

## An Interdisciplinary Perspective on the Study of Bilingualism in Kazakhstan: Research Traditions and New Directions

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### Abstract

In the context of a new globalising world, bilingualism and multilingualism are no longer the exception but are becoming the norm for most of the world's population. In the context of modern global relationships, which are increasingly complex and fragile, languages have emerged as a significant means of enhancing these relationships. The advent of modern transportation networks has rendered geographical boundaries largely obsolete, thereby facilitating the mobility of individuals across national borders. This phenomenon has given rise to new opportunities in the domains of labour and education, thereby reinforcing the role of language as a tool for facilitating integration into a different socio-cultural context. These global processes pose new challenges for scholars in theoretically understanding bilingualism and multilingualism, as well as shifting the focus of research toward an applied approach. The present article offers a comprehensive overview of research domains in Kazakhstan that are centred on bilingualism. In consideration of the article's structure, the current review is oriented towards an examination of the predominant trends in bilingualism within the context of Kazakhstani scholarship, without asserting an exhaustive nature of the subject. In the future, this topic requires more in-depth study.

The article employs a comprehensive descriptive approach, a continuous sample, keyword analysis, and definitional and comparative analysis. The research sources encompass scientific publications, regulatory and strategic documents, lexicographic sources, educational and methodological literature. The analysis revealed that further development of bilingualism and multilingualism research requires strengthening the experimental base, expanding corpus data, and incorporating methods from neuroscience and other natural sciences.

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## **Introduction**

In the contemporary era, characterised by the integration and digitalisation of societies, the boundaries between cultures are becoming increasingly fluid, thereby strengthening international, intercultural and interlingual contacts. In the era of globalisation, bilingualism and multilingualism are no longer the exception but the norm for the majority of the world's population. Consequently, the study of bilingualism and multilingualism, along with the linguistic and cultural processes that accompany them, is becoming increasingly relevant and necessary. The dissolution of borders and the enhancement of freedom of movement have led to the emergence of new opportunities in the domains of labour and education, thereby reinforcing the role of language as a means of integration into new environments. The ability to communicate in a variety of languages is a prerequisite for accessing education and employment opportunities that are both prestigious and highly paid. The impact of this phenomenon is twofold: firstly, it enhances an individual's competitiveness in the global job market; secondly, it broadens the spectrum of career opportunities available to them. Consequently, this dynamic environment fosters the capacity for employment within transnational corporations and the implementation of international projects.

In Kazakhstan, the rapid development of foreign and domestic tourism (according to the Department of Tourism, over 1.14 million tourists visited Almaty alone in the first six months of 2025, which is 6.5% more than the previous year [1]) has created a need for specialists capable of intercultural communication, using communication strategies that avoid cultural misunderstandings, and adequately interpreting language tools in multilingualism. In the present day, multilingualism is emerging as a significant strategic guideline within the context of Kazakhstani education. The reform of the education system, particularly the transition to trilingual education, the introduction of integrated subject-language training programmes, dual-degree master's and doctoral programmes, multilingual study groups and updated curricula, has led to the formulation of and the search for solutions to issues related to comprehensive analysis of bilingualism.

## **Materials and methods**

The present article attempts to review the academic schools and research areas of bilingualism and multilingualism in Kazakhstan, as well as the planned prospects for interdisciplinary research within the context of the current language policy.

In order to provide a comprehensive overview of the scholar's research interests, it is essential to define the terms and concepts that are central to the discussion of the bilingualism process. The methodological basis of the study is a comprehensive descriptive approach and interpretive analysis, including a continuous sample, keyword analysis, and elements of definitional, comparative, and semantic analysis. The sources and materials for the study include academic publications (monographs, research and methodological articles, experimental studies, author's abstracts and dissertations); regulatory and strategic documents; lexicographic sources (industry-specific terminological dictionaries, bilingual terminological dictionaries, and encyclopedias); and educational publications (reference books, teaching aids, and

textbooks). The definitional analysis enabled a comparison and interpretation of the meanings of terms across various sources. This article is confined to a selection of works primarily in the philological and pedagogical fields.

### **Results and discussion**

A number of studies have viewed bilingualism and multilingualism in contrast to monolingualism, which has been used as the standard definition and characteristic features of bilingualism/multilingualism. This approach, according to scholars, often leads to a “distorted,” “fragmented,” and “irregular” view of bilingualism (Bhatia, 2017) [2].

The contrast and contradictory understanding of bilingualism has received increased research attention, which, as noted by A.A. Zalevskaya, has resulted in the publication of a substantial number of articles and monographs [3, p. 11]. Such an ambiguous understanding of bilingualism and the question of its advantages and/or disadvantages is entirely justified and explainable. In the scientific and pedagogical tradition of the first third of the 20th century, bilingualism (primarily in children) was viewed as a risk or problem associated with speech delay, small vocabulary, and underdevelopment of the language system. This recalls the linguist’s own interest and, at the same time, the parent’s concern while observing the speech development of their children. At the age of 3-4 years, phonemic, syllabic, and morphemic metathesis began to appear in their speech in both languages (Kazakh and Russian). On the one hand, there was a conscious understanding that frequent and longer manifestations of metathesis are observed in bilingual children compared to monolingual children. Factors such as the load on phonological memory, interference between two linguistic phonological systems, and interlingual assimilation of difficult-to-pronounce sounds in the first and second languages lead to increased metathesis in the speech of bilingual children. I distinctly recall examples that I recorded in my diary and subsequently analysed in class with students: *kölebek – köbelek (butterfly)*, *gofli – gol’fy (knee-highs)*, *bemogot – begemot (hippopotamus)*, *chebahalya – cherepaha (turtle)*, *telezeber – televizor (TV)*, *kışānai – kışkentai (little)*, *gaustuk – galstuk (tie)*, *pomomike – pomogite (help)*, etc. Metathesis in children’s speech is a natural phonological process in the development of articulation, phonological and lexical memory (Ferguson & Farwell, 1975) [4], (Levelt, 1999) [5]. On the other hand, there was the worry of a young parent, caused by the words of some adult relatives and acquaintances about the poor speech development of children, about the mixing of languages, etc. This example, it is argued, provides a pertinent illustration of the relatively prevalent concerns that young parents have regarding bilingualism and bilingual education. However, even within the scientific community, up until the seminal work of E. Peel and W. Lambert, “The relation of bilingualism to intelligence” (1962) [6], which demonstrated the advantage of bilinguals in the flexibility of thinking, there was criticism of bilingual education.

Subsequent studies (Bain, 1974) [(7, 119-128)] significantly supplemented the theoretical concept of Peal and Lambert on the preferential cognitive development of bilinguals in terms of verbal and non-verbal indicators (Ben-Zeev, 1977) [8].

In the context of Kazakhstani science, the scholarly interest in bilingualism and multilingualism is driven by three factors. Firstly, there is the linguistic situation, which is characterised by the use of two official languages, Kazakh and Russian. Secondly, there is the geopolitical situation, which is marked by the country's history as a Soviet and post-Soviet state. Thirdly, there is the influence of Soviet and post-Soviet linguistic ideology, which has had a significant impact on the country's linguistic policies. Bilingualism in Kazakhstan affects all layers of Kazakh society, which experienced profound upheavals in the 20th century, impacting the functioning of Kazakh, Russian, and other languages. For a considerable duration, extending up until the early decades of the 21st century, Russian functioned as the language of authority and ideology, science and education, economics, medicine, and the service sector. I remember the words of the preceding generation: “Oryssa bilmeseñ adam bolmaisyñ, nan taup jei almaisyñ” (literally, “If you don't know Russian, you won't be able to become a person, you won't even be able to buy bread”). Considering the sociolinguistic and ideological preconditions for the emergence and development of bilingualism in Kazakhstan, as well as the related statements in the media by politicians and public figures about the role and place of the Kazakh and Russian languages, Russification, and Kazakhization, it is evident that the undeniable advantage of natural bilingualism in Kazakhstan lies in its psycholinguistic aspect. Natural bilingualism provides significant advantages for bilinguals, related to cognitive processes and brain function, effective neural networks for performing attention and switching tasks, and the acquisition of a third and subsequent languages. In the field of mental health research, experts are engaged in discourse concerning the implications of bilingualism on cognitive function. The prevailing opinion among these specialists is that bilingualism engenders a phenomenon referred to as a “safety margin” in the brain, which is attributed to the adaptation of the brain to prolonged stress. This adaptation, it is posited, facilitates enhanced ability to cope with potential brain damage.

A detailed analysis of works by Kazakhstani scholars has been undertaken, with a focus on the factors that have influenced Kazakhstan's ethical and linguistic landscape, as well as the shift from one language to another under the new language policy. This process assumes particular relevance in the context of the new state language policy. The analysis of the literature allowed us to outline the scope of research attention, which focuses on the following: bilingualism, state language and language policy (B.Kh. Khasanov [9], E.D. Suleimenova, N.Zh. Shaimerdenova, D.Kh. Akanova [10], A.M. Abasilov, S.A. Asanbaeva [11], Zh.S. Smagulova [12], A.M. Fazylzhanova [13]), bilingualism and linguistic contactology (A.E. Karlinsky [14], D.M. Shaibakova [15], N.S. Pak [16], R.A. Avakova [17], S.Yu. Son [18], D.Zh. Kasymova [19]), functional interaction of languages, choice of language of education, acquisition of a second language and educational bilingualism (M.M. Kopylenko [20], A.E. Karlinsky [21], M.K. Isaev [22], T.T. Ayapova [23], O.B. Altynbekova [24], A.E., Agmanova [25], Sh.K. Zharkynbekova [26]), children's bilingualism (G.D.

Aldabergenova [27], I.M. Vinnitskaya [28], A.D. Zhakupova [29], A.K. Shayakhmet [30]), bilingualism as a way of adaptation to different situations in multilingual and multicultural societies, development and education of tolerance, choice of language in bilingual political communication (B.A. Akhatova [31], Zh.K. Ibrayeva, [32], G.S. Nabieva [33]).

One of the first scholars to turn to the scientific sociolinguistic substantiation of the problem of bilingualism in Kazakhstan was the renowned scientist B.Kh. Khasanov. In his seminal work “Languages of the Peoples of Kazakhstan and Their Interaction” (1976), he provided a comprehensive analysis of the linguistic situation in Kazakhstan during the Soviet period, with a particular focus on the role of the Russian language as a means of interethnic communication. B.Kh. Khasanov defines three parameters for characterizing the linguistic situation: 1) the number of functional units, which differ greatly in their spheres of application, 2) the linguistic nature of the functioning languages (types and forms of bilingualism and multilingualism existing in the republic, 3) the degree of prevalence of languages by the number of speakers and the volume of functions performed. B.Kh. Khasanov identified 126 functioning types of bilingualism [34, p. 33].

The classification of bilingualism through the theory of language contacts is presented in the works of the linguist A.E. Karlinsky. According to the theoretical concept of the scientist, in the process of bilingualism, in addition to the widely studied phenomenon of interference, languages also experience intercalation, in which the inclusion of words from the second language into speech in the first language is observed, or vice versa, creating mixed speech and influencing the norms of the first (native) language [15, 37]. A.E. Karlinsky proposes to distinguish between inventory intercalation (the insertion of individual words of the second language into speech in the first language and can manifest itself in the form of nomenclatural and redundant intercalation) and phrasal intercalation (the insertion of whole phrasal segments from the second language into the first language). Phrasal intercalation can manifest itself in the form of binary insertions, speech crookedness, epenthesis, quotations, which brings intercalation closer to code-switching. The theory of language contacts of A.E. Karlinsky found its continuation in the works of Kazakh scientists studying the processes of minority languages (N.S. Pak [17]), S.Yu. Son [18].

The analysis demonstrated that in Kazakh studies, the process of interference is described more comprehensively and with greater detail compared to the processes of intercalation and intercatenation. Conversely, in modern Kazakh as a first language and in Russian, which functions as a first language, such manifestations are prevalent [36, p. 70].

The starting point for a fundamental analysis of the sociolinguistics of bilingualism is the work of E.D. Suleimenova and her scientific school. The monograph “The Language Situation and Language Planning in Kazakhstan” presents a comprehensive overview of the evolution of the linguistic landscape of contemporary Kazakhstan, exploring the characteristics and types of bilingualism within the context of the republic’s multilingual and multiethnic composition, and delving into the legal

status of the Kazakh and Russian languages [37]. The substantiation of the bilingual nature of the linguistic situation in Kazakhstan and the prerequisites for its formation was continued in the important infrastructural work “Languages of the Peoples of Kazakhstan: A Sociolinguistic Handbook”, which records the number, composition, and functional domains of the republic’s languages [38]. A sociolinguistic description of bilingualism in the republic in the context of the concepts of “state language”, “language choice”, and “languages of education” is presented in the works of scientists (“Dynamics of the language situation in Kazakhstan” [39], “Choice of language and correlations of language transmission” [40]), carried out within the framework of fundamental scientific projects. Bilingualism is a key dominant feature of Kazakhstan’s political communication, clearly manifested in the speech behavior of politicians. The evolution of the speech behavior of the linguistic personality of a politician in Kazakhstan depends on such important components as gender, age, level of education, profession, degree of proficiency in Kazakh and Russian, language preferences, and prestige of the language. [32, p. 25].

The works of Kazakhstani sociolinguist Zh.S. Smagulova are devoted to a systemic analysis of language choice and linguistic attitudes. The scholar answers the question of how the republics current language policy influences citizens’ attitudes toward the Kazakh and Russian languages, and how these processes are reflected in the actual choice and use of language in various spheres of language use (in the family, education). Authors Zh.S. Smagulova and D.B. Madieva, based on an analysis of eventonyms in the Russian-language newspaper “Almaty aqshamy” conclude that in a context of multilingualism, violations of the purist norms of the standard Russian language are becoming the new norm, and Russian is ceasing to be the sole dominant code of the public and official domain [41, p. 1004].

A promising area of research is to address the status of the Russian language in the context of Kazakh-Russian bilingualism, including issues of functional strength, the dynamics of prestige and attitudes towards language, and changes in the speech behavior of different social groups. Today, there is an active discussion in the scientific community; numerous terms are used to describe this phenomenon: pluricentricity, polyvariability, multinational language, local variant, local version, etc. [43, p. 10]. In this regard, researchers propose “Kazakhstani Russian” [42, p. 232], a national variant of a multinational language [44], the Russian language is undergoing a process of regionalization and is increasingly distancing itself from its mainland invariant [45, pp. 257-268] and is experiencing turbulent, rapid diversification processes [43, p. 14]. Since the focus of this article is limited to a review of the literature on bilingualism and multilingualism in Kazakhstan, a promising discussion for future research could be the issue of the status and functional content of languages in a bilingual society.

. Accordingly, the goals and objectives of sociolinguistic research on bilingualism influence the metalanguage and the choice of analysis methods. For instance, the key and system-forming term “bilingualism” in the “Dictionary of Sociolinguistic Terms” by E.D. Suleimenova, N.Zh. Shaimerdenova, Zh.S. Smagulova, D.Kh. Akanova is understood as the proficiency/use of two/several languages by an individual or society [46, pp. 153-154]. We consider it necessary to note that the “Dictionary of

Sociolinguistic Terms” edited by E.D. Suleimenova is the first specialized dictionary in sociolinguistics in the post-Soviet space (the first edition of the dictionary was in 2002). In this article, we refer to the 2nd edition of this dictionary (2020). The dictionary has been reprinted several times and has great scientific and practical value. When compiling the dictionary's entries, the authors took into account the experience of domestic and international sociolinguistics and, crucially, the specific linguistic, demographic, and geopolitical situation in Kazakhstan. All of this is reflected in the proposed definitions and the selection of lexicographic material. The dictionary's terms are provided in both Kazakh and Russian, significantly expanding its user base and facilitating the search for translations. Regarding the definition and content of the term “bilingualism” the authors propose distinguishing the following types: individual bilingualism – knowledge and use of two languages by members of a particular ethnic group; and mass bilingualism – knowledge and use of two languages by the majority of an ethnic group [46, pp. 153-154]. The phenomenon of mass bilingualism in Kazakhstan, as is well documented, emerged during the Soviet era (by analogy with the Soviet term “national-Russian bilingualism”). In contrast, Russian was utilised across all major domains of public life, whereas Kazakh remained confined to specific areas, including everyday and family communication, fiction, journalism, and cultural activities, all within a narrow national framework [47]. One type of bilingualism is known as natural bilingualism, which is defined as the knowledge and use of two languages as a result of direct interaction between native speakers of these languages [46, pp. 153-154]. Natural bilingualism is defined as the acquisition of language through socialisation, whereby the study of a foreign language (in artificial or academic bilingualism) is a means of adaptation [48, p. 12].

Sociolinguistics is interdisciplinary in nature, so it's only natural that its terminology is based on sociological terms and concepts, which are clarified and supplemented with linguistic content in dictionary entries.

In Kazakhstan, natural bilingualism is widespread, where Russian is acquired spontaneously, in the natural context of the speech environment. Most Kazakhs became natural bilinguals because they lived in a bilingual environment during the Soviet era and did not specifically study Russian. This type of bilingualism, according to B. Khasanov, is a socially natural and necessary phenomenon [49]. Natural bilingualism most often begins to develop in childhood. This early exposure is associated with immersion in a communicative environment, where both languages are part of daily practices. Here, the functional distribution of languages is important, where one language is the family language, while the other is realized in the micro-society (kindergarten, street, school). Natural bilingualism in children is characterized by a high level of automaticity in speech processing in both languages. In Kazakh families (usually urban ones), characteristics of natural bilingualism include the early, parallel acquisition of Russian and Kazakh and active code-switching. A comprehensive analysis of children's natural bilingualism (based on children's speech) is presented in the research of psycholinguist A.K. Shayakhmet, who combines sociolinguistic, psycholinguistic, and ontolinguistic approaches to the study of children's bilingualism.

Childhood bilingualism in Kazakhstan is not just the parallel existence of two languages in children's speech, but also a vital necessity, since the main factor leading to the acquisition of a second language – both Kazakh and Russian – is inevitable socialization, an obligatory part of which is linguistic socialization, accompanied by a complex of psycholinguistic factors [50, p. 6].

It is logical to contrast natural bilingualism with artificial bilingualism – the knowledge and use of two languages as a result of deliberate and specially created conditions for learning a second language [46, p. 154].

In light of ongoing educational reforms, the problems of educational bilingualism are constantly the focus of research by linguists, methodologists, educators, and psychologists. Today, the reform of the transition to trilingual education is generating considerable interest both in Kazakhstan and abroad. A number of foreign studies propose a comparison of modern school education with education during the Soviet period in Kazakhstan [51, pp. 122-144], and also discuss the problems of changing the structure, content, and technology of instruction in the context of multilingual education [52, pp. 75-79].

The linguistic situation in Soviet schools dictated the conditions for the formation of bilingual schools. As is well known, during the Soviet period, universities and pedagogical institutes of the Kazakh SSR trained teachers of philology with the qualification “Teacher of Russian Language and Literature in a National Schools”. Today, the Soviet term “national school” has been replaced by the phrases “school with a non-Russian language of instruction” and “school with a non-Kazakh language of instruction”. National and regional higher education institutions across the country train specialists in Kazakh language and literature for schools with non-Kazakh as the language of instruction, and Russian language and literature for schools with non-Russian as the language of instruction. At the same time, the demands of the modern labor market have influenced the emergence of new teaching professions with knowledge of English. For example, the oldest pedagogical university, Abai KazNPU, trains foreign language teachers in the specialization “Uyghur Language and Literature – English”.

In addressing the significant matter of the role and functions of the English language within the educational system of Kazakhstan, it is imperative to acknowledge the pioneering contributions of R.B. Nurtazina. Prior to the transition to multilingual education during the Soviet era, R.B. Nurtazina, a renowned teacher, methodologist and linguist, was among the first to implement multilingualism in practice. As E.D. Suleimenova states in her book “Essays on Linguists”, R.B. Nurtazina addressed the issues of multilingualism as far back as the 1970s of the last century, overcoming organisational and methodological difficulties, and providing students of Kazakh schools with the opportunity to master English along with Kazakh and Russian [53, p. 28]. R.B. Nurtazina largely foresaw the future of Kazakhstan's multilingual education and, as the director of School No. 12 in Almaty, she achieved the introduction of in-depth study of the English language; subjects such as history, physics, and mathematics began to be taught in English. R.B. Nurtazina, as one of the authors and developers of the “Concept of the Kazakh General Education School”, openly raised issues of

expanding the spheres of the Kazakh language, revealed the problems of ignoring examples of folk pedagogy and literature of the Turkic peoples, and the residual principle of financing education.

In all educational organizations, regardless of the form of ownership, students are provided with knowledge of Kazakh as the state language, as well as the study of Russian and one of the foreign languages in accordance with the state compulsory standard of the corresponding level of education [54]. The teaching of a foreign language in the context of artificial or educational bilingualism has again acquired its relevance with the transition of the entire education system to trilingual education. The idea of multilingual education in Kazakhstan was first voiced in 2004, and the phased implementation of the “Trinity of Languages” project began in 2007 [55, p. 2]. Educational bilingualism as a specific type of bilingualism, requiring the development of a methodological concept, is widely considered by Kazakhstani scientists in an interdisciplinary aspect: in contrastive linguistics, linguodidactics, comparative linguistics, and language teaching methodology [56, 24, 37, 57, 58, 59, 60, 61]. In bilingual education, language acts as a tool for acquiring new knowledge, familiarization, and the content of education is distinguished by a combination of subject and language components in all links of the educational process [62, pp. 1-6].

Consequently, an integrative approach combining methodologies from associated disciplines (e.g. sociolinguistics, psycholinguistics, cognitive science, linguodidactics) is recommended when studying bilingualism. Furthermore, it is imperative to draw distinctions between the particulars of the study. The field of sociolinguistics offers an explanation as to why and for what purpose a bilingual individual chooses a language, while psycholinguistics provides an explanation as to how a bilingual individual switches or mixes languages. While the field of sociolinguistics identifies language prestige, attitudes towards language, linguistic norms, and common usage as causes, psycholinguistics focuses on the speech mechanisms that regulate bilingualism as a cognitive phenomenon.

The innovative nature of psycholinguistics has had a significant impact on its metalinguistic framework. The conceptual and terminological basis of psycholinguistics consists of terms and concepts from various sciences, including linguistics itself, psychology, sociology, cognitive neuroscience, medicine, physiology, speech therapy, pedagogy, defectology, etc. [63] serves to confirm the multipolarity of modern linguistics and its various directions.

The study of bilingualism in Kazakhstani psycholinguistics is associated with speech behaviour, speech production and perception, the study of the integrative network between two language systems, and the competition of languages in information processing. The following areas of research are of particular interest:

- the acquisition of first, second and third languages by children and adults (A.K. Shayakhmet [32], M.I. Akberdi [64]),
- the understanding and acquisition of different types of texts in a third (foreign) language by bilinguals, and

- psycholinguistic principles for developing reading literacy (Zh.K. Ibrayeva, A. Saduakassova, E. Kurmanbek, M. Kenzhebekkyzy [65, 66, 67]).

A scientific field that is in its infancy in Kazakhstani science is the neurolinguistics of bilingualism, as well as neurolinguistics in general. It is important to acknowledge the medical dimension of the investigation into the relationship between language and the brain, which is predominantly linked to various pathologies and diseases of the human central nervous system. In contrast, in Kazakhstan, there is a compelling need to shift the focus from the analysis of the brain function of a patient to that of a healthy individual. This approach enables the identification of characteristics related to ontogenesis, language abilities, language choice, code switching, and language processing, among other aspects.

In 2024, the Brain Institute was established at Al-Farabi Kazakh National University, where fundamental and applied brain research is conducted. It is important to acknowledge that neuroscience represents a relatively recent area of research in Kazakhstan. Previously, scientific research related to brain issues was conducted in the republic at clinical research institutes. The Brain Institute, under the leadership of Professor A. Kustubaeva, the project's initiator, was established within the Center for Cognitive Neuroscience at the university's Department of Biophysics, Biomedicine, and Neuroscience. For the first time in Kazakhstan, this interdisciplinary center has begun conducting integrative research into the functioning of the brain, involving scientists from various fields. "The Brain Institute can become a conglomerate uniting the natural, humanitarian, and exact sciences. Fundamental brain research, such as the study of the neuromechanisms of emotional-cognitive functions and consciousness, will attract global international scientific foundations to finance scientific projects. Scientific research conducted by the Brain Institute will help optimize rationality and efficiency in thinking, advance the development of brain-computer interfaces, optimize the processes of cognitive development and emotional state, correct deviant development, prevent the deterioration of cognitive functions with aging, etc." [69]. Within the framework of the work of this institute, an interdisciplinary neurolinguistic study of trilingualism is being carried out for the first time, uniting linguists and neuroscience specialists [68]. The object of the scientists' research is the process of acquisition of English (a third) language by Kazakh-Russian and Russian-Kazakh bilinguals.

### **Conclusion**

The review demonstrated that research on bilingualism and multilingualism in Kazakhstan is developing in line with contemporary global scientific trends and draws on the extensive experience of domestic scientific schools. Bilingualism in Kazakhstan is not only a socio-historical phenomenon but also an important tool for educational, scientific, and cultural modernization. Reforming the education system and transitioning to trilingual education require a comprehensive analysis of the principles of multilingual education. The review demonstrates that successful acquisition of a first, second, or third/foreign language is associated with a whole range of sociolinguistic and psycholinguistic methodological factors. Therefore, language learning methods should be interdisciplinary, combining tools from various disciplines.

An analysis of current trends confirms that further development of bilingualism and multilingualism research requires strengthening the experimental base, expanding corpus data, and incorporating methods from neuroscience and other natural sciences. The importance of multilingualism in modern Kazakhstan is determined not only by the needs of the labor market and education, but also by the role of multilingualism in strengthening intercultural dialogue, interethnic harmony, and the formation of a multilingual and transcultural personality.

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