Abstract

Linguistics, Language



Abstract This essay deliberates the benefits of being bilingual. The information has been analyzed from resources dating from September 2010 through 2012. The idea put forth in this essay is to prove that the brain of a bilingual person is agile and nimble. It argues a bilingual signs in babies having the ability to distinguish between two languages as young as 4 months old. It also presents how infants show a strong preference for the language their mother spoke during pregnancy. It confirms that using two languages throughout life delays the onset of dementia symptoms by an average of four years. The research further explores how bilingualism is positively connected with many cognitive outcomes, including: metalinguistic awareness, focus attention, auto control, active memory, and abstract and symbolic representation skills. In general, bilingual speakers enjoy far nimbler cognitive commands, maintaining a continuously active and alert brain, even when only one language is in control. Being bilingual actually provides opportunities in many corners of life totally impossible for monolinguals speakers. Advantages of Being Bilingual The saying "less is more, " does not apply when the topic of monolingual versus bilingual language skills is concerned. This work is a recompilation of the advantages of being bilingual. It discusses how the brain of bilingual speakers is ingenious and clever. Moreover, extends how infants as young as 4-months old and children who live in bilingual environments have advantages over those living in monolingual environments. The article presents how using two languages throughout life delays the onset of dementia symptoms by an average of four years. This essay proves, through a number of studies, the cognitive outcomes associated with bilingualism. According to Flora (2010):

Infants as young as 4 months who live in bilingual environments can distinguish between two languages, monitoring lip and facial movements. Babies also show a strong preference for the language their mother spoke during pregnancy. We're built to acquire language, of course, but we're also built to learn and accommodate more than one. Monolinguals are essentially underutilized their abilities: Brain scans show that while monolinguals use established language centers such as Broca's area, bilinguals employ far more of the neural landscape when expressing themselves. (p. 75). Wang (2010) uses the results of the studies performed by Dr. Bialystok and Dr. Craik (2004) on how children learn a second language. Doctor Bialystok and Craik conducted three studies that look at the cognitive effects in some 150 monolingual and bilingual people between 30 and 80 years old. They found that in both middle and old age, the bilingual subjects were better able to block out distracting information than the single-language speakers in a series of computerized tests. The advantage of bilingualism was even more pronounced in the older subjects. Compared with people who speak only one language, bilingual children and young adults have slightly smaller vocabularies and are slower when performing certain verbal tasks, such as naming lists of animals or fruits. Bilingualism equally doesn't just apply to the small percentage of people who are perfectly fluent in two tongues. In the same fashion, bilinguals might speak beautifully in one language without being able to read or write it. Moreover, they may have acquired their second tongue as a child, a teen, or an adult. Wang, (2010) affirms that: A lifetime of speaking two or more languages appears to pay off in old age, with recent research showing the symptoms of dementia can be delayed by

an average of four years in bilingual people. Multilingualism doesn't delay the onset of dementia-the brains of people who speak multiple languages still show physical signs of deterioration-but the process of speaking two or more languages appears to enable people to develop skills to better cope with the early symptoms of memory-robbing diseases, including Alzheimer's. Over time, regularly speaking more than one language appears to strengthen skills that boost the brain called cognitive reserve, a capacity to work even when stressed or damaged. This build-up of cognitive reserve appears to help bilingual people as they age. Specifically, the advantages of bilingualism are thought to be related to a brain function known as inhibitory or cognitive control: the ability to stop paying attention to one thing and focus on something else, says Dr. Bialystok (2004). Fluent speakers of more than one language have to use this skill continually to silence one language in their minds, while communicating in another. People who are bilingual are often asked which language they think in, but when people are walking down the street, riding a bus, or jogging in the woods, their thoughts may not be in a particular language, points out Francois Grosjean, author of the researchbased Bilingual Life and Reality. Parker-Jones, (2012) and his colleagues used functional Magnetic Resonance Imaging (fMRI) to investigate whether neuronal activation differs in bilinguals and monolinguals during picture naming and reading aloud when only one language is in use. They found that when a bilingual person names pictures or reads words aloud, in their native or nonnative language, activation was higher by the monolingual in 5 left hemisphere regions: dorsal precentral gyrus, pars triangularis, pars opercularis, superior temporal gyrus, and planum temporale. They further

proved that these areas are sensitive to increasing demands on speech production in a monolingual person. This suggests that the advantage of being bilingual comes at the price of increased work in brain areas that support monolingual word processing. By comparing the effect of bilingualism across a range of tasks, they argue that activation is higher in bilingual speakers as compared with monolingual speakers because word retrieval is more demanding. Furthermore, articulation of each word, by bilingual speakers, is less rehearsed. In addition, speech output needs careful monitoring to avoid errors when competition for word choice occurs between, as well as within, language. The Parker-Jones (2012) team's conclusions offer novel insights into the effect of bilingualism on brain function. They emphasize that the advantage of being bilingual comes at the expense of increased demands on word retrieval and articulation, even in simple picture naming and reading tasks. The Parker-Jones (2012) team also has shown images of the increased activation for bilinguals relative to monolinguals during overt picture naming and reading aloud, even when bilinguals are only responding in their native language. The areas where these effects were observed are remarkably consistent with those previously associated with low- versus high-frequency picture naming in one's native language and the control of interference in bilinguals as they respond in a dual language context. Their findings suggest that bilinguals increase processing within a system that is also used in monolinguals (Abutalebi & Green, 2007). However, they contrast sharply with the idea of a unique and helpful bilingual system that exploits resources that are untapped in monolinguals Baker and Shalinsky (2008). By including multiple tasks, they

have been able to interpret the function of the areas where activation is higher in bilinguals than monolinguals. In addition, by including multiple groups, and only testing in a single language context, they were able to control for differences between native versus nonnative language. In the final analysis, attaining fluency in two or more languages not only looks fabulous like an advantage on college and job applications, it actually presents opportunities in many corners of life completely denied to the monolingual. The advantage of being bilingual now has science behind it. My research proves that the list of advantages includes, staving off dementia, improved cognitive skills, and heightened creativity. Moreover, bilingual speakers have an easier time focusing on tasks, and greater control over literacy skills which is heightened by environmental awareness. Additionally, bilinguals have an easier time switching between tasks; have denser grey matter, faster response time, and higher scores on intelligence tests. References Flora, C. (2010, October). Double Talk. Psychology Today. 70-79. Wang, S. S. (2010, October 12). Building a more resilient brain. The Wall Street Journal. Retrieved from http://online. wsj. com/article/SB10001424052748703794104575 545923443462444. html Parker Jones 1, O., Green 2. D, W., Grogan 3, A., Pliatsikas 4, C., Filippopolitis 1, K., Ali5, N., Lee6, H. L.,...Price1, C. J(2012). Where, When and Why Brain Activation Differs for Bilinguals and Monolinguals during Picture Naming and Reading Aloud. Oxford University Press. 22 (4). Retrieved from http://cercor. oxfordjournals. org/content/22 /4/892. full Grosjean, F. (2012, November). Linguistic Aspects of Childhood Bilingualism. Bilingual: Life and Reality. Harvard University Press. Abutalebi, J., Brambati, S. M., Annoni, J. M., Moro,

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