

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
КИЇВСЬКИЙ НАЦІОНАЛЬНИЙ ЛІНГВІСТИЧНИЙ УНІВЕРСИТЕТ

AD ORBEM PER LINGUAS ДО СВІТУ ЧЕРЕЗ МОВИ

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**СЕМІОТИКА УКРАЇНСЬКОЇ НЕЗЛАМНОСТІ:
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Не менш цікавими є дослідження пам'яті на імена та пам'яті на обличчя (Burton et al., 2019), когнітивних здібностей, які представлені в сучасних моделях розпізнавання облич та запам'ятовування імен (Neils-Strunjas et al., 2001) тощо. Ці та інші аспекти наразі активно студіюються для розширення нашого уявлення про можливий зв'язок імені та обличчя носія.

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EXPLORING THE NEURAL PROCESSES IN MULTILINGUALISM

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The study of the neural processes in multilingualism has yielded essential insights in recent decades. Researchers have been provided with new vistas into code-switching, cognitive control, selective attention, and the brain networks involved in language processing. (e.g., Bialystok, Craik & Luk, 2012; Simasiku et al., 2015; Hayakawa & Marian, 2019; Hirosh & Degani, 2018; Poarch, 2018).

This paper seeks to examine the effect of multilingualism on learners' cognitive and academic outcomes. The study is designed to assess the cognitive and neurological benefits of multilingualism in education.

Multilingualism is related to the capacity to be fluent in multiple (more than two) languages. Multilingualism as a complex, interdisciplinary phenomenon is studied from different perspectives in linguistics, applied linguistics, sociolinguistics, psycholinguistics, neurolinguistics, language policy, and education. The most common definition of multilingualism is stated by the European Commission (2007, p.6) as "the ability of societies, institutions, groups, and individuals to engage, regularly, with more than one language in their day-to-day lives".

In educational contexts, the effect of multilingualism on cognition has received much scholarly attention for a long time, but in recent years much more attention has been paid to specific aspects of cognition, working memory, the role of executive control, cognitive and language proficiency (e.g., Diamond, 2013; Engel de Abreu, 2011; Wray & Weber-Fox, 2013).

The cognitive benefits of being multilingual are generally accepted. Multilingual students can more quickly grasp the language structure and vocabulary (lexicon). They have a better attention span. Multilingualism fosters cognitive flexibility and creativity. Multilingual experience leads to improvement in cognitive and sensory processing that helps a learner to better process and focus on information about the new language.

To sum up, the cognitive and neurological benefits of multilingualism can be outlined as enriched cognitive control, improved metalinguistic awareness, better memory, visual-spatial skills, a higher level of selective attention, a good command of more than one code, and greater mental flexibility.

Multilingualism positively affects cognitive abilities. Over the past decades, due to technological advances, it became possible to study the multilingual brain more deeply and explore how multilingualism forms the cognitive and neurological systems.

According to Kroll and Dussias (2017, p. 249), the multilingual experience shapes the brain, "the brain has far greater plasticity". The active use of multiple languages protects against cognitive decline. Multilingual speakers tend to have a greater developed executive control system that allows them to better perform tasks.

There are three areas of executive function such as working memory, cognitive flexibility, and inhibitory control. Executive function and self-regulation skills refer to the cognitive abilities that allow learners to organize, concentrate, retain directions, and manage several tasks effectively.

Thus, multilingualism contributes to personal and professional development and social and career benefits. Multilingualism helps a person be a more effective communicator and better adjust to a new culture.

However, multilingual advantages go beyond the linguistic domain and involve the cognitive domain. Further research is needed to offer a more comprehensive view of how language shapes the mind.

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