

# The impact of emotional intelligence on the psycholinguistic peculiarities of speech



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**Abstract** Emotional intelligence is an indicator of students' development, which affects their psycholinguistic peculiarities and ensures effective professional training. *The aim* of the research is to identify the impact of the level of emotional intelligence on the psycholinguistic peculiarities of students. The survey and testing method was used, diagnostic techniques: S. L. Bratchenko's Orientation of the Individual in Communication, V. M. Rusalov's QFDPI, EQ-test. Descriptive statistics and correlation analysis were used to analyse the obtained results. It was established that high emotional intelligence has a positive effect on dialogic speech ( $r=0.832$ ,  $p\leq 0.01$ ) and focus on the interlocutor ( $r=0.835$ ,  $p\leq 0.01$ ). Students with developed emotional intelligence have ease in establishing communicative relationships ( $r=0.867$ ,  $p\leq 0.01$ ), a wide range of communicative programmes ( $r=0.745$ ,  $p\leq 0.01$ ), high speech activity ( $r=0.640$ ,  $p\leq 0.01$ ), emotional stability and confidence in communication ( $r=0.856$ ,  $p\leq 0.01$ ). It was established that emotional intelligence affects the psycholinguistic features of speech. In the process of professional training, developed emotional intelligence ensures the preparation of highly qualified specialists capable of active communicative interaction. The obtained results, which reflect the regularities of the development of emotional intelligence and its influence on the psycholinguistic features of students, provide an opportunity to build professional training programmes, to develop correctional classes for the complex speech development of students by means of emotional intelligence.

**Keywords:** emotion management, emotional awareness, psycholinguistic features, communicative abilities, language development, focus of communication

## 1. Introduction

The rapid informational development of society inevitably entails a decreased interpersonal interaction between people, while increasing interaction with various gadgets. In these conditions, the issue of the development of the emotional intelligence of an individual as the basis of his/her emotional culture, emotional stability and emotional competence, which forms effective interpersonal interaction, becomes relevant. Emotional intelligence is a person's ability to understand his/her emotional experiences, manage his/her emotional state, perceive other people's emotions (Andrienko et al 2020).

Student age is a critical period for the formation of emotional intelligence, as it is associated with the development of personal reflection and self-awareness, professional development, and the need for deep, emotionally rich interpersonal relationships. Students with developed emotional intelligence are more adapted to society (Chamizo-Nieto et al 2021), can effectively manage their emotional sphere (Han and Johnson 2012), well understand their emotions and the feelings of other people (Tejada-Gallardo et al 2020), more easily achieve their goals in interaction with others. Accordingly, students with high emotional intelligence have developed a sufficient vocabulary, developed communication skills (Monaghan and Roberts 2019), developed speech activity, as this enables them to express their emotions, understand others, build interpersonal interaction based on emotional contact (Bemani and Ghenaati 2019). Therefore, it can be argued that emotional intelligence is inextricably linked with speech activity, its communicative component.

Students with high emotional intelligence achieve great success in their professional (Sánchez-Álvarez et al 2020) and personal life, it is much easier for them to make operational decisions and take responsibility (Salavera et al 2020), regardless of the complexity of assignments. They enjoy the process of communication, skilfully use speech tools, have developed abilities for communicative interaction (Ieridou 2010). All this contributes to personal and professional development. Developed emotional intelligence and developed psycholinguistic characteristics contribute to professional development (Root 2019), provide active social contacts (Vyspinska 2021), the ability to be mobile, communicative, open, sincere (Han and



Johnson 2012). Communication is the most important aspect of professional activity, which is an indicator of the resource potential of a specialist (Aburome et al 2022).

The foregoing proves the need to study the impact of emotional intelligence on the psycholinguistic peculiarities of speech, which primarily ensures the professional success of students. A sensual relationship with the social environment is formed, the ability to analyse one's emotions and perceive the emotions of others, manage them, and show empathy and compassion develop at the student age. By influencing students' speech, emotional intelligence contributes to professional development through effective communicative interaction (Jiang et al 2022), constructive types of communication, and the developed ability to verbally express one's emotions (Abdolrezapour 2018).

The analysis of current research shows that the specifics of the impact of emotional intelligence on the psycholinguistic peculiarities of students' speech is insufficiently studied, which proves the relevance of the issue under research. On this basis, the aim of the study is to reveal the influence of emotional intelligence on the psycholinguistic peculiarities of students' speech. The aim involved the fulfilment of the research objectives:

- 1) conduct a diagnostics of students' emotional intelligence;
- 2) identify dominant types of student communication;
- 3) diagnose communicative properties of students' individuality;
- 4) establish a correlation between indicators of emotional intelligence and psycholinguistic peculiarities of students' speech.

The following research hypothesis was advanced based on the aim and objectives: students with a high level of emotional intelligence have dialogic and alterocentric types of communication, as well as developed communicative properties of individuality.

## 2. Literature Review

The concept of "emotional intelligence" was first defined and introduced into the scientific field and theory by American scientists in the 1990's. In 1993, P. Seloway and J. Mayer published a joint work *The Intelligence of Emotional Intelligence*, in which they showed that emotional intelligence (EQ) is more important for successful life activities than general intelligence (IQ). Almost at the same time, D. Goleman proved that professional success is achieved through emotional, not cognitive intelligence. He developed the theory of emotional competence and wrote the book *Emotional Intelligence* (Gong et al 2019).

The current state of development of emotional intelligence is characterized by the differentiation of scientific approaches, theories and concepts, the development of psychometric tests for its measurement. The researchers prove its significance in the formation of the integrity of the personality, its interpersonal communication (Tejada-Gallardo et al 2020), professional development. Xiang et al (2022) established that understanding one's emotions contributes to a positive attitude towards people, the development of sensuality, reflection, empathy, conscientiousness, and responsibility. Developed emotional intelligence contributes to success and ensures the regulation of negative emotional reactions (Bru-Luna et al 2021). Research shows that people with emotional intelligence have better psychological adaptation (Tejada-Gallardo et al 2020), a higher level of psychological well-being (Salavera et al 2020).

Considering students' emotional intelligence, it should be noted that it is a useful resource for increasing the level of psychological adaptation and interpersonal relationships (Trigueros et al 2019). Researchers found that emotional intelligence is related to students' academic performance (Sánchez-Álvarez et al 2020), professional achievements (Ivashkevych and Onufrieva 2021), intercultural communication (Aburome et al 2022). Students with developed emotional intelligence are better able to manage emotions, in particular negative ones, which enables them to mobilize internal resources and perform intense work in short periods of time (Abdolrezapour 2018; Tsaras et al 2018). These skills also contribute to positive relationships in the educational process of students (Chamizo-Nieto et al 2021).

Modern researchers are actively studying the connection between emotional intelligence and the peculiarities of human speech. In particular, some researchers prove that the emotional component of the communication process plays an important role in its effectiveness (Wen et al 2019). The ability to manage emotions and express them depends not only on the emotional state, but also on the ability to appropriately and effectively use language tools and skills (Barnwal and Tiwary 2017). This indicates that the communicative process is a combination of the emotional component and speech abilities. That is, there is a certain impact of emotional intelligence on the psycholinguistic features of the personality (Korniienko and Barchi 2023; Semigina and Chystiakova 2020). Psycholinguistics studies the deep knowledge and abilities that a person needs to use speech (Cohen et al 2021). Bemani and Ghenaati (2019) believe that being able to manage one's emotions helps to build interpersonal relationships because it involves being able to express one's speech acts.

Psycholinguistics studies the processes in which the speaker's intention is transformed into signals of a code accepted in a given culture, and these signals are transformed into interpretation (Tyron and Korieshkova 2021). So, psycholinguistics is based on processes that reveal the relationship between speech messages and the emotional state of partners (Wu et al 2022). This implies that the speech process is mediated not by the language system, but by the psyche of a specific person, his/her individual characteristics (Monaghan and Roberts 2019). The language competence as the ability to communicate

effectively is one of the elements of psycholinguistics (Luchkina et al 2022). Language competence is the result of its practical application (Kostikova et al 2020).

The active use of language resources automatically entails the ability to express one’s own intentions, desires, aspirations in individual speech. This is a necessary component of students’ professional educational activities, as most professions involve active communication with people (Iqbal et al 2022). Only students with developed language skills supported by an emotional component are able to achieve high professional success (Cohen et al 2021).

Based on the above, it is possible to graphically present the classification of psycholinguistic features of an individual's speech (Figure 1).

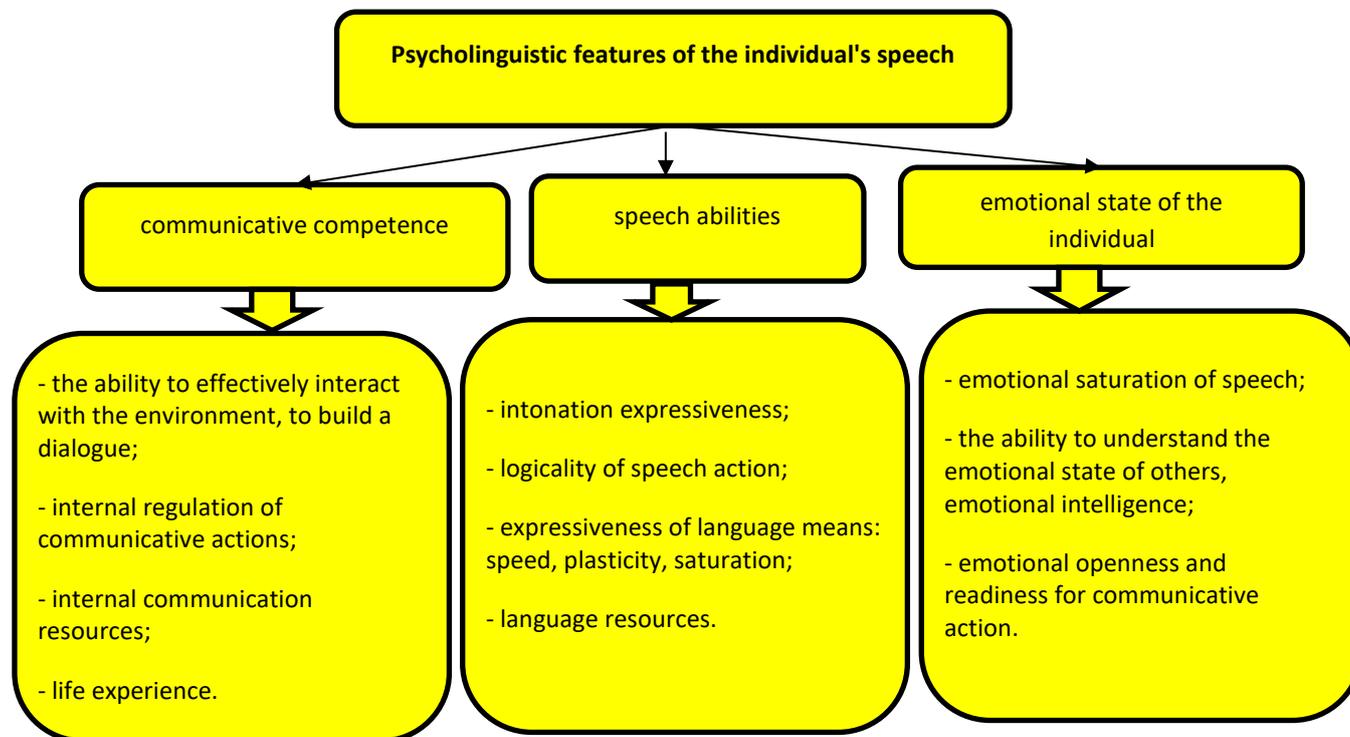


Figure 1 The structure of psycholinguistic features of speech.

Psycholinguistic features of speech can be classified into communicative competence, that is, the ability for interpersonal interaction; speech abilities such as speed of speech, expressiveness, logic, saturation, etc.; the emotional state of an individual, which directly determines the affective side of speech, the ability to perceive and understand emotions, and accordingly build the speech process on this basis. It is the last component that is an important element since students' emotional intelligence contributes to their professional success.

### 3. Methods

#### 3.1. Research design

The study was conducted from January 2023 to April 2023 and included 4 stages. The first stage involved a scientific and methodological analysis of information sources on the issue under research. It provided for the identification of the main scientific approaches to the study of emotional intelligence and its impact on the speech of an individual. The second stage involved direct diagnostics of the sample of respondents using the selected tools. The third stage provided for quantitative, qualitative, and statistical analysis of the obtained results to graphically present the obtained data. The fourth stage involved a description of the obtained diagnostic results, a search for prospects and an outline of the limitations of the study.

The research design involved group diagnostics of students using selected methods. Considering the sample size, the diagnostics was conducted in groups of students according to the schedule during the educational activities in compliance with previously discussed agreements.

#### 3.2. Sampling

The aim of the research provided for the formation of a representative homogeneous sample, which included 244 students aged 19-22 studying at Odesa I.I. Mechnikov National University, 137 female and 107 male. The sample is uniform. Two educational groups from 4 faculties of the university were chosen arbitrarily. All students from each group who attended classes on the day of diagnosis participated in the study, regardless of inclusion/exclusion criteria. In particular, these were



students from the following faculties: the Faculty of Psychology and Social Work (2 groups, 62 people), Faculty of International Relations, Political Science, and Sociology (2 groups, 65 people), Philology Faculty (2 groups of 60 people), Faculty of History and Philosophy (2 groups, 57 people).

### 3.3. Methods

The survey was conducted directly in the educational institution during the training sessions by prior agreement with the teachers. The following diagnostic methods are used to diagnose psycholinguistic peculiarities of speech.

Bratchenko's Orientation of the Individual in Communication. This technique involves the study of the orientation of the individual in communication, which is based on the perceived personal attitudes and value orientations in interpersonal communication. The technique was used to establish the predominant type of communication: dialogic, authoritarian, manipulative, alterocentric, conforming, indifferent. Students were given sheets with items of the technique where they marked their answers (Studocu n.d.).

Rusalov's Questionnaire of Formal-Dynamic Properties of Individual (QFDPI). The questionnaire diagnoses motor (psychomotor), intellectual (thinking) and communicative (communication) aspects of temperament. In this study, only the communicative scale and its properties were used: vitality, plasticity, speed, emotionality (StudFiles n.d.).

The students' emotional intelligence was studied using the Hall's Emotional Intelligence Test (EQ Test). The test determines the main parameters that reflect a person's emotional intelligence: the ability to recognize one's emotions, show them according to specific situations, the ability to recognize other people's emotions, show empathy, self-motivation (PDAU n.d.).

All answers were subsequently processed and interpreted according to the keys.

### 3.4. Data analysis

Descriptive statistics were used to determine the average indicators, the minimum and maximum values according to the tests. The Pearson linear correlation coefficient was used to identify the relationship between the indicators. In particular, correlation coefficients ranged from -1 to +1. A positive relationship indicates a direct correlation, and a negative relationship — an inverse one. The closer the coefficient is to 1, the stronger the correlation.

### 3.5. Ethical criteria of the research

Before the diagnostics, the respondents gave their informed consent for conducting the study, were introduced into its purpose and goals. They were informed about the confidentiality of the received information and its non-disclosure.

## 4. Results

Hall's Emotional Intelligence Test was used to identify the levels of students' emotional intelligence (Table 1).

**Table 1** Indicators of students' emotional intelligence (N=244).

| Parameters of emotional intelligence | Mean  | SD   | Min   | Max   |
|--------------------------------------|-------|------|-------|-------|
| Emotional awareness                  | 9.26  | 1.22 | 2.00  | 16.00 |
| Self-regulation                      | 15.37 | 2.24 | 2.00  | 18.00 |
| Self-motivation                      | 9.49  | 0.25 | 3.00  | 18.00 |
| Empathy                              | 8.96  | 0.26 | 2.00  | 17.00 |
| Emotion recognition                  | 16.61 | 1.27 | 2.00  | 17.00 |
| EI                                   | 65.70 | 1.94 | 15.00 | 74.00 |

The study showed that the surveyed students had medium indicators of emotional awareness ( $M=9.26\pm 1.22$ ), self-motivation ( $M=9.49\pm 0.25$ ), empathy ( $M=8.96\pm 0.26$ ) and high indicators of self-regulation ( $M=15.37\pm 2.24$ ), emotion recognition ( $M=16.61\pm 1.27$ ). The students has a medium level of emotional intelligence ( $M=65.70\pm 1.94$ ). This suggests that students were quite successful in managing their emotional states and experiences, they were capable of self-control and self-expression, they know how to recognize emotions in communication partners, which enables effective communication interaction.

The general level of emotional intelligence among students (Figure 2) is mainly represented by medium values, which indicates sufficient self-esteem, self-control, but in some situations the inability to correctly recognize emotions and express them.

Comparing indicators of general intelligence among students of different fields of study, it can be stated that the highest average level of EI was found in students of the "international relations" field of study and the lowest in students of the "philology" field (Figure 3).

The Bratchenko's Orientation of the Individual in Communication test was used to identify the type of students' orientation in communication (Table 2).

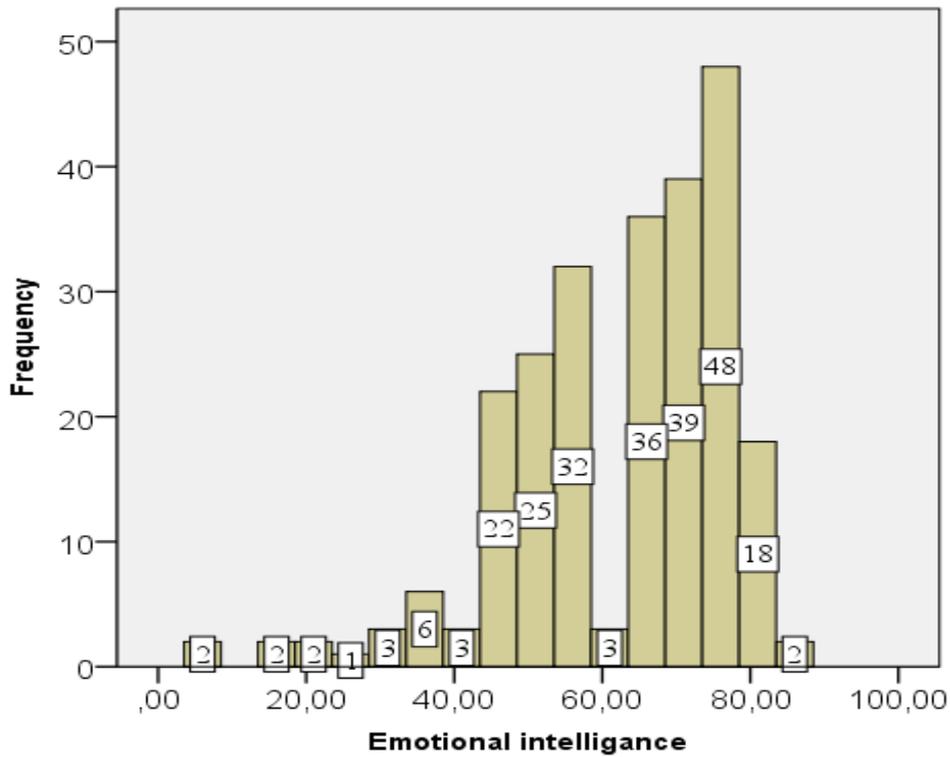


Figure 2 Indicators of students' emotional intelligence.

### TOTAL LEVEL EI

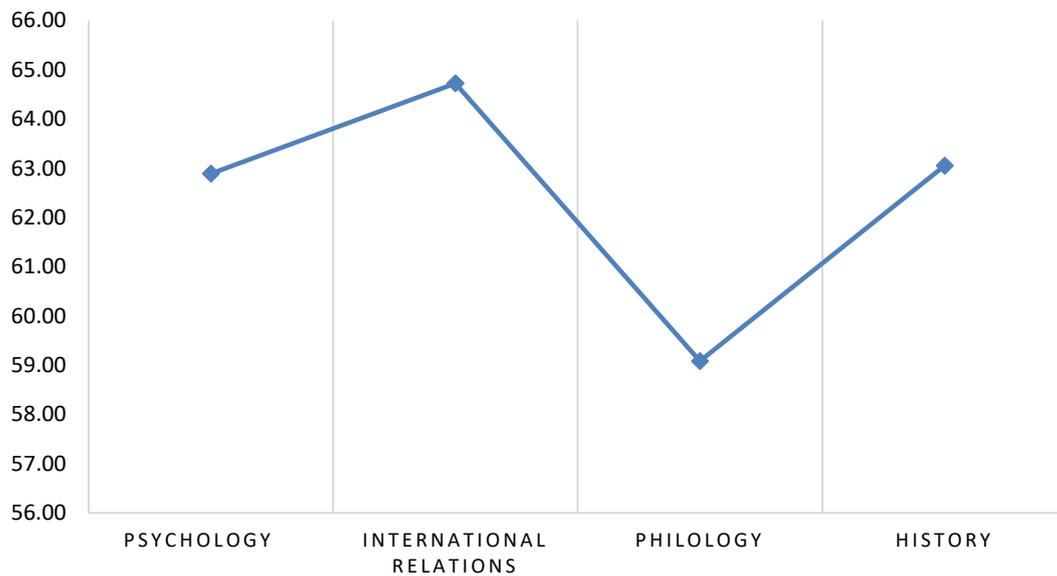


Figure 3 The level of EI among students of various fields.

Table 2 Indicators of the development of students' types of orientation in communication (N=244).

| Types of orientation in communication | Mean  | SD   | Min   | Max   |
|---------------------------------------|-------|------|-------|-------|
| Dialogic                              | 37.64 | 2.49 | 14.00 | 44.00 |
| Authoritarian                         | 30.39 | 1.40 | 11.00 | 45.00 |
| Manipulative                          | 31.44 | 0.41 | 11.00 | 46.00 |
| Alterocentric                         | 36.60 | 2.48 | 14.00 | 44.00 |
| Conforming                            | 30.34 | 1.47 | 11.00 | 46.00 |
| Indifferent                           | 32.77 | 0.46 | 11.00 | 46.00 |

According to the data in the table, students have high indicators of the dialogic ( $M=37.64\pm 2.49$ ) and alterocentric ( $M=36.60\pm 2.48$ ) types of communication. The dialogic type of orientation in communication is the most constructive for interaction and involves an orientation towards equal communication, mutual openness, and communicative cooperation. The ability to dialogic speech ensures the establishment of communicative contact, the exchange of information using verbal and logical operations. The alterocentric type expresses voluntary “centering” on the interlocutor, orientation to his/her interests and requests.

Medium indicators of authoritarian ( $M=30.39\pm 1.40$ ), manipulative ( $M=31.44\pm 0.41$ ), conforming ( $M=30.34\pm 1.47$ ), indifferent ( $M=32.77\pm 0.46$ ) types of orientation in communication were found. Such data indicate that students have a reduced orientation to dominance in communication and communicative rigidity, a reduced attitude to the interlocutor as a means of personal gain and the use of verbal means for the purpose of communicative manipulation, imitation, orientation only on business issues without emotional support.

The study using Rusalov’s Questionnaire of Formal-Dynamic Properties of Individual (QFDPI) showed that students have insufficient level of communicative properties in communication (Table 3).

**Table 3** Indicators of development of communicative properties of students (N=244).

| Communicative properties of an individual | Mean  | SD   | Min  | Max   |
|-------------------------------------------|-------|------|------|-------|
| Vitality                                  | 10.52 | 0.53 | 3.00 | 20.00 |
| Plasticity                                | 15.46 | 1.23 | 3.00 | 20.00 |
| Speed                                     | 16.45 | 0.86 | 2.00 | 20.00 |
| Emotionality                              | 12.28 | 0.65 | 3.00 | 20.00 |

The obtained results show that the students have high indicators of plasticity ( $M=15.46\pm 1.23$ ) and speed ( $M=16.45\pm 0.86$ ) in communication. At the same time, vitality ( $M=10.52\pm 0.53$ ) and emotionality ( $M=12.28\pm 0.65$ ) are at a medium level. Such data testify to the ease of entry into new social contacts of students, high ability to switch during communication, impulsiveness in communication, speed of speech, a wide range of communicative programmes that allow active use of vocabulary and lexical units for the purpose of communicative interaction. They have a slightly less pronounced need for communication, a medium desire to make new acquaintances, a medium sociability and sufficient emotional experience in communication, typical sensitivity to interpersonal relationships.

The identified psycholinguistic features of students of various fields of study indicate that they are most developed among students of philological and psychological fields and least among students of historians (Table 4).

**Table 4** Comparison of indicators of psycholinguistic features of students of different fields of study.

|                                           | Types of orientation in communication | psychology n=62 (M±SD) | international relations 65 (M±SD) | philology n=60 (M±SD) | history n=57 (M±SD) |
|-------------------------------------------|---------------------------------------|------------------------|-----------------------------------|-----------------------|---------------------|
| Types of orientation in communication     | Dialogic                              | 33,05±17,44            | 28,18±7,64                        | 39,08±13,67           | 27,01±7,74          |
|                                           | Authoritarian                         | 20,27±6,25             | 24,22±6,52                        | 28,73±7,46            | 23,14±7,53          |
|                                           | Manipulative                          | 22,19±5,99             | 27,27±6,46                        | 21,30±6,72            | 26,91±5,89          |
|                                           | Alterocentric                         | 37,01±7,74             | 28,18±7,64                        | 39,87±6,72            | 21,11±6,22          |
|                                           | Conforming                            | 20,98±7,67             | 29,97±7,36                        | 28,73±7,46            | 26,96±7,55          |
|                                           | Indifferent                           | 31,23±7,14             | 25,21±6,97                        | 20,30±7,55            | 20,46±7,03          |
| Communicative properties of an individual | Vitality                              | 10,84±4,39             | 8,20±4,34                         | 10,95±7,20            | 8,51±7,58           |
|                                           | Plasticity                            | 10,79±4,20             | 8,20±4,41                         | 11,32±3,99            | 9,68±4,61           |
|                                           | Speed                                 | 9,98±4,42              | 9,09±4,36                         | 11,02±4,17            | 9,70±4,67           |
|                                           | Emotionality                          | 10,09±4,32             | 8,04±4,36                         | 11,02±4,00            | 9,67±4,60           |

A correlation analysis was conducted to identify the degree of impact of emotional intelligence on the psycholinguistic features of students’ speech, which showed highly significant coefficients between the variables. The correlation between emotional intelligence and the type of orientation in communication was found (Table 5).



**Table 5** Correlational analysis of the relationship between emotional intelligence and psycholinguistic peculiarities of students' speech (N=244).

| Types of orientation in communication | Components of emotional intelligence |                 |                 |          |                     | EI       |
|---------------------------------------|--------------------------------------|-----------------|-----------------|----------|---------------------|----------|
|                                       | Emotional awareness                  | Self-regulation | Self-motivation | Empathy  | Emotion recognition |          |
| Dialogic                              | 0.662**                              | 0.694**         | 0.373*          | 0.477*   | 0.635**             | 0.832**  |
| Authoritarian                         | -0.425**                             | -0.502**        | -0.490*         | -0.315*  | -0.465**            | -0.606** |
| Manipulative                          | -0.452**                             | -0.498**        | -0.322*         | -0.298*  | -0.408**            | -0.600** |
| Alterocentric                         | 0.665**                              | 0.697**         | 0.378*          | 0.281**  | 0.634**             | 0.835**  |
| Conforming                            | -0.272*                              | -0.338**        | -0.328**        | -0.391*  | -0.287**            | -0.392** |
| Indifferent                           | -0.252**                             | -0.357**        | -0.316**        | -0.409** | -0.255**            | -0.386** |

Note: \*\* - correlation coefficient for  $p \leq 0.01$ , \* - correlation coefficient for  $p \leq 0.05$

The identified coefficients indicate the existence of a relationship between emotional intelligence and types of orientation in communication. A direct relationship was found between the dialogic type and emotional awareness ( $r=0.662$ ,  $p \leq 0.01$ ), emotion management ( $r=0.694$ ,  $p \leq 0.01$ ), self-motivation ( $r=0.373$ ,  $p \leq 0.05$ ), empathy ( $r=0.477$ ,  $p \leq 0.05$ ), emotion recognition ( $r=0.635$ ,  $p \leq 0.01$ ), general level of emotional intelligence ( $r=0.832$ ,  $p \leq 0.01$ ). This means that the higher the indicators of emotional intelligence, the higher the students' ability to focus on equal interpersonal communication, the desire for mutual understanding in communication, for communicative cooperation. In other words, the characteristic of students' dialogic orientation in communication corresponds to the description of the intentional features of dialogue as the most effective style of speech activity.

Inverse coefficients were established between the authoritarian type and emotional awareness ( $r=-0.425$ ,  $p \leq 0.01$ ), emotion management ( $r=-0.502$ ,  $p \leq 0.01$ ), self-motivation ( $r=-0.490$ ,  $p \leq 0.05$ ), empathy ( $r=-0.315$ ,  $p \leq 0.05$ ), emotion recognition ( $r=-0.465$ ,  $p \leq 0.01$ ), general level of emotional intelligence ( $r=-0.606$ ,  $p \leq 0.01$ ). This indicates that persons with low emotional intelligence have tendencies towards authoritarianism in communication, dominance in conversation, and communicative rigidity.

Inverse coefficients were established between the manipulative type and emotional awareness ( $r=-0.665$ ,  $p \leq 0.01$ ), self-regulation ( $r=-0.697$ ,  $p \leq 0.01$ ), self-motivation ( $r=-0.322$ ,  $p \leq 0.05$ ), empathy ( $r=-0.298$ ,  $p \leq 0.05$ ), emotion recognition ( $r=-0.408$ ,  $p \leq 0.01$ ), general level of emotional intelligence ( $r=-0.600$ ,  $p \leq 0.01$ ). Low emotional intelligence also contributes to high manipulative communication, insincerity in conversation, the use of language tools in order to convince the interlocutor that he/she is right.

A direct relationship was found between the alterocentric type and emotional awareness ( $r=0.665$ ,  $p \leq 0.01$ ), self-regulation ( $r=0.697$ ,  $p \leq 0.01$ ), self-motivation ( $r=0.378$ ,  $p \leq 0.05$ ), empathy ( $r=0.281$ ,  $p \leq 0.05$ ), emotion recognition ( $r=0.634$ ,  $p \leq 0.01$ ), and general level of emotional intelligence ( $r=0.835$ ,  $p \leq 0.01$ ). High emotional intelligence provides a focus on the interlocutor, a desire to understand him/her, compromise, and show communicative tolerance.

An inverse relationship was established between the conforming type and emotional awareness ( $r=-0.272$ ,  $p \leq 0.05$ ), self-regulation ( $r=-0.338$ ,  $p \leq 0.01$ ), self-motivation ( $r=-0.328$ ,  $p \leq 0.01$ ), empathy ( $r=-0.391$ ,  $p \leq 0.05$ ), emotion recognition ( $r=-0.287$ ,  $p \leq 0.01$ ), and general level of emotional intelligence ( $r=-0.392$ ,  $p \leq 0.01$ ). The ability to understand one's own emotions and control them contributes to the reduction of conformity in communication of students, their subordination to others and the orientation towards dependence.

A negative relationship was established between the indifferent type and emotional awareness ( $r=-0.252$ ,  $p \leq 0.01$ ), self-regulation ( $r=-0.357$ ,  $p \leq 0.01$ ), self-motivation ( $r=-0.316$ ,  $p \leq 0.01$ ), empathy ( $r=-0.409$ ,  $p \leq 0.01$ ), emotion recognition ( $r=-0.255$ ,  $p \leq 0.01$ ), general level of emotional intelligence ( $r=-0.386$ ,  $p \leq 0.01$ ). High emotional intelligence ensures low ignoring of the communication process and low focus on business issues only.

The relationship between emotional intelligence and communicative properties of students' individuality was also found (Table 6).

**Table 6** Correlational analysis of the relationship between emotional intelligence and students' communicative personality traits (N=244).

| Communicative personality traits | Components of emotional intelligence |                 |                 |         |                     | EI      |
|----------------------------------|--------------------------------------|-----------------|-----------------|---------|---------------------|---------|
|                                  | Emotional awareness                  | Self-regulation | Self-motivation | Empathy | Emotion recognition |         |
| Vitality                         | 0.706**                              | 0.694**         | 0.279**         | 0.434** | 0.472**             | 0.867** |
| Plasticity                       | 0.675**                              | 0.669**         | 0.475**         | 0.318*  | 0.654**             | 0.745** |
| Speed                            | 0.695**                              | 0.665**         | 0.373*          | 0.201*  | 0.339**             | 0.640** |
| Emotionality                     | 0.703**                              | 0.675**         | 0.685**         | 0.521** | 0.657**             | 0.856** |

Note: \*\* - correlation coefficient for  $p \leq 0.01$ , \* - correlation coefficient for  $p \leq 0.05$



The obtained correlation coefficients indicate the relationship between emotional awareness and vitality ( $r=0.706$ ,  $p\leq 0.01$ ), plasticity ( $r=0.675$ ,  $p\leq 0.01$ ), speed ( $r=0.695$ ,  $p\leq 0.01$ ), emotionality ( $r=0.703$ ,  $p\leq 0.01$ ). A direct relationship was found between self-regulation and vitality ( $r=0.694$ ,  $p\leq 0.01$ ), plasticity ( $r=0.669$ ,  $p\leq 0.01$ ), speed ( $r=0.665$ ,  $p\leq 0.01$ ), emotionality ( $r=0.675$ ,  $p\leq 0.01$ ). Self-motivation is positively correlated with vitality ( $r=0.279$ ,  $p\leq 0.01$ ), plasticity ( $r=0.475$ ,  $p\leq 0.01$ ), speed ( $r=0.373$ ,  $p\leq 0.05$ ), emotionality ( $r=0.685$ ,  $p\leq 0.01$ ). A direct relationship was found between empathy and vitality ( $r=0.434$ ,  $p\leq 0.01$ ), plasticity ( $r=0.318$ ,  $p\leq 0.05$ ), speed ( $r=0.201$ ,  $p\leq 0.05$ ), emotionality ( $r=0.521$ ,  $p\leq 0.01$ ). Emotion recognition correlates with vitality ( $r=0.472$ ,  $p\leq 0.01$ ), plasticity ( $r=0.654$ ,  $p\leq 0.01$ ), speed ( $r=0.339$ ,  $p\leq 0.01$ ), emotionality ( $r=0.657$ ,  $p\leq 0.01$ ). The general level of emotional intelligence correlates with vitality ( $r=0.867$ ,  $p\leq 0.01$ ), plasticity ( $r=0.745$ ,  $p\leq 0.01$ ), speed ( $r=0.640$ ,  $p\leq 0.01$ ), emotionality ( $r=0.856$ ,  $p\leq 0.01$ ).

The identified correlations indicate that students with a high level of emotional intelligence have a high need for communication, ease of establishing connections, switch well in the communication process, and have a wide range of communication programmes. They are characterized by easy and fluent speech, rapid verbalization, high linguistic activity, and a sense of confidence in communication.

## 5. Discussion

The results of the study showed that the students have a medium level of emotional intelligence, and they have the most developed ability to understand the emotions of others and control their own emotions. High emotional intelligence reflects the inner world of students and their interaction with reality and society. Bemani and Ghenaati (2019) consider emotional intelligence responsible for success in almost all areas of a person's life, and self-regulation as enabling a person to easily achieve one's goals, obtain an education, and promote professionalization. Therefore, students with high emotional intelligence are self-motivated and have strong personality traits. The authors established a positive relationship between emotional intelligence and the concept of social intelligence, which provides understanding of oneself and others in interpersonal relationships, and influences social relationships. The obtained results are similar to the results of this study, which established that emotional intelligence is an important basis for increasing the effectiveness of students' communication with others, as it forms the desire to listen and hear, is a factor in receiving feedback, helps to correct the verbal image and contributes to the prediction of behaviour. It follows that the effectiveness of students' communication and their interpersonal interaction largely depends on the level of emotional intelligence.

Correlation analysis revealed that high emotional intelligence among students is positively correlated with dialogic and alterocentric types, and negatively correlated with authoritarian, manipulative, conforming, and indifferent types. This proves that emotional intelligence affects students' dialogic speech, promotes the verbal expression of their thoughts, emotions, and desires. This was confirmed in other studies (Purba 2018). It ensures the effectiveness of speech activity, mutual understanding with the interlocutor, centring on his/her emotional state. Ieridou (2010) obtained similar results. Students with higher emotional intelligence have a higher degree of social connections. In particular, individuals with a higher ability to perceive emotions are more attached to peers and have higher dialogic interaction.

The connection between students' emotional intelligence and communicative properties shows that they have a high speed of speech activity, quick verbalization, and an inherent sense of confidence in communication. This contributes not only to their interaction in the educational and personal environment, but also ensures the development of professionally important communication skills. Abdolrezapour (2018) proved the relationship between emotional intelligence and the complexity, accuracy, and fluency of oral speech. According to the author, such a connection ensures better academic performance. Xiang et al (2022) proved that emotional intelligence is the key to success in educational activities and stimulates the development of empathy, which positively affects the communication of participants in the educational environment. The speed of speech, its accuracy and lability characterizes the ability to gain new experience and acquire new knowledge. In this context, Root (2019) notes that emotional intelligence contributes to linguistic development of students, cultural sensitivity. Jiang et al (2022) also found that emotional intelligence mediates students' speech development and promotes academic performance.

The results prove that emotional intelligence positively builds the foundations of dialogic speech, provides language plasticity, lability, speed, which contributes to their communicative interaction.

## 6. Conclusions

As a summary of the study, it should be noted that modern requirements for the training of specialists are not reduced to the level of acquired knowledge only. The range of professional skills and competencies is currently expanding, which requires specialists to be mobile, communicative, emotionally stable, and emotionally ready for professional activity. Therefore, more and more attention is being paid to building students' emotional intelligence, which, as this study showed, is able to influence their psycholinguistic features of speech. High emotional intelligence acts as a regulator of emotions, makes it possible to bear responsibility for one's decisions, to be aware of one's own needs and motives for behaviour, and to express them verbally.

An important aspect of the research is that improving students' emotional intelligence will ensure the development of psycholinguistic features of their speech, which in turn will contribute to the achievement of professional success, professional competence, and the formation of qualified specialists.

The prospects of the study outline the possibilities of establishing gender differences in the manifestations of students' emotional intelligence and their psycholinguistic peculiarities of speech. It is also important to develop a programme of psychological development classes for students to develop their emotional awareness, control emotions, perceive and express emotional experiences. This will contribute to the improvement of their psycholinguistic peculiarities of speech, which will successfully affect the professional development of specialists.

### Ethical considerations

Not applicable.

### Conflict of Interest

The authors declare no conflicts of interest.

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### References

- Abdolrezapour P (2018) The Relationship between Emotional Intelligence and Complexity, Accuracy, and Fluency in EFL Learners' Oral Performance. *Cypriot Journal of Educational Sciences* 13. DOI: 10.18844/cjes.v13i3.3452.
- Aburome R, Alhasanat M, Ajarmah S, Ghayyadah I, Taqatqa R, Zboun M (2022) The effect of Emotional Intelligence on communication among the fourth-year nursing students at Al-Quds University-Palestine (Graduation Project).
- Andrienko T, Chumak N, Genin V (2020) Emotional intelligence and acquisition of english language oral communication skills. *Advanced Education* 15:66-73. DOI: 10.20535/2410-8286.201013.
- Barnwal SK, Tiwary US (2017) Using Psycholinguistic Features for the Classification of Comprehenders from Summary Speech Transcripts. In: Horain P, Achard C, Mallem M (eds) *Intelligent Human Computer Interaction. IHCI 2017. Lecture Notes in Computer Science* (vol. 10688). Springer, Cham. DOI: 10.1007/978-3-319-72038-8\_10.
- Bemani N, Ghenaati Z (2019) Interrelationships of emotional intelligence with the awareness of request and apology strategies in an EFL setting. *Indonesian Journal of Applied Linguistics* 9:148-156. DOI: 10.17509/ijal.v9i1.14486.
- Bru-Luna LM, Marti-Vilar M, Merino-Soto C, Cervera-Santiago JL (2021) Emotional Intelligence Measures: A Systematic Review. *Healthcare* 9:1696. DOI: 10.3390/healthcare9121696.
- Chamizo-Nieto M, Arrivillaga C, Rey L, Extremera N (2021) The Role of Emotional Intelligence, the Teacher-Student Relationship, and Flourishing on Academic Performance in Adolescents: A Moderated Mediation Study. *Frontiers in Psychology* 12:695067. DOI: 10.3389/fpsyg.2021.695067.
- Cohen M, Boulton A, Lanzi A, Sutherland E, Hunting Pompon R (2021) Psycholinguistic features, design attributes, and respondent-reported cognition predict response time to patient-reported outcome measure items. *Quality of Life Research* 30(6):1693-1704. DOI: 10.1007/s11136-021-02778-5.
- Diagnostics of "emotional intelligence" (N. Hall). PDAU. Available in: <https://www.pdau.edu.ua/content/diagnostyka-emociynogo-intelektu-n-holl> Accessed on: May 26, 2023.
- Gong Z, Chen Y, Wang Y (2019) The Influence of Emotional Intelligence on Job Burnout and Job Performance: Mediating Effect of Psychological Capital. *Frontiers in Psychology* 10:2707. DOI: 10.3389/fpsyg.2019.02707.
- Han H, Johnson SD (2012) Relationship between students' emotional intelligence, social bond, and interactions in onlinelearning. *Educational Technology & Society* 15:78-89.
- Ieridou NL (2010) Relationship between students' emotional intelligence, perceived school life and school performance. *Scientia Paedagogica Experimentalis* 59:167-186. DOI: 10.57028/559-167-21010.
- Iqbal J, Asghar M, Ashraf M, Yi X (2022) The Impacts of Emotional Intelligence on Students' Study Habits in Blended Learning Environments: The Mediating Role of Cognitive Engagement during COVID-19. *Behavioral Sciences* 12(1):14. DOI: 10.3390/bs12010014.
- Ivashkevych E, Onufrieva L (2021) Social Intelligence of a Teacher as a Factor of the Stimulation of Cognitive Interests of Students. *Problems of Modern Psychology* 54:34-56. DOI: 10.32626/2227-6246.2021-54.34-56.
- Jiang P, Akhter S, Azizi Z, Gheisari A, Kumar T (2022) Exploring the role of content and language integrated learning approach in developing transversal skills in university students with respect to the mediating role of emotional intelligence. *Frontiers in Psychology* 13. DOI: 10.3389/fpsyg.2022.988494.
- Korniienko I, Barchi B (2023) The concept of the soft skills and emotional intelligence development. *Psychology Travelogs* 1:16-26. DOI: 10.31891/PT-2023-1-2.
- Kostikova I, Holubnycha L, Fomenko K, Shevchuk A, Kadaner O, Moshynska O (2020) The Psycholinguistic Standpoints in English Speech Activity. *Broad Research in Artificial Intelligence and Neuroscience* 11:199-210. DOI: 10.18662/brain/11.2/83.
- Luchkina L, Tsinko S, Medvid N, Barannyk N, Marieieva T, Hrychanyk N (2022) Psycholinguistic Aspects of Youth Speech. Consequences and Realities of Postmodernism in Ukraine. *Postmodern Openings* 13:201-215. DOI: 10.18662/po/13.3/485.
- Methodology orientation of the personality in communication Bratchenko. Studocu. Available in: <https://www.studocu.com/ru/document/rgpu-impertsenia/reshenie-pedagogicheskikh-zadach/metodika-napravlennoy-lichnosti-v-obshchenii-bratchenko/54920260> Accessed on: May 26, 2023.
- Monaghan P, Roberts S (2019) Cognitive influences in language evolution: Psycholinguistic predictors of loan word borrowing. *Cognition* 186:147-158. DOI: 10.1016/j.cognition.2019.02.007.

- Purba N (2018) The Role of Psycholinguistics in Language Learning and Teaching. *Tell: Teaching of English Language and Literature Journal* 6:47. DOI: 10.30651/tell.v6i1.2077.
- Questionnaire of formal-dynamic properties of individuality (ofdsy) by V. M. Rusalov. StudFiles. Available in: <https://studfile.net/preview/9199751/page:8/> Accessed on: May 26, 2023.
- Root S (2019) The Relationship Between Language, Emotional Intelligence, and Cultural Sensitivity. Honors Theses 55. DOI: 10.33015/dominican.edu/2019.HONORS.ST.14.
- Salavera C, Usán P, Teruel P, Antoñanzas JL (2020) Eudaimonic well-being in adolescents: the role of trait emotional intelligence and personality. *Sustainability* 12:2742. DOI: 10.3390/su12072742.
- Sánchez-Álvarez N, Berrios-Martos MP, Extremera N (2020) A meta-analysis of the relationship between emotional intelligence and academic performance in secondary education: a multi-stream comparison. *Frontiers in Psychology* 11:1517. DOI: 10.3389/fpsyg.2020.01517.
- Semigina T, Chystiakova A (2020) Children with down syndrome in Ukraine: Inclusiveness beyond the schools. *New Educational Review* 59: 116-126.
- Tejada-Gallardo C, Blasco-Belled A, Torrelles-Nadal C, Alsinet C (2022) How does emotional intelligence predict happiness, optimism, and pessimism in adolescence? Investigating the relationship from the bifactor model. *Current Psychology* 41:5470–5480. DOI: 10.1007/s12144-020-01061-z.
- Trigueros R, Aguilar-Parra JM, Cangas AJ, Bermejo R, Ferrandiz C, López-Liria R (2019) Influence of emotional intelligence, motivation and resilience on academic performance and the adoption of healthy lifestyle habits among adolescents. *International Journal of Environmental Research and Public Health* 16:2810. DOI: 10.3390/ijerph16162810.
- Tsaras K, Papathanasiou IV, Vus V, Panagiotopoulou A, Katsou MA, Kelesi M, Fradelos EC (2018) Predicting factors of depression and anxiety in mental health nurses: A quantitative cross-sectional study. *Medical Archives* 72:62-67. DOI: 10.5455/medarh.2017.72.62-67
- Tyron O, Korieshkova S (2021) Psycholinguistic features of successful transformation of engineering thinking in speech. In Pazaver A, Manuel ME, Bolmsten J, Kitada M, Bartuseviciene I (Eds), *Proceedings of the International Maritime Lecturers' Association. Seas of transition: setting a course for the future* (pp. 128-137). World Maritime University. DOI: 10.21677/imla2021.13.
- Vyspynska N (2021) Development of emotional intelligence as a prerequisite of foreign language communicative competence development in children with special educational needs. *Scientific Bulletin of Uzhhorod University Series "Pedagogy Social Work"* 1(48):73-78. DOI: 10.24144/2524-0609.2020.48.73-78.
- Wen J, Huang SS, Hou P (2019) Emotional intelligence, emotional labor, perceived organizational support, and job satisfaction: a moderated mediation model. *International Journal of Hospitality Management* 81:120–130. DOI: 10.1016/j.ijhm.2019.01.009.
- Wu W, Morales M, Patel T, Pickering M, Hoffman P (2022) Modulation of brain activity by psycholinguistic information during naturalistic speech comprehension and production. *Cortex* 155:287-306. DOI: 10.1016/j.cortex.2022.08.002.
- Xiang D, Qin G, Zheng X (2022) The Influence of Student-Teacher Relationship on School-Age Children's Empathy: The Mediating Role of Emotional Intelligence. *Psychology Research and Behavior Management* 15:2735-2744. DOI: 10.2147/PRBM.S380689.