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COGNITIVE AND SOCIAL MECHANISMS OF BILINGUALISM AND THEIR MODERN PERSPECTIVES

SUMMARY

Keywords: bilingualism, intellectual activities, linguistics, language, social mechanism

This article explores the impact of bilingualism on an individual's cognitive development and social adaptation. The study analyzes the role of bilingualism in brain and neurological aspect of it. Bilingualism is no longer a rare exception but a global norm. It is defined as the ability of an individual to use two languages with varying degrees of proficiency. Far from being a simple linguistic skill, it acts as a constant mental workout that reshapes the architecture of the human body. Research suggests that bilinguals often outperform monolinguals in tasks requiring executive control. Because a lingual person must constantly suppress one language to use another, their brain develops superior skills. Beyond brain bilingualism serves as a bridge between cultures; it fosters empathy and perspective-taking as speakers must navigate different cultural nuances and social norms inherent in each language. Being bilingual is like a “gym for the brain”.

Bilingualism is a complex experience which comprises a range of experience-based factors. Equally, there are several ways in which the brain adapts to these experiences. However, both the adaptations and experience-based factors which give rise to them do not occur independently and thus likely modulate their respective neural effects. Herein ,we have outlined a framework mapping the relationships between the bilingual experience trajectory and neurocognitive outcomes. The component experience-based factors can be broadly summarized into four categories: intensity and diversity of use, language switching, relative proficiency, and duration. Adaptations to these experiences can be broadly summarized into two general domains: efficiency and control demands. The primary effect of longer duration of use and more balanced language proficiency will be adaptations towards increased efficiency, whereas an increase in diversity.

There is a widespread perception in monolingual societies, particularly in the United States, that bilingualism a rare and exceptional occurrence in communication. Bilingualism is a world-wide phenomenon. In fact global communication is often third or even fourth language. (p.15-16) According to David

Crystal, approximately two-thirds of the world's children grow up a lingual environment which in turn, leads to adult bilingualism/multilingualism. However childhood bilingualism is not the only reason for adult bilingualism. A host of different factors lead to adult bilingualism. How, they do humans become bilingual? Is adult second language learning different from child-language learning?

Long-term bilingualism has been linked to increased grey matter density in the left inferior parietal cortex. Further more clinical studies indicate that bilingualism can act as a “cognitive reserve”, potentially delaying the onset of symptoms associated with the brain. Bilingualism in the 21st century is no longer just about translation, it's about perspective-shifting. It is the ultimate cognitive hack that allows you to navigate different social and professional landscapes with ease . When a man speaks two languages, he doesn't just double his vocabulary, he doubles his empathy and his ability to solve complex problems divergent thinking. (2 p.38-39) Bilingual person can suppress one language to use another, their brain develops superior skills in: 1) Inhibitory control, the ability to ignore distraction. 2) Task switching, moving efficiently between different logical frameworks. 3) Working memory. processing and storing information is defined processing and storing information simultaneously. Bilingualism is defined as the everyday use of more than one language. Globally more than half of the population is bilingual but there are huge regional differences, with only one fifth of the speaking population two languages in the USA and Canada whereas in some countries, bilingualism or even multilingualism being more or less the norm. The benefits of bilingualism in terms of communicative skills are obvious in the modern society and globalized economy, additional benefits exist in terms of the extra brain training that comes with mastering two languages. This extra training appears to translate into health benefits at old age when brain deterioration sets in and its impact on brain functioning, higher level cognitive functions depends upon how well the brain had been trained up in childhood and adolescence. The term cognitive reserve is used to denominate this result of brain training early in life and speaking two languages to be a relevant part of it (3, p.22) Types of bilingualism is considered to be coordinate compound or subordinate. In coordinate bilingualism a person has parallel but separate systems for each language. This type of bilingualism is most common among people who grew up in two-language households and acquired both languages from infancy. In compound bilingualism, the person does not completely separate the two languages. Typically, the person has a unified concept for physical objects or abstract ideas that is expressed by two different words. Subordinate bilingualism arises when the second language is learned after childhood and sometimes in formal settings; in this case, the person is clearly less proficient in the second language than in the first. Also relevant to discussion is the notion of language dominance. A bilingual person's native language is usually the dominant one, but there are exceptions. For example,

immigrant children who speak their native language at home may be more eloquent and literate in the ambient language their second language. (4p 31) Contrary to the most widely held beliefs in some monolingual societies, bilingualism is not a rare or unnatural phenomenon. This article presents a state-of-the-art treatment of the various facets of bilingualism and second language learning. In addition to comparing and contrasting the key concepts of monolingual and bilingual language acquisition, salient features of bilingual verbal behavior are accounted for both on descriptive and explanatory grounds. Current trends and approaches in bilingual education and second language learning are also presented.

Bilingualism as a literary device involves the use of two languages within a single work to enrich telling and convey cultural identity. This technique allows writers to reflect the unique experiences and environments of diverse communities, particularly those with a rich linguistic heritage. In literature particularly among Chicano and Mexican / American authors bilingualism can manifest as code switching alternating passages in different languages. This approach not only enhances the emotional and philosophical depth of the narrative, but also serves to preserve and communicate community identities amid larger cultural landscapes. Bilingual elements in literature serve as powerful tools to narrate themes of assimilation, cultural conflict and the complexities of identity, ultimately celebrating the richness of linguistic diversity and community narratives diversity. Bilingual children turned out to score higher on almost all subtests. In addition of their capability to think about language was comparatively higher example bilingual children were able to distinguish formal (grammar-related) from context-related errors in sentences. To them "apple grow on noses sounded funny but still correctly stated that is grammatically correct. From research in bilingualism and its consequences for psychological functioning in general and language mastery in particular two interesting findings emerged. Bilinguals are slower in producing **speech** in tasks **such as naming objects** (or pictures of objects) or in so-called verbal fluency tasks (where subjects are asked to name, for one **minute**, as many words as possible that start with "**p**" or denote a given category (e.g., concepts, **tools**, animals, furniture, etc.)). even if responses are made in the major language, or in either language. For bilinguals, it seems it is harder to come up with words. In contrast, they demonstrate better executive control. Bilingualism is defined quite simply as the everyday use of more than one language (or more than one dialect) of one language.

This definition is pragmatic, practical, and broad since it explicitly does not imply, as often assumed, the fluent mastery of two languages. It includes "dialect" because there is no clear-cut boundary between language and "dialect" and it allows for differences in fluency so that the careful evaluation of it (which has its own methodological problems) is not a necessary condition to this definition. According

to this definition, bilingualism is a dimensional variable that people can be more or less such that bilingualism is a matter of degree and can be studied accordingly. According to this world definition, the proportion of bilingual people globally is slightly more than 50%. There are marked differences in the rate of bilingualism across countries. Naturally acquiring a second language shapes the human brain through a lifetime of learning and practice which is why, from the perspective of neuroplasticity, a large number of studies show that managing more than one language has an impact on brain structure and function. In particular, bilingualism has a positive effect on cognitive control, which is often referred to as executive function. In essence, these terms denote the capability to consciously conceive a goal and act to achieve it.

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**İKİDİLLİLİYİN KOQNİTİV VƏ SOSIAL MEXANİZMLƏRİ VƏ
ONLARIN MÜASİR PERSPEKTİVLƏRİ
XÜLASƏ**

Açar sözlər: koqnitiv, ikidillilik, sosial davranış, dilçilik, interaktiv metodlar, sosial mexanizmlər

Məqalə ikidilliliyin insan beynindəki koqnitiv proseslərə və cəmiyyətlərdə sosial davranışlara təsirini göstərir. Koqnitiv mexanizmlər çərçivəsində ikidilliliyin diqqətin idarə olunması və zehni çevikliyi üzərindəki üstünlükləri təhlil edilir. Sosial aspekt isə iki dil bilməyən fərdin müxtəlif mədəniyyətlər arasında inteqrasiyasına və kommunikativ imkanlarına təsiri öyrənilir. Müasir perspektivlər neyrolinqvistik nailiyyətlər fonunda ikidilliliyin intellektual inkişafındakı rolunu işıqlandırır.

Bilingvizm (ikidillilik) həm dilçilik, həm də psixologiya nöqtəyi-nəzərindən geniş tədqiq olunan bir sahədir. Demək olar ki, dilçilikdə ikidillilik geniş yayılmış bir sahələrdən biridir. Eyni zamanda insan beynində hər iki dilin müəyyən aspektdə istifadəsi müsbət qiymətləndirilir. Azərbaycan dilçiliyində isə bilingvizm məsələləri daha çox dillərin qarşılıqlı əlaqəsi və təhsil kontekstində araşdırılır. Psixoloji cəhətdən ikidillilik insanın davranış və rəftarına, qarşılıqlı münasibətlərin tənzimlənməsində mühüm rol oynayır.

Psixologiyada bilingvizm sadəcə ikidillilik iki dildə danışmaq bacarığı deyil, həm də beynin koqnitiv strukturuna, emosional vəziyyətinə və şəxsiyyətin formalaşmasına təsir edən mürəkkəb bir prosesdir.

**ДОЦЕНТ ГАДАШОВА АЙБЕНИЗ
КОГНИТИВНЫЕ И СОЦИАЛЬНЫЕ МЕХАНИЗМЫ БИЛИНГВИЗМА
И ИХ СОВРЕМЕННЫЕ ПЕРСПЕКТИВЫ**

РЕЗЮМЕ

Ключевые слова: билингвизм, когнитивность механизмы, современные перспективы, социальная адаптация.

Данная статья изучает влияние билингвизма на когнитивные процессы в человеческом мозге и социальное поведение в обществе. В рамках когнитивных механизмов анализируются преимущества двуязычия в управлении вниманием и умственной гибкости. В социальном аспекте рассматривается влияние владения двумя языками на межкультурную интеграцию и коммуникативные возможности личности. Современные перспективы освещают роль билингвизма в интеллектуальном развитии в свете нейролингвистических достижений. Билингвизм — это не просто знание двух языков, а сложная когнитивная способность, вовлекающая уникальные нейронные механизмы. Научные исследования в области нейролингвистики выделяют несколько ключевых аспектов того, как функционирует мозг человека, владеющего двумя языками.

Механизм билингвизма — это динамическая система. Мозг билингва находится в состоянии постоянной "тренировки", что не только позволяет общаться на разных языках, но и замедляет старение мозга, развивая его адаптивные возможности. Один из главных механизмов — это способность мозга быстро переключаться между языковыми системами. Это что отвечает за исполнительный контроль мозга.

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