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Linguocultural Aspect as a Factor in the Development of Emotional Intelligence in the Process of Learning a Foreign Language: Neuroscientific Aspects

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Abstract: *The importance of the article is due to the fact that in recent years psycholinguists and linguistic theorists in many countries around the world have shown great interest in the research of the linguo-cultural aspect of emotional intelligence development in the process of learning a foreign language neurodidactics. Of course, teaching foreign languages using a special method based on neurolinguistic programming in the study of the linguo-cultural aspect of the development of emotional intelligence in the process of learning a foreign language will allow to master intercultural communicative competence in the shortest possible time due to the production needs. Researchers who conduct such research want to help teachers to teach the linguo-cultural aspect of the development of emotional intelligence in the process of learning a foreign language, taking into account the individual and age features of the brain activity of students. They also emphasise the importance of the emotional component of the learning process, although they analyse the full range of challenges for teachers. Thus, many neurodidactic issues related to the improvement of the educational process are still waiting to be solved. The article explores the role of neuroscientific knowledge in the didactics of learning a foreign language; ways of developing emotional intelligence in the process of learning a foreign language are defined; the role of the linguocultural aspect in the process of learning a foreign language is outlined.*

Keywords: *neuroscience; neurodidactics; intercultural communicative competence; students' brain activity; emotional intelligence; empathy.*

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1. Introduction

The application of neuroscience in the field of foreign language education has been relatively underexplored in the past. However, the 21st century has seen a significant surge of interest in neurodidactics, which many specialists now consider a paradigm shift in education. Research into brain activity has led to the publication of numerous scientific articles on foreign language teaching, prompting a revised perspective on education, the role of the student, motivation for learning foreign languages, and the acquisition of language competence. Central to neurodidactics are the individual abilities of learners, as these form the foundation for personal development and the expansion of cognitive horizons.

According to Bihych et al. (2013), there is evidence that the integration of linguocultural dimensions in foreign language learning, particularly the ability to connect emotions in balanced ways to processes such as creativity, problem-solving, and communication, plays a significant role. Also, some authors as Malykhin et al. (2014), Smolina (2010), and Kolomiets and Hromov (2018), highlight additional components of emotional intelligence in the process of learning a foreign language: empathy, conflict resolution, and social competencies. Bihych et al. (2013) highlight the importance of describing and classifying the components of emotional intelligence for a holistic comprehension of the learning process. According to Bihych et al. (2013, p. 23), "neuroscientific research in the didactics of foreign language learning was engaged in by such domestic and foreign scientists". Sabitzer (2011), in their studies in neuroscience and psychology, offers insight into foreign language acquisition and the cognitive mechanisms underlying brain function during learning.. Carmeli (2003) investigated how neural networks are involved in processing different linguistic aspects, which would help to improve the teaching process. The neuroplasticity of the brain is proven by Marquez, Martin, and Brackett (2006, p. 12), since, in their opinion, “one characteristic feature is the permanent brain is adaptation to new conditions, new environment, and age". According to Marquez, Martin, & Brackett (2006, p. 24), "humans are capable of lifelong learning, but adult learners can learn by using their analytical thinking, which is not quite developed in children".

The purpose of this article is to explore the contribution of neuroscientific knowledge to foreign language didactics, with particular emphasis on identifying effective strategies for developing emotional intelligence and highlighting the significance of the linguo-cultural dimension in language acquisition.

2. The Role of Neuroscientific Knowledge in the Didactics of Foreign Language Learning

Neuroscientific insights significantly contribute to the pedagogy of foreign language acquisition. The left hemisphere of the brain functions as the center for analytical thinking, language, and logic, while the right hemisphere is associated with synthetic thinking. It reflects our imagination and creative potential. Through the right hemisphere, we are able to appreciate colour, imagery, music, and rhythm, serving as the hub for our emotions. During vocabulary acquisition, both the left and right cerebral hemispheres work in tandem (Perelomova, 2008). Verbal information is processed by the left hemisphere, while the corresponding imagery engages the right hemisphere. This simultaneous activity in both hemispheres fosters the formation of specific linguistic patterns that enhance memorisation and reduce the likelihood of forgetting new vocabulary. As a result, the new words become firmly anchored in memory and are utilised automatically and naturally in speech. According to Kostikova (2008), the careful selection of instructional materials is essential for effectively engaging both sensory modalities, visual and auditory, in the learning process. Therefore, it is important to pay attention to factors such as good acoustics and lighting in classrooms, the quality of printed handouts, and the elimination of extraneous noise in listening materials.

During learning, neuronal networks are formed in which synapses, specialised junctions between neuronal extensions and other excitable or non-excitable cells, play a critical role in the

transmission of neural signals. Impulse reception slows down with age. "The learner may be thoroughly engaged, but the information is not processed quickly and more time is required to memorise it, which slows down the whole learning process" Biria and Zafari (2014, p. 56).

Emotions play a crucial role in the learning process. Our memory and motivation are closely linked to our emotional experiences, as we tend to remember information that holds emotional significance more effectively. Many educators view emotions as a vital element in fostering successful foreign language acquisition. According to Pishghadam (2009, p. 23), "emotions enrich our lives, enhance memory, motivate us, and stimulate learning."

Mastering a foreign language is a highly individual journey. No brain can absorb information instantaneously; personal experiences and unique neuroanatomical differences play a significant role in how we process and assess information, leading to varied cognitive pathways. This raises an important question: how do we perceive new knowledge and experiences, and how do we interpret those perceptions? According to multilingual speakers, the most challenging aspect was learning that first foreign language. As noted by Biria and Zafari (2014, p. 17), *"*The process of acquiring each successive language became easier and easier*"*. Research in neuroscience and psychology offers insights into the mechanisms of learning. There is no single, one-size-fits-all way to learn foreign languages. As Salovey and Mayer (1990, p. 45) note, "Everyone who learns is individual. Understanding how our brains function during learning, what the mechanism of cognition is, and how neural networks are involved in processing different aspects of language would help to improve the teaching process." There are many ways to prevent premature sclerotic brain changes. One of the best exercises for the brain is to learn a foreign language. Until recently, learning foreign languages was considered the privilege of the younger generation, but in the last few years, there has been a growing interest in learning foreign languages among the older generation. A seventy-year-old person who is active and eager to learn often has more success in mastering a foreign language than a less ambitious twenty-year-old student. As Prots et al. (2021, p. 45) emphasise, there are several factors that teachers should take into account when working with diverse age groups.

While many young individuals develop their own strategies for learning foreign languages, members of the middle generation benefit from a more extensive knowledge base and greater experience to guide their learning. As Goleman (1995, p. 12) notes, "They prefer cognitive learning, are more resourceful, and display greater flexibility in communicative contexts." Additionally, the middle generation often shows high levels of motivation, frequently driven by career-related goals such as job security and advancement.

It is widely acknowledged that one of the defining features of the neuroplastic brain is its ability to continually adapt to new conditions and environments. Everyone is capable of lifelong learning. The difference between children and adults is the speed of learning, which is very high in children but decreases with age. However, adult learners can compensate through their more developed analytical thinking, a cognitive faculty that is not yet fully mature in children. We pay special attention to the ability to communicate when teaching foreign languages in order to be comprehensible and communicate intelligently in a foreign language. In this regard, teachers must be universal language models for their students, combining experience, modern teaching methods, and authenticity of instructional materials. If a teacher is not proficient enough in a foreign language and is not able to communicate fluently in it, he or she cannot learn at the proper level and motivate his or her students. In addition, their characteristics must be taken into account. What are their true goals? What is their attitude towards the foreign language, the culture of a particular country? What are the age, neuropsychological, and intellectual characteristics of each student? All of these are important aspects of successful interaction between teachers and students.

Neuroscientific principles of emotional intelligence are vital for the development of AI models used in adaptive learning platforms and cognitive assessments. The human brain functions as a complex system that continually evolves through learning and experience. These principles, often referred to as emotional intelligence (EQ), provide essential insights into cognitive processes,

guiding their application in artificial intelligence technologies. As noted by Mirochnyk (2016), incorporating these concepts into the design of adaptive learning platforms and cognitive assessments can significantly enhance the effectiveness of personalised instruction and real-time performance evaluation.

Emotional intelligence is the human ability to recognise, understand, and manage one's own emotions, as well as to perceive the emotions of others. Its development helps optimise decision-making because people with high EQ are more aware of their emotions, which allows them to make more informed decisions. Emotion regulation helps reduce cortisol levels, which positively affects cognitive function, and interacting with others based on empathy and understanding improves communication skills and cognitive flexibility. According to Sabitzer (2011), emotional awareness enhances creative problem-solving and encourages divergent thinking. Current research in neuroscience can inform the development of innovative AI models for adaptive learning platforms and cognitive assessment. By leveraging the principles of emotional intelligence, AI can analyse users' reactions and tailor the learning experience to their emotional states. Through language and emotion analysis techniques, AI can more effectively evaluate human cognitive abilities in real time. Additionally, incorporating emotional intelligence principles into voice and text-based assistants can enhance user interactions. Utilising AI to recognise students' emotional states and adjust instruction accordingly can significantly boost student engagement and learning efficiency.

Utilising neuroscientific principles of emotional intelligence to inform the development of AI models unlocks new opportunities for adaptive learning and cognitive assessment. By incorporating emotional intelligence into AI technologies, we create a more personalised and effective learning approach that considers not only users' cognitive abilities but also their emotional states. This integration can greatly enhance the learning experience, boost motivation, and optimise cognitive assessments across various contexts.

3. The Development of Emotional Intelligence in the Process of Learning a Foreign Language

It is essential to recognise that the components of emotional intelligence in the context of learning a foreign language are organised hierarchically. At the foundation lies the identification of emotions, which serves as a cognitive skill. This ability is crucial for comprehending and managing emotions effectively. Each of these three components encompasses both intrapersonal and interpersonal dimensions, meaning it involves understanding and regulating one's own emotions as well as those of others. As Khatsaiuk et al. (2021, p. 23) observe, intrapersonal and interpersonal emotional intelligence components may develop at different rates. The use of emotions is based on the ability to understand and manage emotions, to show flexibility in perceiving and presenting information to others. Identification in the process of learning a foreign language is the ability to accurately determine the presence of the very fact of emotional experience in oneself and others, and the ability to find a verbal expression for it. Understanding in the process of learning a foreign language - the ability to find the reasons underlying certain emotional states, and foresee the development of emotions and their impact on behaviour. "Control in the process of learning a foreign language is the ability to control the intensity of emotions, their external expression and transmission to other people, as well as the ability to arbitrarily evoke a particular emotion when necessary", Mirochnyk (2016, p. 45).

In the process of learning a foreign language, emotional intelligence encompasses the ability to effectively integrate emotions into various cognitive functions, such as thinking, creativity, problem-solving, evaluation, behaviour, and communication. Additionally, some authors highlight further components of emotional intelligence relevant to language acquisition, including empathy, conflict resolution, and social competence. Understanding and classifying these components is crucial for a comprehensive grasp of emotional intelligence in the context of foreign language learning. Self-regulation means the ability to control one's internal states. The regulation of internal

states serves as a key indicator of how to respond to external factors and is inherently adaptive. Certain individuals possess the ability to normalise and adjust more swiftly, regardless of the circumstances. Self-regulation entails achieving an internal balance. To accomplish this, one must learn to act with confidence and express thoughts, feelings, and beliefs sincerely and directly that respect the integrity of others. Self-confidence involves recognising and accepting both one's own needs and feelings, as well as those of others. As Lyusin and Mohammed (2020, p. 23) assert, "Body language conveys extensive information about our internal state; therefore, we must consciously regulate negative emotions—such as anger, moodiness, fear, shyness, embarrassment, shame, and disgust—and express them in socially appropriate ways."

Being aware of your emotions while learning a foreign language is about being aware of yourself, being calm, being true to yourself and your feelings and emotions, being able to give rest to logic and rationality, listening, and understanding others. It is crucial to acknowledge and accept one's internal emotional states while also striving to meet personal needs, maintaining a balance between self-fulfilment and sensitivity to the emotions of others. It is very important to strike a balance between satisfying one's own needs while accepting one's inner feelings and the emotions of others. Furthermore, emotional awareness can foster creativity and facilitate problem-solving from alternative cognitive perspectives. Being true to oneself primarily means staying true to one's beliefs and tastes, which is quite difficult for adolescents because they need to identify with a certain peer group and accept its attitudes, norms, and morals in order not to be rejected by this group.

Empathy, defined as the intuitive understanding of others through emotional communication, involves the ability to recognise and share the feelings of another person. In essence, it is the capacity to place ourselves in someone else's position. This ability is rooted in the physiological properties of the nervous system, which enable us to resonate with our fellow humans. The brain constructs a perception of the social world based on a pattern of exchanges that have evolved through human interaction and experiences. Consequently, empathy is a fundamental aspect of the human psyche, continuously influencing our daily interactions with parents, friends, classmates, neighbors, passersby, and co-workers (Volodko, 2009). Recently, the term "emotional intelligence" has been increasingly used in domestic and foreign methodology to denote a set of abilities, knowledge, and skills related to self-regulation and necessary for communication and social integration. This concept combines the ability to discern and understand emotions with the ability to manage one's own emotional states.

Emotional intelligence in learning a foreign language is an integrative concept and covers a wide range of abilities, knowledge, and skills, the importance and necessity of which for the development of knowledge of a foreign language is beyond doubt. Among the components of emotional intelligence in learning a foreign language are the following (Hromov, 2020):

1. Self-awareness (emotional self-awareness, self-esteem, self-confidence).
2. Social awareness (empathy, organisational awareness).
3. Self-management (self-control, adaptability, initiative, performance orientation).
4. Social skills (development of others, leadership, influence, communication, conflict resolution, group work).

Speaking about emotional intelligence, it is necessary to consider two main aspects: the ability to manage one's own emotions and to create a favorable emotional atmosphere in relation to other people.

When it comes to teaching a foreign language, the concept of "emotional intelligence" is particularly noteworthy. Many of its components—such as empathy, achievement motivation, self-regulation, and reflection—are essential for both the holistic development of a person's emotional sphere and the effective formation of students' foreign language communication skills. Foreign language lessons provide unique opportunities for fostering emotional intelligence, allowing for the simulation of communicative situations and the development of appropriate behaviours in various communication contexts. The emotional sphere, along with the intellectual,

plays a crucial role in the formation of speech and speech skills. Integrating self-regulatory skills and emotional state management into the broader framework of emotional intelligence enables a comprehensive approach to developing the learner's emotional sphere, which is essential for both effective language acquisition and its sustained communicative use.

Payne (1985) highlights the general principles of developing the components of emotional intelligence when learning a foreign language.

a. Self-assessment

During the lesson, it is crucial to emphasise students' strengths and potential rather than their weaknesses. Educators should assess not only the final outcomes but also the effort each student puts into reaching those results. When students understand that the greatest achievements are often the result of significant effort, their motivation to engage in assignments will naturally grow.

b. Confidence

Incorporating elements of self-regulation into the learning process is essential when students are given the opportunity to evaluate their own actions. While learning a language, it is vital for students to explore and implement their individual learning styles and strategies. Through a variety of tasks, teachers should create opportunities that engage the diverse cognitive dimensions of each student's intellect. To cultivate realistic thinking, emphasis should be placed on self-reflection, encouraging students to assess their positive and negative actions and emotions. By fostering an internal dialogue, students can better concentrate on the task at hand and enhance their effectiveness. Continued self-reflection can guide students in developing techniques for communicating with their "Ego," ultimately becoming a crucial component of their mental performance.

c. Achievement motivation

Establishing realistic and attainable goals while modelling the necessary processes, along with providing consistent support, is vital for promoting successful outcomes. Emphasis should be placed on the persistence and effort students dedicate to their tasks rather than solely on the end results. It is important to guide students in recognising that failure is a natural and valuable part of the learning journey. Additionally, teaching them to appreciate not only their own work but also the contributions of their peers is essential.

d. Empathy

In the lesson, the teacher should encourage students to consider the diverse perspectives and attitudes observed in role plays and real-life situations, which may differ from their own. Students should learn to recognise the emotions they experience, as well as those of others, in various moments and contexts. It is essential for students to practice empathy by placing themselves in others' shoes and to respond both verbally and nonverbally, demonstrating understanding and compassion.

Voznyuk (2014, p. 34) emphasises that "one of the most crucial aspects of empathy is the ability to understand and utilise non-verbal methods of conveying emotions." Elements such as tone of voice, speech rate, and intonation are essential in this process. These skills also play a significant role in developing communication abilities in a foreign language, as they allow students to "decode" and employ non-verbal expressions that are characteristic of the culture associated with the language being studied.

e. Social skills

It is crucial to offer tasks that encourage students to collaborate in groups and pairs. In the initial stages, begin with short, well-structured tasks, gradually progressing to those that grant students greater independence and responsibility. Ultimately, you should incorporate tasks that clearly promote student interaction, active listening, and continuous role-switching.

When cultivating communication skills in a foreign language, it is essential to emphasise abilities such as sharing personal information, interpreting reactions to others' remarks, offering assistance, and providing support. Additionally, responding positively or negatively, demonstrating listening skills, and expressing understanding, appreciation, admiration, and approval are crucial. Fostering active listening among students not only enhances communication but also aids in the acquisition of a foreign language.

It should be noted that many of the above principles and techniques can be used and are often practiced in self-study of a foreign language. "However, the greatest effectiveness of the learning process can be achieved with a holistic approach, with an awareness of their mechanisms of functioning during assimilation and with an emotional focus", Sabitzer (2011, p. 34).

Today's research in neuroscience can inspire the development of new AI models for adaptive learning platforms and cognitive assessment. AI can use the principles of emotional intelligence to analyse users' reactions and adapt the learning experience to their emotional state. Using language and emotion analysis techniques, AI can more accurately assess human cognitive abilities in real time. Moreover, embedding emotional intelligence (EQ) principles into voice- and text-based assistants enhances the quality of human–AI interaction. Using AI to recognise students' emotional state and adapt instruction can improve student engagement and learning efficiency.

Leveraging neuroscientific principles of emotional intelligence in the development of AI models unveils new opportunities for adaptive learning and cognitive assessment. By incorporating emotional intelligence (EQ) into AI technologies, we can foster a more personalised and effective learning approach that considers not only users' cognitive abilities but also their emotional states. This enhancement can greatly enrich the learning experience, boost motivation, and optimise cognitive assessment across various contexts.

Enhanced emotional intelligence is associated with lower levels of cortisol, a stress hormone that can impair the ability to retain new information and lead to cognitive challenges. By managing emotions effectively, individuals can enhance their concentration, which directly influences learning and memory performance (Lyusin & Mohammed, 2020).

Emotional intelligence also influences a person's ability to understand and use language. The ability to understand the emotional state of a communication partner helps in better comprehension and interpretation of speech messages. People with high emotional intelligence are better able to adapt their language to the appropriate context by using the right tone of voice, style, and vocabulary. Emotional awareness and regulation can break down communication barriers such as shyness or fear, which has a positive impact on the ability to express opinions clearly and concisely.

Developing emotional intelligence helps to improve memory and speech skills. Emotions play an important role in memory processes, and the ability to control one's emotional state has a positive impact on language adaptation and communicative efficiency. Using emotion regulation strategies in learning can significantly improve cognitive and linguistic skills and make the learning process more effective and sustainable.

The following section delves into how these methods and principles can be applied to specific English language tasks and exercises. There exists a variety of tasks and exercises, as well as techniques for fostering and enhancing students' emotional intelligence while learning a foreign language. Among the most effective are game-based activities (such as role-playing games, drama activities, and games designed to boost communication skills), poetry, the incorporation of drawings and photographs, the modelling and analysis of specific situations, mini-competitions, competitive games, and the utilisation of specialised computer programs.

f. Role play

The game is an indirect way for the student to connect to the outside world - it is a kind of school of emotions, the most important tool with which to shape the emotional world of students. Role-playing not only reinforces a variety of cognitive skills but also provides a foundation for emotional and social development. The use of game tasks in teaching a foreign language makes it possible to combine successful language learning with the formation and development of emotional intelligence.

An effective means of forming motivation for foreign-language dialogic communication is role-playing games. Situations of communication based on role-playing allow bringing speech activity in the classroom closer to real communication and making it possible to use language as a means of communication, with both verbal and non-verbal means of communication being actualised, while developing such important components of emotional intelligence as motivation to achieve, use and understand non-verbal means of communication, etc.

g. Group discussions.

An effective form of work, which allows combining effective foreign language learning with the development of various components of emotional intelligence, is group discussions.

One example of such exercises is Circle Time. This activity promotes vocabulary development and enhances speech skills, while also boosting self-esteem and encouraging individuals to express their emotions openly. Malykhin et al. (2014) highlight that these tasks foster active listening and cultivate essential communicative competencies. Numerous other exercises also aid in developing various facets of emotional intelligence among foreign language learners. It is important to note that emotional intelligence should not be viewed in isolation; it is intertwined with the other knowledge, skills, and abilities essential for any individual. A holistic educational approach emphasises the integration of both emotional and intellectual domains. By incorporating contemporary methods of emotional development into language instruction, these principles can be effectively applied within the language learning context. The mechanisms of emotional intelligence significantly influence memory and speech skills, playing a vital role in memory consolidation and verbal performance. This encompasses the ability to recognise, understand, control, and express emotions, which directly impacts the capacity to remember information and use language effectively. Furthermore, emotional intelligence mechanisms enhance the efficient encoding, storage, and retrieval of information, as events or facts that elicit an emotional response are better remembered due to the activation of the amygdala. This illustrates why significant events or information with emotional resonance tend to be remembered for an extended period. Higher emotional intelligence has been linked to lower secretion of cortisol, a stress hormone that can negatively affect memory formation and cognitive function. Managing emotions enhances concentration, which directly influences learning and memory performance (Pishghadam, 2009).

Emotional intelligence also affects linguistic competence, that is, a person's ability to understand and use language, and understanding the emotional state of the interlocutor helps to better perceive and interpret speech messages.

Exercises that merge linguistic and cultural elements with emotional intelligence training include:

- Role-playing: organising scenarios that reflect diverse cultures enhances participants' understanding of cultural contexts, thereby fostering empathy and improving intercultural communication.
- Literary discussions: analysing characters through the lens of their emotional responses and language promotes the development of critical thinking and emotional intelligence.
- Cross-cultural dialogues: engaging in conversations with individuals from various cultures, focusing on traditions, customs, and emotional expressions, enhances language flexibility and empathy.

- Cross-cultural emotion recognition games: utilising videos, photos, or audio recordings to analyse both nonverbal and verbal expressions of emotions across different languages and cultures, as noted by Payne (1985).

Developing emotional intelligence helps to improve memory and verbal skills. Emotions play an important role in memory processes, and the ability to control one's emotional state has a positive impact on language adaptation and communicative efficiency. Using emotion regulation strategies in learning can significantly improve cognitive and linguistic skills and make the learning process more effective and sustainable.

4. Linguocultural Aspect in the Process of Learning a Foreign Language as a Factor in the Development of Emotional Intelligence

Linguocultural linguistics investigates the complex relationship between language and culture, focusing on how they operate together within a cohesive conceptual and communicative framework. This field reflects the culturally embedded modes of societal existence that are articulated through language, collectively constituting what is referred to as the *linguistic worldview* in the context of foreign language acquisition. According to Lyusin and Mohammed (2020), "cultural linguistics in the process of learning a foreign language is characterised by several distinctive features."

1. Linguocultural studies is a synthetic academic discipline situated at the intersection of cultural studies and philology, particularly linguistics. It addresses the inseparable relationship between language and culture in foreign language instruction, thereby raising fundamental issues related to language teaching methodology.

2. The main subject of linguoculturology in the process of learning a foreign language is the relationship and interaction of culture and language in the process of their functioning and the study of the interpretation of this interaction as a single system of integrity. The main problems here are methodological (philosophical) and philological (linguistic, etc.).

3. The subject of the study of linguoculturology in the process of learning a foreign language is the material and spiritual culture created by man, systems of artifacts expressed in the language, and all that constitutes the "linguistic worldview".

4. Linguoculturology emphasises the emergence of new value systems shaped by contemporary modes of thinking and social change. Within the context of foreign language learning, it fosters an objective understanding of facts and cultural realities in diverse societies.

Linguoculturology, as a discipline focused on the study of how culture manifests, reflects, and is preserved within language and discourse, is intricately linked to the examination of national worldviews, linguistic consciousness, and the features of the mental-linguistic complex. Generally, the mastery of a foreign language primarily involves the development of communicative competence. From the perspective of a linguocultural approach to foreign language acquisition, effective communication encompasses not only comprehension of spoken content and the appropriate use of linguistic tools but also the successful assimilation of the cultural elements inherent in the language. As Mayer and Salovey (1997) assert, effective communication cannot occur without both speakers possessing additional competencies related to emotional and cultural understanding.

1) Linguistic.

Possessing a comprehensive understanding of the various levels of the studied language, phonemic, morphemic, lexical, and syntactic, enables one to accurately utilise word forms and construct syntactic structures. This knowledge also facilitates the comprehension of language segments that adhere to the established norms of the language being used.

2) Sociolinguistic.

Knowledge and skills are necessary for the effective use of language in a social context. It is expressed in the norms of politeness, registers of communication, linguistic markers of social relations, and expressions of folk wisdom.

3) Sociocultural.

The totality of knowledge regarding the country where the target language is spoken, including national and cultural aspects of social and linguistic behaviour among native speakers, as well as the ability to apply this knowledge during communication by observing customs, behavioural norms, etiquette conventions, social contexts, and cultural stereotypes.

The aggregate of all the aforementioned competences, led by communicative competence, forms the basis for defining linguocultural competence as "the ideal speaker-listener's knowledge of the entire system of cultural values embedded in language."

That is, the formulated competence is a system of cumulative knowledge about the culture of the country, which is reflected in the national language, as well as the ability to use the knowledge both in the perception of a segment of the language and in its organisation.

Thus, the development of linguocultural competence, comprising a set of more specific sub-competences, is both the primary goal and the key advantage of adopting the linguocultural approach in language education.

Cultivating linguistic and emotional intelligence enhances brain function and cognitive processes, as the human brain is a complex system that continuously evolves through learning and experience. Two critical components that influence brain function and cognitive abilities are linguistic and emotional intelligence. The interplay between these two forms of intelligence contributes significantly to thinking, memory, concentration, and the overall capacity to process information.

Linguistic intelligence refers to an individual's capacity to effectively perceive, process, and utilise language structures. Cultivating this ability significantly impacts brain function, as learning new languages or enhancing one's mastery of a native language stimulates the hippocampus, the region of the brain responsible for memory storage. Multilingual individuals tend to switch between tasks more efficiently and adapt more effectively to changing conditions. Engaging in grammatical and lexical analysis of texts enhances critical thinking skills and fosters logical reasoning. The process of language learning requires meticulous attention, which ultimately improves concentration on cognitively challenging tasks (Prots et al., 2021).

Emotional intelligence (EQ) refers to an individual's ability to recognise, comprehend, and manage their own emotions, as well as to perceive the emotions of others. Cultivating EQ positively influences brain function, as individuals with high EQ are more in tune with their emotions, enabling them to make more effective decisions. Regulating emotions can lower cortisol levels, which in turn enhances cognitive function. Furthermore, engaging with others through empathy and understanding fosters improved communication skills and cognitive flexibility, as noted by Khatsaiuk et al. (2021).

Since language is the primary means of expressing emotions, developing linguistic intelligence improves EQ. The ability to express thoughts and feelings correctly helps to better understand oneself and others, which leads to better communication, conflict avoidance, and improved interpersonal relationships.

Cultivating linguistic and emotional intelligence is crucial for enhancing cognitive function, alleviating stress, and fostering social interactions. By refining these abilities, individuals become more adaptable, creative, and adept at processing information efficiently. Consistent practice in verbal skills and emotional self-regulation is essential for maintaining healthy brain function throughout one's life..

5. Conclusions

The article explores the significance of neuroscientific knowledge in the teaching of foreign languages. It concludes that for effective comprehension and intelligent communication in a foreign language, teachers must incorporate insights from neuroscience into their pedagogy. In this context, educators need to serve as comprehensive language models for their students, integrating their experiences, contemporary teaching methods, and authentic learning materials in English language

instruction. Furthermore, when addressing the linguocultural aspects of foreign language learning, it is crucial to take into account the individual characteristics of learners.

Methods for developing emotional intelligence during the process of learning a foreign language have been identified. It is essential to recognise that the components of emotional intelligence in this context are structured hierarchically. At the foundation lies the identification of emotions, which serves as the cognitive basis for understanding and managing emotions. Each of the three components has both intrapersonal and interpersonal applications when learning a foreign language, encompassing the understanding and management of one's own emotions as well as those of others. Furthermore, the intrapersonal and interpersonal components may not be equally developed. The effective use of emotions depends on the ability to understand and manage them, as well as being adaptable in how one perceives and communicates information to others.

The article explores the significance of the linguocultural aspect in the process of learning a foreign language. It focuses on the relationship and interaction between culture and language during their functioning, as well as the interpretation of this interaction as an integrated system. The key issues addressed include methodological (philosophical) and philological (linguistic, etc.) challenges.

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