

Bilingualism and ageing

Age is also a factor about which one can ask questions with regard to cognitive advantages *generally*. Are such alleged advantages permanent? Do they increase or diminish with age? This was an issue which concerned authorities in Wales in the 1950s as the provision of bilingual education and the establishment of bilingual schools began to flourish:

...we need a thorough study of the relation of bilingualism to the development of the entire personality of the child – how far the learning of two languages at various stages maybe an advantage or a disadvantage....., how far the disadvantages are temporary and in what sense they are permanent. (Central Advisory Board (Wales), 1953)

For rather obvious reasons possibly, research in cognitive aspects of bilingualism tends to concentrate on children who are in the primary and secondary sectors of schooling and the early stages of life (4-18 years of age). The underlying rationale of such research seems to be the discovery of facts which can influence and improve the educational provision and lives of *future* generations. Although such research focuses on the present, nevertheless, like all research, it has an inevitable *future* orientation. Research in bilingualism in middle-aged or older people, therefore, tends to be ignored. However, as will be mentioned later, this is a field which also demands further attention and which, arguably, could have substantial social and political implications similar to those relating to younger generations.

Baker (2017: 148-49) provides evidence of research involving the older-age group and refers to the work of Bialystok et al. (2004), (2008) who adopted the Simon Task and the Stroop Task with younger and older bilinguals and ‘matched’ monolinguals. As described (Baker, 2017:148), despite being different, both tasks tested individuals’ response and reaction to ‘congruent’ and ‘incongruent’ situations. Reactions generally are deemed to be usually slower in response to the latter than to the former, especially with ageing. However, in both tasks, bilinguals were seen to be superior to ‘matched’ monolinguals in reaction times regardless of their age. The speed of bilinguals’ responses also indicated a significant improvement on the *age-related* lower performance expected. As Baker (2017:148-49) mentions, this research again points to the superiority of bilinguals in relation to the *selective attention* also found in bilingual *children*, therefore suggesting a life-lasting metalinguistic effect emanating from the need to keep languages separate in order to avoid

intrusion whilst another is still active. In relation to this point, it is worth quoting Bialystock et al. (2004):

The joint activity of the two systems requires a mechanism for keeping the two languages separate so that fluent performance can be achieved without intrusions from the unwanted language. (Bialystok et al., 2004: 291)

The simple experience of bilingualism that relies on some aspect of these [cognitive] processes to control the production of the relevant language appears to yield widespread benefits across a range of complex cognitive tasks. (Bialystok et al., 2004: 302)

Again, using the Simon Task and adopting magnetoencephalography (MEG) for a comparative *neural* investigation of the brain of bilingual and monolingual young *adults*, further research by Bialystok et al. (2005) showed that bilinguals used more areas of the brain than monolinguals including the Broca's area associated with language processing. However, the research related to the benefits of bilingualism which, arguably, has gained most attention internationally of late is that which was also carried out by Bialystok et al. (2007) to compare the onset of dementia in bilinguals and monolinguals. Of the 184 individuals involved, half were bilingual and half monolingual. The results showed that, while the signs of dementia amongst monolinguals had a mean age of 71.4, the mean age of bilinguals was 75.5, suggesting the possibility that, on average, the likelihood of dementia occurring in bilinguals is delayed by four years. It seems that such a finding could have obvious implications not only in terms of the health and well-being of older generations, but also in *economic* terms for policy-planners in public welfare and health.

Ageing is acknowledged to be a contributory factor in an almost inevitable decrease in cognitive functioning and control which various tests such as the Simon and Stroop Tasks can detect by requiring individuals to react to various stimuli. Data from tests carried out on bilinguals, however, seem to suggest that the *decline* in cognitive control associated with normal ageing is delayed or slowed down. Whereas this research, obviously, has health implications for people as individuals, yet, in relation to society generally on a global scale, it can be seen to have much wider political, educational, social and economic implications also.