# Never Too Late: The Benefits of Learning a New Language Later in Life

### Alison Chan

The belief that a biologically based critical age exists for language learning (Penfield & Roberts, 1959) is a long-standing one. As people age and the brain matures, the brain is rendered less adaptable and flexible resulting in more difficulty when learning new tasks (Lenneberg, 1967).

Typical findings showed that proficiency in a foreign language declines when acquired later in life (Bialystok & Hakuta, 1999). As learning a new language requires a set of executive functions such as working memory and mental flexibility, which become less effective as one ages, more substantial effort is required for older learners. So is there any hope for older language learners? Is lifelong language learning even an accomplishable feat? If so, what are the benefits and advantages for older language learners?

#### **Cognitive Aging**

In the world of second or foreign language acquisition research, the focus has so far largely been on children. Bilingual children practically acquire their first language naturally and their second language is often up to a native-like competence. There is a paucity of research, however, in the area of how learning a foreign language much later in life affects the brain. In a recent study however, researchers (Martensson et al., 2012) have found changes in certain areas of the brain in 20-year old adults after they started learning a new language. These changes were in the hippocampus, the left middle frontal gyrus, inferior frontal gyrus and superior temporal gyrus, regions known to perform language

functions whilst acquiring a new language. Although it still needs to be determined whether the same applies to more senior language learners, this was the first time research has shown that learning a new language in adulthood could alter the structure of language-related brain areas.

Older learners may also have an advantage that younger learners do not possess: the ability to rely more on extensive background knowledge (Tun & Wingfield, 1997). This suggests that they may find it easier to integrate new information with their already existing learning experience. In fact, older adults have been found to perform better on vocabulary tests than younger adults (Howard & Howard, 1997), which means older learners could end up having a larger lexicon.

Active older learners may also be more motivated which will give them an advantage over younger learners. Researchers have in fact found that older learners who are regularly involved in intellectually engaging activities do well on vocabulary and verbal tests as well as other cognitive tests (Salthouse, 1988; Hultsch et al., 1998). It is, hence, possible that keeping your mind intellectually active could slow down the cognitive aging process.

## **Social factors**

From a social perspective, learning a new language at an older age could enable older language learners to socialise with others through language classes or language exchanges. In a recent report presented by the Lancet Commission (2017) on dementia, prevention, intervention and care, social isolation was identified as one of nine lifestyle factors that could contribute to the risk of dementia. Language and culture are inseparable concepts and learning a new language could be a gateway to exploring another culture and its traditions, allowing one to establish connections with new people.

Additionally, researchers (Bunzeck & Duzel, 2006) have demonstrated that novelty may be intricately linked to learning and

also, memory. Having new experiences such as meeting a new person, can increase neuroplasticity (in this case the hippocampus) and subsequently, our ability to learn new concepts.

## **Computer-assisted language learning**

Technology is changing society in many ways but it is a double-edged sword; and with it seeping into every aspect of our lives, the elderly are often the ones who are left behind. Reports have suggested that the elderly feel isolated by technological advances and its ever increasing pervasiveness. How could one maximize the benefits of technology and apply these positively in the world of language learning?

Computer-assisted language learning was a term first coined in 1997 and was defined as "the search for any study of applications of the computer in language teaching and learning" (Levy, 1997, p. 1). Over time, this definition has morphed into "learners learning language in any context with, through and around computer technologies" (Egbert, 2005, p. 4). Evidently, technology has developed even more since then and the term has slowly faded away but Egbert (2005) captures the essence of the term which is even more relevant today due to the accessibility of language learning resources.

Through the use of technology in language learning, elderly people will have the opportunity to acquire a technological skill set. Online resources such as language games and videos facilitate and liven up the foreign language process and by bridging the gap between technology and the elderly, the effects could be tenfold.

Masako Wakamiya, an 82-year-old Japanese woman, is the ultimate example. She started to use computers for the first time at the age of 60 and taught herself the basics of coding. She is now one of the world's oldest app developers, having developed a smartphone app for the elderly. She divulged that after retirement at 60, she felt things looked bleak and learning to use computers has helped her hugely to stay active and connected to the world ("Never too old to code," 2017).

## The Future

The advantages and benefits of learning a foreign language as an adult are not restricted to the above and more research is needed to establish whether there are any further neurological benefits while acquiring a new language at a later age.

There are also other important factors which determine the success of one's attaining a new language such as motivation, one's personality traits, social integration and knowing more than one language (Hardison et al., 2012). With more substantive research, learning a new language could be implemented in programmes at care homes, for instance, in the shape of vocabulary lists to improve attention and memory functions.

As an older learner, one may be ambivalent towards the prospect of learning a brand new language but the benefits, whether these are direct or indirect consequences, are abundant. Granted, learning a foreign language as an adult up to a high level of proficiency is not an easy task but it can be a fun and rewarding experience. I hope this article will serve as encouragement for older language learners and provide a better understanding of new language acquisition.

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