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Age-related changes in the development of communicative competence in adults

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Abstract. The longest age stage in human development is adulthood, which is characterised by the accumulation of communicative experience and numerous opportunities for effective interaction with others. This article examined the psychophysiological features of communicative competence development in adulthood and identified guidelines for promoting long-term communicative functionality in adults, considering their psycholinguistic features. Among the methods used in the study,

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key approaches include theoretical, empirical, and statistical analysis. The study explored the essential characteristics and age-related features of communicative competence development in adults, as well as anatomical and functional changes in adulthood. It was demonstrated that older people do not lack communicative knowledge or skills, compared with younger individuals. Furthermore, heterochrony and uneven ageing among individuals and groups were also confirmed. Experimental findings indicated that most middle-aged individuals exhibit a high level of communicative competence, which can be attributed to their accumulated experience in communication. This is further supported by competence, knowledge and skills, as well as their willingness to share information with others. A comparative analysis of early and middle adulthood groups revealed that communicative competence indicators are slightly higher in early adulthood than in middle adulthood. Taking into account the findings on communicative competence development in adulthood, methodological recommendations have been developed for individuals at different stages of this life period

Keywords: age-related changes; communication; interpersonal interaction; early, middle, and late adulthood; psychophysiological features; guidelines

Introduction

Communication in modern society is a crucial means of transferring knowledge and information. It is an integral part of human activity throughout life. Communication skills are accumulated by a healthy individual in various socio-cultural, political, and economic contexts and contribute to the development of their communicative competence. The longest age stage in an individual's development is adulthood, which typically spans two-thirds of a person's life. This period of human ontogeny is characterised by the accumulation of communicative experience, which opens up new opportunities for effective interaction with others and facilitates the realisation of one's talents and abilities. During adulthood, communication enables individuals to deepen and broaden their communicative range, thereby enhancing both self-perception and comprehension of the broader modern world. This issue arises from the necessity not only to cultivate a communicatively competent and competitive individual capable of addressing diverse challenges throughout life but also to refine and adapt already established competencies.

The authors conceptualised this special issue as a means of highlighting recent research on how language varies with age and how ageing may be influenced by language. Over the past 40 years, research has documented complex interactions between language processing and ageing (Abrams & Stine-Morrow, 2024). The study by N. Pereira *et al*. (2019) investigated differences in communication challenges between younger and older adults during a communicative discourse (CD) task. Their findings revealed that younger adults exhibited fewer difficulties in areas such as expressive language, pragmatic understanding, discourse cohesion and coherence, comprehension, and interpreting emotional tone. Conversely, older adults demonstrated greater verbal proactivity and experienced fewer instances of word retrieval problems.

M. Shafto *et al*. (2024) examined age differences in reactivity to emotionally evocative words that varied in valence (pleasantness) and arousal (intensity) to explore whether young, middle-aged, and older adults differentially experience humour and taboo in language. When rating a long list of words for tabooness, humour, and arousal, older and middle-aged adults provided lower overall arousal ratings than young adults. Furthermore, while arousal ratings were predictive of both taboo and humour ratings, these relationships weakened with age. The relationship

between taboo and humour was also weaker in older adults compared with younger adults. The findings suggest that even at the word level, emotionally evocative language may be experienced differently throughout adulthood and ageing (Kolly-Shamne, 2024).

H. Baek *et al*. (2024) also demonstrated age-related consistency in visual word recognition, as measured by word frequency effects in Korean speakers. Using a lexical decision task with almost 500 adults aged between their 20s and 60s, they showed that higher-frequency Korean words were recognised more quickly than lower-frequency words, similar to the well-established observed with English words. In their study, J. Schepens *et al*. (2022) explored how age affects adults learning Dutch as a second language, examining speaking, writing, listening, and reading abilities. Their research indicated that individuals who began learning Dutch after the age of 25 showed age-related declines in both language learning and cognitive functions. Specifically, they observed a gradual decrease in performance across all four language skills, with speaking being particularly affected. Furthermore, they found that the degree of difference between an individual's native language and Dutch, in terms of morphology, vocabulary, and phonology, amplified this age-related decline, especially in spoken language. The authors concluded that a person's native language background influences how age impacts language learning, suggesting that both inherent language learning capabilities and accumulated native language proficiency affect this process.

This article aimed to identify the specific developmental patterns of communicative competence in adults and to enhance sustained and effective communication by considering individual linguistic profiles.

Materials and Methods

The study was conducted in three stages: theoretical, empirical, and methodological. The theoretical stage involved the collection and thorough analysis, generalisation, and systematisation of psychological and pedagogical literature on the research problem. The empirical stage was carried out by one of the authors of this article, V. Pomiluyko, using diagnostic methods ("Diagnostics of the General Level of Communication" by V. Ryakhovsky, n.d.; "Determination of Interpersonal Interaction Styles" by S. Maksymova & Y. Lobeiko, n.d.) and statistical methods (for the quantitative and qualitative processing of the study's empirical results) in 2020 on a sample of 354 people (210 in early adulthood, 144 in middle adulthood). The experiment involved adult employees of Business Constructor (Kyiv); "Ukrgaz" Group of Companies (Kyiv, Zaporizhzhia, Mykolaiv, Khmelnytskyi); KSU (Kyiv, Smila, Shepetivka); journal editorial office ZhKh (Kyiv); the Institute of Energy Audit and Energy Metering (Lviv); and Stanislavska Heat and Power Company (Ivano-Frankivsk). The methodological stage involved summarising the data obtained and providing practical recommendations for the development of the phenomenon under study (2021-2024). This provided a sufficient scientific basis for: a) establishing the psychophysiological characteristics of the development of communicative competence at different stages of adulthood (early, middle, and late); b) conducting experimental studies to pinpoint distinct variations in communicative competence development between early and middle adulthood; c) formulating methodological recommendations for improving the communicative competence of adults. All procedures were conducted following the American Sociological Association's Code of Ethics (1997).

In the course of the study, scientific articles covering the following aspects of the problem were analysed: essential features and components of adult communicative competence (Light, 1989; Light & McNaughton, 2014); the characteristics of adults' communicative abilities throughout their professional careers (including the period of professional adaptation 18-25 years), primary professionalisation (23-30 years), secondary professionalisation (28-40 years), and professional skill development (from 35 years onwards) (Korniiaka, 2011); age differences of different

groups among adults and factors influencing communicative competence and communicative behaviour (Gordon *et al.*, 2019; Pereira *et al.*, 2019); the impact of age on an individual's awareness of their own communication skills in various language activities, including speaking, comprehension, reading, and writing; age-related effects on the selection of language used for expressing emotions in diverse contexts, as well as language preferences during mental calculations and inner monologues in adults aged 18 and above (Dewaele, 2009); a comparative analysis of changes in adult sign language communication (Schubotz *et al.*, 2019; Arslan & Göksun, 2020); interpersonal communication among the elderly (Kovalenko, 2015); the development of intercultural communicative competence among highly skilled refugees and how it can enhance their intercultural communication abilities through the use of accessible, open-source educational resources (Schneider *et al.*, 2024).

Among studies of age-related changes in the development of adult communicative competence, the proposed study focuses on research related to changes in thinking and physiological states that affect communication, namely: the reorganisation of brain activation patterns with age (Cabeza *et al.*, 2002); changes in linguistic skills based on age-related neuroimaging results (Rosselli *et al.*, 2014); language and communication disorders associated with the physiological processes of human ageing (Chrut *et al.*, 2018); the effect of language competence on memory at different stages of adulthood (Schneider *et al.*, 2016). Thus, the research employed a comprehensive, multi-stage approach, integrating theoretical analysis, empirical data collection, and methodological synthesis to explore the development of communicative competence across adulthood.

Results and Discussion

Study of the main features and components of communicative competence in adults

O. Korniiaka (2011) defines communicative competence as a multifaceted and potentially conflicting integration of communicative understanding and abilities. This definition, derived from a synthesis of existing literature and her own empirical and theoretical research, emphasises the alignment of these elements with the aims and outcomes of an individual's communicative actions. J. Light (1989), a long-time researcher in communicative competence, views it as the capacity to communicate effectively in everyday settings and to meet routine communication requirements. The researcher posits that communicative competence is a fluid and context-dependent interpersonal concept. This concept is based on the effectiveness and appropriateness of communication, as well as proficiency in knowledge, sound judgment, and practical skills. It encompasses linguistic, operational, social, and strategic competencies. Linguistic and operational competencies involve the use of communication tools whereas social and strategic competencies reflect the functionality of knowledge and judgment in communicative interaction. These four fundamental components of communicative competence have remained central in subsequent research by this scholar. In J. Light's interpretation of communicative competence, the breadth of linguistic, operational, social, and strategic skills required to achieve it has changed. Thus, J. Light & D. McNaughton (2014) argue that the scope of communication needs in contemporary society has expanded dramatically, now encompassing not only personal communication but also written communication, Internet access, and social networking. Modern media, mobile phones, text messaging, blogging, and e-commerce influence the development of adults' communicative competence. It is worth noting that J. Light & D. McNaughton's (2014) definition primarily concerns individuals requiring additional and alternative communication methods; however, its core principles also apply to the general population.

Contemporary definitions of communicative competence highlight the necessary communicative knowledge and skills for effective communication across diverse contexts. In a report by

ETS Research by T. Laughlin *et al.* (2015), communicative competence within the context of a culturally diverse, information-driven society. It is described as a capacity encompassing knowledge, skills, abilities, adherence to rules, personal attributes, and values. This capacity enables individuals to successfully generate, convey, receive, and interpret communication in various cultural interaction scenarios. According to one model, communicative competence comprises seven interconnected elements: linguistic, sociolinguistic, discourse, strategic, sociocultural, social, and information and communication technology (ICT) competencies (Wright *et al.*, 2014). Therefore, adult communicative competence can be understood as a multifaceted, integrated interpersonal trait. It relies on a complex system of interaction strategies and interpersonal connections, built upon a foundation of knowledge, skills, and abilities that facilitate successful communication. At its core, communicative competence encompasses linguistic (including analytical skills, vocabulary, linguistic and stylistic accuracy, and verbal expression), social (such as social adaptability, situational awareness in communication, and social engagement), and psychological (including motivation for personal development and communication, a drive for self-fulfilment, and reflective capacity) attributes.

Development of communicative competence at different stages of adulthood

Given the variety of age-based frameworks for adulthood, each with its own conceptual foundation, this research adopted the established model developed by American psychologists G. Craig & D. Baucum (1999), which is widely recognised within academic communities. They noted that the early period of adulthood lasts from 20 to 40 years, the middle period from 40 to 60 years, and the late period from 60 years onwards. It is widely acknowledged that the left hemisphere of the brain plays a crucial role in shaping an individual's speech capabilities during early adulthood. Building on prior research, it is reasonable to suggest that human communication relies on two distinct "language systems": one governing lexical-semantic processing (associated with Wernicke's area) and the other managing morpho-syntactic functions (tied to Broca's area, located in the left posterior frontal lobe). Additionally, the automaticity of speech develops through consistent practice (Ardila, 2011).

The analysis of neuroimaging study results demonstrates that at an early age, speech is mainly governed by the functioning of the left hemisphere of the cerebral cortex (Dehaene-Lambertz *et al.*, 2002; Cabeza & Dennis, 2012). This organisation of communicative capabilities has distinct characteristics in adults, which are linked to age-related anatomical and physiological changes. These changes are associated with the predominance of the right hemisphere of the brain over the left, and therefore cognitive processes become somewhat more symmetrical (Wingfield & Grossman, 2006). The observation that brain activity patterns shift during cognitive tasks aligns with findings from R. Cabeza *et al.* (2002), who studied age-related changes in cognitive processing. M. Rosselli *et al.* (2014) further examined age-related shifts in language skills using neuroimaging, highlighting the interconnectedness of speech and thought. They noted that while most adults exhibit left-hemisphere dominance for language, ageing brings about brain changes, including increased right-hemisphere activity during language tasks. This suggests a gradual decrease in language lateralisation with age, accompanied by a more symmetrical distribution of cognitive functions. M. Rosselli *et al.* (2014) also emphasise the dynamic nature of language lateralisation, which begins as bilateral in early life, becomes unilateral in early adulthood, and gradually returns to a more bilateral pattern in middle and late adulthood, reflecting the influence of experience and maturation.

Now attention turns to the language characteristics of adulthood. J. Gordon *et al.* (2019) identify spoken language as the primary means of social interaction, in which communication

and communication skills change with age and are a potential source of reinforcing stereotypes. Their study analysed the stories of 84 speakers aged 30-89 to identify age differences and compare them with factors that influence perceptions of age and communication competence. Three groups of experts evaluated the quality of communication and the age of adults: 44 individuals listened to audio recordings of stories, 51 individuals read their transcripts, and 24 experts assessed 10-second speech samples extracted from the stories. Based on the data obtained, the researchers found that older speakers (middle and late adulthood) communicated more slowly, but they showed minimal language differences compared with early adulthood speakers. The participants' age was objectively assessed based on acoustic signal patterns (speech rate and vocal characteristics). Ratings of adult speech were not strongly related to perceived age but were influenced by various aspects of language and speech. In particular, speakers whose stories were longer and delivered at a faster pace were identified as the best communicators. An individual's age can be estimated with considerable accuracy by analysing vocal attributes such as timbre, pitch, speech tempo, and volume. While certain linguistic abilities, including vocabulary, grammatical assessment, and repetition, tend to remain stable, others, such as comprehension of complex sentences and word retrieval, may decline over time.

A comparative study of age differences in spoken language ability was also conducted by researchers such as N. Pereira *et al.* (2019) between 2015 and 2017 as part of two large projects approved by the Research Ethics Committee of the Pontifical Catholic University of Rio Grande do Sul (PUCRS). The study involved 95 participants aged 18 to 55 years (54 early adulthood participants and 41 middle-aged participants). The frequency of communication behaviours was compared between groups using MANCOVA tests at a significance level of $p \leqslant 0.05$. The experimental data were collected and analysed using SPSS Statistics version 20. The results obtained indicated that participants in early and middle adulthood demonstrated significant differences in 19 aspects of spoken discourse including pragmatics, expression, cohesion, coherence, comprehension, emotionality, and prosody. In most cases, the first topic was "family", which was discussed by both older participants (97.6%; n = 40) and younger participants (96.3%; n = 52). The second most frequently discussed topic was "work", which was mentioned by 80.5% (n = 33) of older participants and 79.6% (n = 43) of younger participants, followed by "leisure" (older participants: 17.1%; n = 7; younger participants: 16.7%; n = 9). Emotional behaviours such as crying or irritability were observed in 9.8% (n = 4) of older participants, whereas none of the younger participants exhibited these behaviours. The examiner took an active part in the conversation with 87.8% (n = 36) of older participants and 96.3% (n = 52) of younger participants. Middle-aged participants were more talkative than early adulthood participants. However, they provided less accurate information on the topics discussed. Early adulthood participants were more consistent in their storytelling, outperforming middle-aged participants in terms of coherence. The data obtained did not confirm the hypothesis of group differences in communicative behaviour related to speech planning and self-control (including repetition of words (RW), repetition of information (RI), syllabic false starts (FS), sudden interruptions (AI), and repetition of the examiner's last words (RSE)). The results of the experiment demonstrated that both groups received the same scores on this variable. Thus, these aspects of communicative behaviour are a normal part of the speech of healthy individuals across all age groups.

Several scholars, such as L. Schubotz *et al.* (2019) and B. Arslan & T. Göksun (2020), have examined how sign language usage varies across adulthood, finding that while fundamental signing abilities remain largely consistent, certain age-related differences emerge. For instance, there is a documented decline in the use of iconic gestures, such as tracing a road in the air, among

older adults compared to younger ones (Arslan & Göksun, 2020). However, the number of words and narrative elements, as well as the speed of iconic gestures and the overall frequency of multimodal expressions, do not show significant variation between early and late adulthood. Notably, individuals in early adulthood demonstrate greater adaptability in their speech and gestures to accommodate the specific demands of a communicative situation, whereas those in late adulthood exhibit less flexibility in their communicative style (Schubotz *et al.*, 2019). The observed reduction in gesture usage among older adults in situations lacking shared knowledge may be attributed to a strategy of reducing gestures to manage increased cognitive demands.

At the same time, psycholinguists demonstrate that adult participants are able to go beyond negative stereotypes: their speech provides evidence of the positive influence of old age on communicative competence and directly contrasts with studies demonstrating a link between agerelated processing limitations and deficits in the communicative abilities of older adults compared to younger ones (Burke *et al.*, 1991; Gold & Arbuckle, 1995; Hummert *et al.*, 1998). A similar conclusion has been drawn by several other scholars. Thus, M. Long *et al.* (2020), based on the results of a study with a representative sample of 200 native English speakers aged 19 to 82 with normal colour vision and hearing, challenge the conclusion that older adults are usually less effective than younger ones due to a decline in age-related cognitive abilities. These researchers argue that the preservation of pragmatic skills in later life is an adaptive phenomenon, as successful communication depends on the effective coordination of communicators' efforts.

Claims regarding age-related shifts in adult communication skills, alongside observations that older individuals maintain a strong repertoire of communicative knowledge and abilities, are not mutually exclusive. Rather, the communication skills honed over a lifetime persist, enabling individuals to articulate their thoughts with precision, establish rapport, and engage in successful negotiations. Furthermore, the concept of effective collaboration between communicators is valid, as the success of any two-way exchange relies on mutual tolerance and adaptability. This is evidenced by the emotional satisfaction derived from interaction, shared understanding, and the practical value of the information exchanged. In addition, each person has an individual development trajectory, which is determined by personal activity. Although interconnected, different types of ageing (biological, physical, psychological, social, and economic) have different time frames. Consequently, there is heterochronicity and unevenness in the ageing of individuals and population groups.

The greatest age differences between different stages of adulthood (early, middle, late) are observed after the age of 60 when most people around the world retire. During late adulthood, the effects of the ageing process are most frequently observed, including in the sphere of communication. The scientific research of A. Chrut *et al.* (2018) on speech and communication disorders associated with physiological ageing have been particularly significant. These changes are especially evident in late adulthood and affect the central nervous system, muscles, respiration, and phonation. Anatomical and functional changes primarily affect speech production. Approximately 50% of older adults (over 80 years of age) are diagnosed with varicose veins in the lower part of the tongue and its hyoid region, decreased saliva production and flaccidity, loss of muscle fibres during mastication, dental problems, and other related issues. In language production, age-related changes are observed at all levels (phonological, syntactic, and semantic). Studies indicate that individuals over 70 may experience a decline in word-finding abilities. Furthermore, their speech may exhibit reduced coherence, along with less frequent and accurate use of anaphora and conjunctions. They might also simplify their language, favouring basic sentence structures, and display excessive verbosity. Cognitive processing

generally slows, leading to an increase in talkativeness and a tendency to share personal anecdotes.

Age-related verbosity, observed in later life, can be attributed, in part, to a reduced capacity to filter out extraneous information (Gold & Arbuckle, 1995). Furthermore, as individuals age, they may experience a general decline in cognitive abilities, which can result in less coherent discourse. This is because they may struggle to prioritise and select the most pertinent semantic information for their speech (Hoffman *et al.*, 2018). Consequently, this can lead to a reduced ability to tailor communication to the listener's needs. Communication plays a particularly vital role in the later stages of life, significantly impacting an individual's sense of self. When an older adult's need for social interaction remains unfulfilled, they may exhibit behaviours that strain relationships, such as becoming overly persistent or experiencing distress when others avoid them (Kovalenko, 2015). Consequently, the erosion of strong social connections, the absence of adequate communication, and diminished self-regulation can contribute to heightened self-focus, a desire for recognition, and feelings of bitterness in older adults. To mitigate these tendencies, it has been suggested that older adults participate in initiatives such as information literacy programmes, informal education, and the expansion of their social networks online.

The later years of life often present communication challenges due to the onset of conditions such as hearing impairment, diminished eyesight, altered articulation, and cognitive decline associated with conditions like dementia. Furthermore, older adults typically find it more difficult to process rapid or highly condensed speech compared to younger individuals. Research by J. Lee (2015) demonstrates that word recognition in older adults decreases as speech speed increases, whereas younger adults' recognition remains relatively stable, indicating a slower perceptual processing rate with age. M. Hummert *et al.* (1998) emphasise the importance of adjusting speech patterns when communicating with individuals experiencing age-related or illness-induced cognitive slowing. To ensure comprehension, communicators may need to slow their speech below what is generally considered optimal.

Generally, older adults maintain comprehension in calm settings and with familiar voices. However, they are notably susceptible to background noise, which can significantly hinder their ability to understand spoken language. Compared to younger individuals, older adults experience greater difficulty processing speech in noisy environments due to decreased hearing sensitivity and challenges with focused attention (Ben-David *et al.*, 2012). Consequently, selecting quiet locations for conversations is a key recommendation for effective communication with older adults. These and other tailored strategies, informed by the unique communication patterns of this age group, aim to minimise discomfort during interactions.

The evolution of communication skills exhibits fewer variations between early and middle adulthood. Individuals in these age groups usually work actively and communicate with colleagues, family, friends, and children. Differences in communicative competence between these groups became a focal point in the experimental research. J. Harwood & H. Giles (1993), in their research on language and communication across early and middle adulthood, identified middle age as a period marked by significant challenges in intergenerational communication. Individuals in this stage often engage in interactions with both significantly older individuals, such as ageing parents or workplace superiors, and much younger individuals, like their own children. This diverse range of communication partners, they argue, necessitates a more extensive set of communication skills compared to other life stages. Notably, they highlighted variations in conversational topics across different adult age groups. Early adulthood conversations tend to focus on future aspirations, whereas middle and late adulthood discussions often reflect on past experiences. In interactions with younger adults, older individuals frequently assume a mentorship role, guiding future

planning. Consequently, to enhance communicative competence in middle and late adulthood, engagement in mentorship, tutoring, and guidance programmes for younger professionals – both within their current and former workplaces – is recommended.

Results of the conducted empirical research

Two diagnostic methods were used in the empirical study. The first method, "Diagnostics of the General Level of Communication" by V. Ryakhovsky, n.d.), was chosen to assess the communicative competence of adults as its main indicators – flexibility, emotional stability and endurance in conflict resolution, tolerance, and proficiency in oral and written communication – align with the manifestations of communicative competence (Filonenko, 2008). According to this methodology, the following results were obtained and are shown in Figure 1:

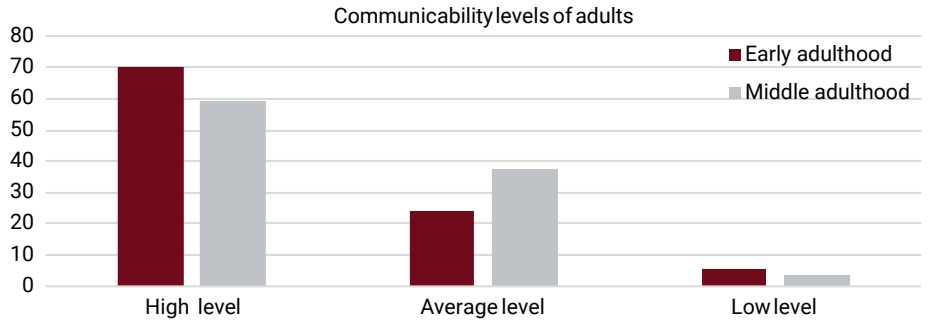

Figure 1. *Communicability levels of adults*

Source: *developed by the authors*

The strong performance observed in this study, using the chosen assessment method, can likely be attributed to the demographic composition of the participants. The majority of respondents were company managers and highly educated professionals – individuals who frequently engage in interpersonal communication and have developed proficiency in both verbal and non-verbal communication techniques, such as gestures and facial expressions.

The second method was used to assess activity-passivity in interpersonal interactions. Regarding the high activity-passivity index in interpersonal interactions, the following trends were identified using the methodology "Determination of Interpersonal Interaction Styles" (Maksymova & Lobeiko, n.d.): a decline in its manifestation among middle-aged participants compared to those in early adulthood, from 59.02% to 57.43%, respectively. No statistically significant differences were observed in the lower levels of interpersonal interaction between the comparison groups: a slight increase in the percentage of middle-aged participants (+0.23%) from early adulthood (0.95%) was recorded. These respondents were mostly focused on an individual style of cooperation and displayed limited interest in collaborating with others. For the average level of interpersonal interaction, minor variations were recorded: early adulthood – 39.98%, middle adulthood – 41.32% (+1.34).

Based on the study's findings on the development of communicative competence in adulthood, methodological recommendations have been formulated for individuals at different stages of this life period, namely:

- for early adulthood: development of communicative confidence for more effective acquisition of communicative skills; paying attention to feedback in communication to enhance its effectiveness; fostering an interest in engaging with new people;

➤ for middle adulthood: development of emotional and communicative flexibility through a combination of individual behavioural patterns and varied forms of communicative role interaction; emphasis on empathic listening and the ability to interpret the emotional state of others through verbal and non-verbal cues; overcoming inertia in communication, providing constructive feedback, and integrating past experiences with future professional goals;

➤ for late adulthood: acquisition or refinement of information literacy skills through non-formal education: broadening social circles, including engagement in online social networks; active involvement in mentoring, tutoring, and knowledge-sharing with younger generations; choosing an appropriate environment for communication to ensure comfort, among other strategies.

Conclusions

It has been established that in adulthood, particular importance is placed on the development of an individual's communicative competence, which facilitates the assimilation and transmission of information, the accumulation of communicative experience, and effective interpersonal interaction with others.

The theoretical analysis revealed that the functional organisation of the cerebral cortex in adulthood undergoes age-related changes, shifting from unilateral processing in early adulthood to bilateral processing in late adulthood. With age, individuals experience changes in various speech characteristics, such as voice timbre, pitch, speech speed, and volume. Some communication skills remain unchanged, including vocabulary, grammatical judgment, repetition ability, and the use of gestures. However, ageing also brings about changes, such as a decline in comprehension and the ability to construct complex statements, difficulties with word retrieval, reduced cohesion in speech, increased use of simple sentences, excessive talkativeness, and a tendency towards personal narration. These changes become particularly pronounced in late adulthood and are associated with the functioning of the central nervous system, muscles, hearing, speech, and respiration. Anatomical and functional changes primarily affect executive speech processes. Despite these age-related changes in communicative competence, there is no significant deficit in communicative knowledge and skills among older adults compared to younger individuals. Instead, heterochrony and uneven patterns of ageing are observed among individuals and groups.

The experimental study revealed that most individuals in early and middle adulthood demonstrate a high level of communicative competence, which can be attributed to their accumulated communication experience. This is reflected in their proficiency in interpersonal interaction, their willingness to exchange information, and their ability to apply their communicative knowledge and skills effectively.

The test results identified notable differences in the development of communicative competence across adulthood. Specifically, the proportion of respondents with a high level of communicative competence is greater in early adulthood than in middle adulthood (by 10.98%); however, the proportion of respondents with a low level of communicative competence is also higher in this age group (by 2.24%). In contrast, a greater number of individuals aged 40-60 exhibit an average level of sociability compared to those aged 20-40. The activity-passivity index in interpersonal interactions among middle-aged individuals shows a slight decline compared to early adulthood (-1.59%), whereas the average level of interaction has slightly increased (+1.34).

These findings results can be explained by the greater communicative engagement observed in early adulthood, particularly in the context of professional development and career aspirations. In early adulthood, individuals typically pursue higher education, engage in frequent communication, and adapt to professional environments. They tend to be open in their interactions, favour group activities and are more inclined to

collaborate and exchange information both within teams and with a broader social network.

In middle adulthood, most individuals hold permanent employment, engage less frequently in formal education or self-directed learning, and have an established social circle. Respondents in this age group have largely achieved their professional goals, hold specific positions, and are less inclined to exchange information as extensively as before, often feeling fatigued by communication. Middleaged individuals also tend to be more reserved and independent, in part due to workplace competition, making them less flexible in their interactions and more inclined towards individual tasks.

Thus, the comparative analysis of early and middle adulthood indicates that communicative competence tends to be higher in early adulthood than in middle adulthood. Future research should focus on examining the communicative competence of individuals in late adulthood.

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Conflict of Interest

None.

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Вікові зміни у розвитку комунікативної компетентності дорослих

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Анотація. Найбільш довготривалим віковим етапом у розвитку особистості є період дорослості, який характеризується накопиченням комунікативного досвіду та великими можливостями для ефективної взаємодії з іншими людьми. У статті встановлено психофізіологічні особливості розвитку комунікативної компетентності в дорослому віці, визначено методичні рекомендації щодо сприяння довготривалій функціональності дорослих у спілкуванні з урахуванням їхніх психолінгвістичних особливостей. Серед методів, що застосовані в дослідженні, потрібно виокремити: теоретичні, емпіричні, статистичні. Авторами розглянуті сутнісні ознаки й вікові особливості розвитку комунікативної компетентності дорослих; з'ясовано анатомічні та функціональні зміни в дорослому віці. Доведено, що спостерігається відсутність дефіциту комунікативних знань й умінь у більш літніх людей у порівнянні з молоддю, гетерохронність і нерівномірність у старінні окремих осіб і груп населення. У процесі експериментальної роботи з'ясовано, що для більшості людей ранньої і середньої дорослості притаманний високий рівень комунікативної компетентності, що можна обґрунтувати накопиченим досвідом спілкування. Це супроводжується наявністю використання у взаємодії компетентнісних знань і вмінь дорослих, їхньою готовністю обмінюватися інформацією між собою й іншими людьми. Порівняльний аналіз досліджуваних груп ранньої та середньої дорослості засвідчив, що показники комунікативної компетентності дещо вищі у ранньому дорослому віці в порівнянні із середнім дорослим віком. З урахуванням результатів дослідження розвитку комунікативної компетентності в дорослому віці розроблено методичні рекомендацій, які можна запропонувати людям на різних етапах цього вікового періоду

Ключові слова: вікові зміни; комунікація; міжособистісна взаємодія; рання, середня і пізня дорослість; психофізіологічні особливості; методичні рекомендації