Benefits Of Being Bilingual Or Multilingual

In current times, it is very common for people to be bilingual or even multilingual due to learning them from their parents or even going beyond and learning languages on their own. There are also many people who have misconceptions that being a bilingual individual can actually be harmful. There are also another set of people that see bilingualism as a threat and do not like for people to speak a language that is not the dominant one. However, there are many benefits of knowing more than one language. There are not only the simple benefits of enjoying others cultures, such as being able to travel, read and watch foreign movies but there are also many health benefits that stem from being bilingual. Some of these benefits include the delay of dementia, faster recovery from a stroke and workplace advantages.

One benefit of being bilingual is having an advantage in the workplace. Many employers hire bilingual individuals because they need employees who can cater to their customers. For example, if a workplace is in a predominantly Spanish speaking neighbourhood, then it is very likely that there will be customers who will not be able to speak English because they are only monolingual in Spanish. It is important to have staff that will be able to effectively communicate with the customers. The employer will also save money by hiring someone who is bilingual, rather than paying two monolingual employees where one will speak English and the other will speak Spanish. Hiring a bilingual individual means that employer and company will only have to pay one person. This means that knowing more than one language is gives an advantage over the monolingual people who have also applied for the same job.

Recent studies propose that bilingualism delays the onset of dementia by 4-4.6 years (Bialystok, Craik & Freedman, 2007, Craik, Bialystok & Freedman, 2010, Alladi et al., 2013. Woumans et al., 2015). In Canada, Bialystok, Craik and Freedman (2007) found a 4.1–year delay of dementia onset in bilinguals compared to monolinguals. Unfortunately, the authors do not report effect sizes, making it difficult to interpret the potential impact of these associations. The authors suggest immigration status had no effect on results, supporting this claim with a separate analysis of immigrants, which showed an 11.5-year delay of dementia onset in bilinguals compared to monolinguals. However, there is no separate analysis of non-immigrants. Therefore, the overall reported effect may have been driven by the large effect within the immigrant sample. Having said this, immigrant status is not necessary for the effect, as a similar study on non-immigrants found a delay of 4.6 years in bilinguals compared to monolinguals (Woumans et al., 2015). Bak and Alladi (2016) emphasise the importance of cross-cultural research in this field, as attitudes towards bilingualism can significantly influence people’s lives and physicians’ diagnoses of dementia. A recent study in India included illiterates and was representative of a “truly bilingual environment” (Alladi et al., 2013). It found a 4½-year delay in bilinguals compared to monolinguals in Alzheimer’s disease (AD), frontotemporal dementia and vascular dementia (Alladi et al., 2013). As each type of dementia affects the brain and cognition in unique ways, future research should further investigate potential differential effects of bilingualism. The results were also independent of sex, occupation and education. As experiments with random design are impossible in this field, it is crucial to control for extraneous variables like these. There is also indirect support for the hypothesis. For example, a study found an interaction between bilingualism and age of diagnosis of single-domain mild cognitive impairment (likely to develop into dementia) but not multi-domain mild cognitive impairment (not

likely to develop into dementia) (Ossher, Bialystok, Craik, Murphy & Troyer, 2013). Together, these results are consistent with the hypothesis that bilingualism protects against the onset of dementia.

However, other findings are not consistent the hypothesis (Lawton, Gasquoine & Weimer, 2015; Ljungberg, Hansson, Adolfsson & Nilsson, 2016; Sanders et al., 2012; Ellajosyula et al., 2015; Yeung et al., 2014). For example, Gollan, Salmon, Montoya and Galasko (2011) found that degree of bilingualism predicted dementia onset in low educated but not highly educated Hispanic people. Further research could investigate whether there are limits to cognitive reserve. Perhaps once a limit is reached (e.g. with education), other factors (e.g. bilingualism) no longer provide benefits. Additionally, Chertkow and colleagues (2010) reported a 3-year delay in dementia diagnosis for immigrant bilinguals, but no benefit for non-immigrant bilinguals. Again, this result suggests immigrant status plays a role in the effect. Perhaps this is because immigrants often acquire a second language later in life or because they use their second language more frequently than non-immigrants, both requiring greater cognitive effort. Chertkow and colleagues (2010) further report benefits for multilingual independent of immigrant status. Perhaps more languages increase cognitive reserve, building stronger protection against dementia. Furthermore, Zahodne and colleagues (2014) adopted a different design, analysing data from a longitudinal study with 1067 Hispanic participants, including 282 who developed dementia. They found no association between bilingualism and dementia or rates of cognitive decline. However, the incidence of mild cognitive impairment was lower in bilinguals than monolinguals providing some, albeit weak, evidence that bilingualism protects against dementia. In this study, many of the bilinguals came from disadvantaged minority groups, so negative effects of low socioeconomic status may have outweighed benefits of bilingualism. Future research should continue to identify conditions in which associations between bilingualism and dementia onset are, and are not, found.

A limited number of studies have investigated the ongoing benefits of bilingualism after dementia onset. For example, Bialystok, Craik and Freedman (2007) found that 4 years after a dementia diagnosis, bilinguals and monolinguals had a similar decline in Mini-Mental State Examination (MMSE) Scores. This suggests no difference in dementia progression after diagnosis. Furthermore, Woumans and colleagues (2015) found an onset delay of 4.6 years in bilinguals compared to monolinguals and a 4.8-year delay informal diagnosis. At first glance, this could suggest it takes 0.2 years longer for symptoms to qualify for diagnosis in bilinguals compared to monolinguals. However, although bilinguals were older than monolinguals at the time of formal diagnosis, they also exhibited significantly greater cognitive deficits. Therefore, the difference of 0.2 years between onset and diagnosis could reflect that bilinguals are more reluctant to go for assessment. Longitudinal analysis is necessary to investigate whether bilingualism continues to protect cognitive function throughout the course of dementia.

Insightful evidence is emerging from neuroimaging studies. For example, Kowoll and colleagues (2016) found that in the early stages of AD, bilinguals scored the same as monolinguals on the MMSE despite having greater glucose uptake impairment in the cerebellum, frontotemporal and parietal brain regions. The authors suggest that bilingualism allows people to compensate for more severe cerebral changes. However, these results cannot be confidently attributed to bilingualism, as the bilinguals in this study had significantly more years of education than the monolinguals. Similarly, Schweizer and colleagues (2012) found that bilinguals with AD had greater brain atrophy than monolinguals in brain areas involved in AD diagnosis, despite similar performance on cognitive tests. This result suggests greater amounts of neuropathology is

present in the bilingual brain before the of dementia symptoms manifest. However, bilinguals had significantly higher occupational status than monolinguals, which could also account for the results. Future research should continue to investigate structural and metabolic brain differences between monolinguals and bilinguals and could include brain imaging during active tasks, to explore how bilinguals compensate for greater cerebral changes.