having a thorough understanding of at least a second language and culture allows a person to know what kinds of questions to ask in order to comprehend a different culture's communication patterns, and having a good understanding of several facilitates an understanding of the range of possibilities of such communication patterns. The employment of a lingua franca is insufficient for gaining access to a society's fundamental cultural elements or insider perspectives; without a working grasp of the target language, one must rely on the selective interpretation of the "other." The idea that English will always be the sole language of the web, which is the medium of the future, is one of the arguments in favour of monolingualism. While the internet was formerly thought to be a tool for language unification, the percentage of home sites in English has dropped dramatically since 1998 ([33]: 51; [34]). Those that protect multilingualism (particularly governments) must ensure that there are incentives for electronic multilingual communication.

7. Conclusion

This chapter pinpoints the issue of multilingualism and describes its implication on personal health. With the instant satisfaction and expediency offered by the rising trend for multilingualism due to the social media, YouTube, Facebook, and Twitter. At both the individual and societal levels, multilingualism offers a plethora of benefits and opportunities. Financial services, researchers, translators, interpreters, chemical, IT, and other human involvement (social) services, as well as other worldwide and globalised sectors, largely rely on language skills to operate for commercial activity and service.

Some of the advantages of multilingualism extend to a wide range of sectors of life for both individuals and communities. In a conclusion, the findings of the study presented in this chapter show that multilingual experience are often advantageous to both the individual and the community.

The fact that multilingualism improves cognitive control suggests that lifelong bilingualism may protect against age-related cognitive decline and potentially delay the onset of dementia symptoms. Bilingualism and multilingualism could be one of the ecological factors contributing to cognitive reserve or brain reserve in this scenario [35].

Interestingly, Peal and Lambert [36], concluded in their study that bilingual children have an advantage in cognitive and linguistic performance: “Intellectually [the bilingual child’s] experience with two language systems seems to have left him with a mental flexibility, a superiority in concept formation, a more diversified set of mental abilities” (p. 20).

It should come as no surprise that prolonged and intense experience has an impact on our minds and brains; huge experience obviously changes the functional connections that result from practise, and the anatomical regions that are recruited for specific tasks undoubtedly alter as well [37, 38]. Neuroplasticity refers to these types of responses to experience. However, in the case of bilingualism, it has long been assumed that any such impacts would be disastrous: “This might be considered evidence that the use of a foreign language in the home is one of the primary causes in creating mental retardation based on intelligence tests,” one famous educational researcher wrote in 1926.

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