Students' Communicative Inclinations as an Element of Assessment of their Emotional Intelligence in Terms of Education for Sustainable Development

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Abstract: Education for sustainable development encompasses environmental, economic, and social issues, emphasizing security and value formation. Emotional intelligence (EI) garners attention across scientific disciplines, exploring its developmental specifics, professional implications, and impact on success and personality. Applied research probes EI's connections to life domains like work, leadership, and happiness, vital during adolescence for emotional and communicative growth. This article reports theoretical and empirical findings on students' emotional intelligence across communication skill levels. Methodologically, sustainable education employs dialogics, active learning, and transversal competency building. Theoretical analysis and synthesis complement empirical psychodiagnostic testing using N. Hall's "Questionnaire of Emotional Intelligence," "KOI-2" (by V. Fedoroshin), and statistical analyses. Empirical data reveal most students with low to moderate emotional intelligence, correlating with communication skills. Higher EI correlates with better sociability, positivity, and resilience to negativity. Given low EI and communication skill levels in some students, interventions to enhance emotional awareness are recommended.

Keywords: Emotional Intelligence, Emotion Management, Emotion Recognition, Emotional Awareness, Communication Skills, Sustainable Development.

JEL classification: D91, J24, M12.

1. INTRODUCTION

In modern society, the growing role of education has caused changes in its understanding. Today, education is considered a process of external influence on the individual's assimilation of generalized objectives, social experience, norms, values, etc. It is an essential characteristic of society. It determines the ways of its development, as well as the ways of its preservation (McKeown, 2006).

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In wartime, Ukrainian teachers face certain problems. They are as follows: teaching in stressful situations, a decrease in student activity, student dissatisfaction with online learning, lack of opportunity to learn online and with constant access to the Internet, peculiarities of wartime forecasting, etc. (Ma et al., 2022). Therefore, one of the current tasks facing university teachers should be, besides teaching, communication with students and assisting them psychologically.

Nowadays, the issue of emotional competence is still relevant. Current conditions of Ukraine's development are characterized by radical social, economic, and political changes in society. Therefore, the ability to adapt to changing conditions, and to perceive and understand own emotions and those of the surrounding people are of particular importance.

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These abilities are considered within the framework of the concept of emotional intelligence (EI). In recent decades, emotional intelligence has led to the growth of scientists' interest in this phenomenon and has become a subject of scientific cognition in psychological and applied sciences.

In this context, the state of mental health and psychological well-being of students in higher education attracts particular attention and interest. After all, modern education is mostly focused on the intellectual development of students and teachers. Not enough attention, unfortunately, is paid to students' emotional experiences that arise in the process of education. Thus, there is a need for a conceptual justification of the phenomenon of emotional intelligence and its role in the educational environment, in particular, ensuring the psychological well-being of students. Nevertheless, understanding own inner world and emotions, and the ability to manage them will contribute to a more harmonious interaction of the individual in society. Understanding and accepting the inner world and emotional experiences of another person will contribute to the establishment of friendly and tolerant relations during university studies, as well as later in life.

Entering a higher education institution, students begin to feel social deprivation from family and school friends. They must solve all problems they face independently. Thus, communication with teachers, the search for new friends, social groups in which you can express yourself, and spheres of practical self-realization are determined. An important factor that affects the success of adaptation in a new educational environment is communication skills. With their help, students can achieve their goals (Dotsenko et al., 2020).

Communicative culture is one of the defining features of the future specialist, as it takes a leading place in the overall cultural and professional formation of an individual, at the same time, being one of the main means of practical activity and productive professional communication. The implementation of an effective model of communication in professional activity is possible if there is a certain level of communicative potential and specific knowledge of future specialists. They, in turn, constitute the core of the communicative structure of the individual and are the foundation for the development of communicative culture. The social and psychological nature of an individual presupposes the formation of his communicative life activity, in the process of which external and internal changes occur, sociability is formed, and the components of communicative potential are realized (Solomka et al., 2020).

The issue of the person's communicative potential and its implementation lies within the ratio of the ideally possible and the truly available. Thus, the determination of possible options and directions for improving the communication process and its correction in various fields of activity is related to the determination of the general psychological structure of communication and the main components of the individual's communicative potential. It refers to the psychological and social foundations of communicative potential. Regarding the first, it determines the efforts of each person to utmost realize his psychophysiological, characterological properties and individual features in the process of communication. At the same time, the psychological basis of potential by itself being outside the general set of cause-and-effect

relationships, outside the system of social relations, that is, outside the social basis cannot ensure the effective communicative life of a person, his optimal participation in the regulation of the social process (Orban-Lembryk, 2004).

According to Rosalyn McKeown, education for sustainable development (ESD) is the use of education to achieve sustainability. The author compares ESD with the training of drivers or firefighters. The goal of training drivers is to master safe driving skills to increase the level of road safety. Fire safety training is also aimed at preventing fires and tragic deaths. Education for sustainable development, thus, reasoning from analogy, should ensure the acquisition of knowledge and skills that will help make the development of society sustainable and contribute to building quality and safe life for current and future generations (Koreneva, 2018).

D. Tilbury and D. Wortman outline the essence of education for sustainable development as follows: imagination (the ability to imagine the desired future and choose the best ways to achieve it), critical thinking and reflection, systemic thinking, development of partnership relations, learning of interaction and participation in the approval of decisions (Koreneva, 2018).

According to Rudyt Anderson (Anderson, 2015) the characteristic features of education for sustainable development are an integrated approach to economic and social development, understanding of diversity in all its manifestations (culture, everyday life, nature, and economy), formation of responsibility for living conditions and the environment, development of civic activity (society's participation in decisionmaking), consideration of regional, national, and global contexts, and integrated learning process.

Some scientific works (S. Derevyanko, O. Bodalyov, S. Myronets) indicate that emotional competence should be understood as the ability of a person to act in harmony with the internal environment of his feelings and desires and as the ability of an individual to carry out optimal coordination between emotions and purposeful behavior. In general, emotional competence involves the integral and progressive development of the individual's emotional sphere aimed at self-realization. It consists of a set of knowledge, abilities, and skills that allow adequate action based on the processing of external and internal emotional information (Tyshakova & Balabanova, 2021).

As to the nature of emotional competence, there are also differences in scientistic views. Some scientists believe that the nature of emotional competence has a determining genetic character, while others believe that emotional competence is formed under the influence of society. Several researchers combine these two factors, not rejecting the genetic character and giving preference to social influence (Nosenko & Kovryha, 2003; Lopes, 2004).

The earliest roots of emotional intelligence research can be traced to the work of Charles Darwin, who noted the importance of emotional expression for survival and adaptation. In the 1900s, although traditional definitions of intelligence emphasized cognitive aspects such as memory and problemsolving, several influential researchers in the field of intelligence recognized the importance of non-cognitive aspects (Emotional intelligence). So, in 1920, E. L. Thorndike intro-

duced the term "social intelligence" to describe the skills of understanding and managing other people (Thorndike, 1920). In 1940, David Wechsler described the influence of non-mental factors on intellectual behavior. He argued that intelligence models considered by science will not be complete until we can adequately describe the aforementioned factors. In 1983, Howard Gardner in "Frames of Mind: The Theory of Multiple Intelligences" introduced the idea of multiple intelligences, separately considering interpersonal intelligence (the ability to understand the intentions, motives, and desires of other people) and intrapersonal intelligence (ability to understand oneself, to evaluate one's feelings, fears, and motives). According to Gardner, traditional indicators of intelligence, such as IQ, are not able to fully explain the cognitive abilities and characteristics of a person (Thorndike, 1920).

The concept of emotional intelligence (EI) appeared in psychological science at the end of the 20th century. Its founders were American psychologists D. Caruso, P. Salovey, and J. Mayer. They include the accuracy of expressing emotions, understanding emotions, the ability to use emotions in activities, and the management of emotions in the field of emotional intelligence (Sergiyenko & Vetorova, 2010).

D. Goleman refers to emotional intelligence such features as the individual's ability to self-motivation, resistance to disappointment, control over emotional outbursts, the ability to refuse pleasure, mood regulation, and the ability not to let experiences drown out the ability to think, empathize, and hope (Goleman, 1996).

R. Bar-On distinguishes five spheres of emotional intelligence. They are knowledge of own personality (emotions, self-confidence, self-respect, self-realization, and independence), communication skills (interpersonal relationships, social responsibility, and empathy), ability to adapt (problem-solving, reality assessment, and adaptability), management of stressful situations (resistance to stress, impulsivity, and control), and prevailing mood (Bar-On, 1997). S.O. Lyusina and D.V. Ushakova distinguish two spheres of emotional intelligence - intrapersonal and interpersonal (Lyusina & Ushakova, 2009).

M. M. Reva claims that the necessary foundation for increasing the effectiveness of interaction with others and communication is a person's desire to listen and hear, which in turn strongly depends on how the person perceives the communication situation. According to the researcher, an important factor in increasing the accuracy of another person's perception is receiving feedback from him, which helps to correct the image and contributes to a more accurate prediction of behavior. It follows that the effectiveness of communication largely depends on the level of emotional intelligence (Reva, 2022). These scientists offer their methods of diagnosing emotional intelligence. Although, they still have certain reservations regarding their validity. That is, there is no generally accepted method for assessing emotional intelligence today.

Regarding communicative competence, the analysis of various scientific and psychological literature shows that a significant number of domestic and foreign works are devoted to its study. In the philosophical dictionary, "communication" is a category of philosophy that means communication by which the "Me" finds itself in another. Communication is most fully presented in this aspect in the existentialism of K. Jaspers and in modern French personalism where it is considered as a relationship established consciously with the help of a discussion (K. Jaspers, O. Bolnov, E. Mounier), during which people are convinced that they are separated by generally accepted norms of thinking and are related by what differ and make them individually unique (Fitsula, 2002).

In the research of T. I. Fedotyuk, communicative competence is interpreted as a complex personality trait, which includes cognitive (professional competence, reflective competence, and scattered thinking), affective (high sensitivity and ingenuity), positive emotional attitude towards others, maximum sincerity, and openness to expressing their feelings and behavior (ability to self-regulate, correct behavior, self-confidence, and sense of responsibility). Concurrently, empathy goes beyond the emotional component and is considered the main element that permeates all of them (Fedotyuk, 1997).

The communicative potential is interpreted by L. E. Orban-Lembryk as the presence of an individual's personal qualities, abilities, communicative knowledge, capabilities, skills, and motives that in the system make up the communicative structure of the individual, his communicative core, and the communicative world. The specified properties being developed and formed in communication, are fixed in the personality structure as a peculiar life position, which performs the function of further improvement of actual communicative behavior. This is a system of forms, means, and ways of integrating one's activity with the activity of others, one's personality with the personalities of others, and a specific complex of personal qualities and features. The basic structure of communicative potential is formed by the communication need, which is interpreted as an individual's specific attitude towards communication, an interpersonal attraction, as well as an innate instinct for communication, and an innate desire for affiliation. This need is directly related to the individual's sociability – the expression of the need for communication, the establishment of social relations, and the use of various forms and means of communication (Orban-Lembryk, 2004).

According to L. V. Plyaka, communicative abilities are significant for the socialization of an individual, his psychological development, as well as the acquisition of the necessary forms of social behavior. Communicative abilities are divided into two groups, such as command of contact and communication techniques and the ability to use personal communicative properties in the process of communication (Plyaka, 2018).

In his work, G. L. Bondar indicates that the understanding of the "language of non-verbal signals" and mastery of them is no less important in the formation of a specialist's communicative competence. Means of non-verbal communication (gestures, posture, facial expressions, intonation, pauses, and distance) as the "language of feelings" are a product of people's social development. Mimics and gestures in the process of verbal communication emphasize the semantic structure of information and increase its emotional effect of it. However, the inconsistency of facial expressions and gestures can

complicate the process of perceiving information and disorient a communication partner (Bondar, 2018).

B. Parkinson, a researcher at the University of Oxford, believes that there are important differences between the way verbal statements work and the way a person moves. First, mimic activity can be dynamically coordinated with the unfolding of a social episode allowing for mutual interpersonal adaptation over time. Second, facial movements may serve social functions that require a lower level of information processing than the perception of verbal meaning or the registration of verbal pragmatic force. For example, smiles can be a reward stimulus, and gaze modulation can be the direction of other people's visual attention in a real-time mode without any need for categorization or logical inference processes. Despite these differences, facial expressions and verbal communication can be considered functionally equivalent in those specific cases where the process of social influence is mediated by the registration of an emotional meaning by another person (i.e., in the special case where a person's form or words are perceived by someone else as a sign of emotion, who then responds according to his categorization of first-person emotions) (Parkinson, 2021).

In another article, B. Parkinson compiled the arguments and evidence from his 2019 monograph "Heart to Heart: How Your Emotions Affect Other People". The basic claim is that emotions act as relational leveling processes that lead to convergence, complementarity, or conflict between two or more people. In some cases, relational alignment involves the strategic presentation of emotional information to regulate the behavior of other people. In other cases, emotions are consolidated from socially distributed reciprocal devices of cues, signals, and actions without any overt registration or transmission of emotional meaning by the parties. An approach based on relational alignment provides a new perspective on issues related to the interpersonal, intragroup, and organizational functions of emotions and clarifies how emotions are regulated for social purposes (Parkinson, 2021).

2.METHODOLOGY

To carry out the research, we used the following methods: theoretical (analysis, synthesis, systematization, and generalization), the empirical research was conducted using the psychodiagnostic method, namely the testing method of the "Questionnaire of emotional intelligence" by N. Hall and "KOI-2" (described by V. Fedoroshin), methods of mathematical processing of Pearson and Spearman correlation coefficients and t-Student's test. We also used a graphic method in the research to illustrate and systematize the obtained results.

3.RESULTS AND DISCUSSIONS

Over the past 30 years, sustainable development has become a prominent concept. As an integral element, education for sustainable development provides learners with comprehensive knowledge, skills, perspectives, values, and attitudes to make informed decisions and take action to care for the natural and social environment. Sustainable development indicators (SDIs) translate such information about complex phenomena into a simple message that can be (easily) interpreted. SDIs play a key role in sustainable development plan-

ning, both in promoting positive change and in delaying a change in the methodological planning process, thereby highlighting the most important aspect of SDIs, which is that they can be multiple and sometimes vague or conflicting goals when they are not properly understood, accordingly, when fulfilling the relevant communicative criteria (Urválková & Surynková, 2022).

The main feature of education for sustainable development is its influence on the value-motivational sphere of the individual. Based on value orientations, activity and behavior are regulated, which reflect a person's attitude to things and phenomena. Thus, the transformation of society towards sustainable development is impossible without changing the value system. Therefore, the formation of a system of values corresponding to the idea of sustainable development is the main task of education for sustainable development. Only "internal" but not imposed behavior based on learned, internalized eco-ethical values that have become personally significant is more sustainable and effective. Education for sustainable development can be defined as a special type of education, which (Koreneva, 2018):

- in terms of content, is social, economic, ecological, safe, and value-oriented:
- by the level of application, is general pedagogical, interdisciplinary, end-to-end, and practically oriented;
- on a philosophical basis, is humanistic;
- by orientation, is futuristic;
- according to the approach of those who study, is subjectby-subject;
- according to the prevailing method, is active and dialogic;
- by category of students, is mass (all categories);
- according to the duration of the training, is continuous;
- by the form of education, is formal, non-formal, and informal.

The above-mentioned characteristic features of education for sustainable development enable us to define it as a modern transversal type of education, aimed at revealing the potential of the individual at all educational levels based on the values and principles of sustainable development (Koreneva, 2018). We conducted an empirical study on a sample of 70 students of the State Biotechnological University (Kharkiv, Ukraine). The age of the subjects is 18-25 years. To determine the level of emotional intelligence we used the method proposed by N. Hall (Diagnostics of "emotional intelligence" (N. Hall)) to identify the ability to understand personal relationships represented in emotions and manage the emotional sphere based on decision-making in Fig. (1).

The results obtained on the "Emotional awareness" scale indicate that 13.8% of respondents have a high level, 54.5% have an average level, and 31.8% have a low level of development of this property. This shows that most subjects mainly can recognize their own emotions and feelings correctly, verbalize them, and find a connection between their thoughts, feelings, and reactions. However, a large percentage of the subjects also have low abilities to differentiate emotions.

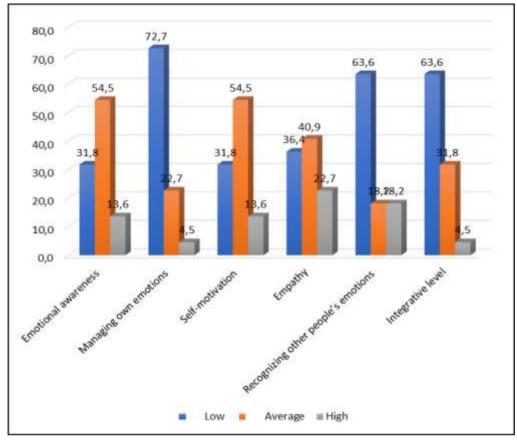


Fig. (1). Indicators of the level of emotional intelligence of the subjects (in %).

According to the "Managing own emotions" scale, 4.5% of the subjects manage their emotions very well, 22.7% skillfully manage their own emotions, and 72.7% have difficulties with managing their emotions. Therefore, the results indicate a low ability to manage their own emotions in most respondents, since only a small percentage of respondents have a high ability to manage their own emotions and understand what exactly controls them when making a decision thoughts or feelings.

According to the "Self-motivation" scale, only 13.6% of respondents have a high level, 54.5% of respondents have an average level, and 31.8% have a low level. This indicator reveals the degree of command of own emotions, so subjects with high and average levels on this scale can cope with their own emotions. They are aware of what is hidden behind the feeling (for example, an offense that triggers anger), and they have ways to get rid of anxiety, anger, and sadness. The same subjects of the research, who have a low level of selfmotivation development have a hard time realizing the true essence of expressed feelings and getting rid of negative ones.

According to the "Empathy" scale, 22.7% of the subjects have a high level, 40.9% have an average level, and 36.4% have a low level of this quality development. That is, 22.7% of all respondents understand the attitude, feelings, and mental states of another person in the form of empathy well, the largest part of the respondents (40.9%) copes with these qualities not very well, and 36.4% of respondents are unable

to understand the emotions of others and empathize with them.

According to the scale "Recognizing other people's emotions", 18.2% of respondents possess this skill at a high level, 18.2% at an average level, and 63.6% have difficulties in recognizing other people's emotions. Thus, we can conclude that 4.5% of respondents have a high level of integrative emotional intelligence, 31.8% have an average level, and 63.6% have a low level. The higher the level of development of emotional intelligence among the subjects, the more they are sociable, friendly, and in a good mood, not susceptible to fear and not prone to anxious thoughts. Their emotional life is full of events within proper limits.

The effectiveness of communication activity is ensured by a complex of individual communicative characteristics of a person. Communication skills are among them.

The communicative abilities of an individual are manifested in the speed, depth, and strength of mastering the means and techniques of communication activity, namely, the ability to listen, perceive, and reproduce information, conduct a dialogue, participate in discussions, convince, and defend one's point of view, as well as the ability to cooperate with people and to have different social roles in the team (Solomka et al., 2020).

To study communicative abilities, we used the "KOI-2" method (described by V. Sinyavsky & V. Fedoroshin) (The technique of identifying), which makes it possible to reveal the communicative and organizational inclinations of an in-

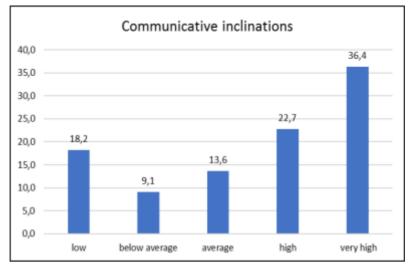


Fig. (2). Indicators of communicative inclinations of the subjects (in %).

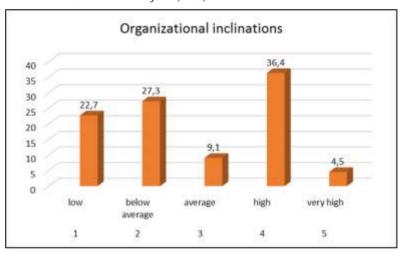


Fig. (3). Indicators of organizational inclinations of the subjects (in %).

dividual, namely the ability to establish and expand contacts, influence people, and show the initiative. In the context of our research, we were interested in the study of the ability to establish and maintain contact with others. Fig. (2) presents the results of testing students' communicative inclinations.

The obtained results indicate that 36.4% of students show very high communicative inclinations. This testifies to the determined need of these subjects for communicative activity, and relaxed behavior in a team, which is new to them. They can defend their opinion and insist on making their decision, quickly tackling difficult situations. Besides, 22.7% of respondents demonstrate high communicative inclinations, which is evidence of the desire to expand the circle of acquaintances and to find friends easily. They are the initiators of communication.

13.6% of respondents show an average level of development of communicative inclinations. They can be characterized as those who seek contact with people, though the potential of their communicative inclinations is not characterized by high stability.

The level of communicative inclinations below the average was determined in 9.1% of students. It can be assumed that

they do not strive for communication and prefer to spend time alone with themselves. In a new company or team, they feel constrained and may experience difficulties in establishing and maintaining contacts. Moreover, 18.2% of the subjects showed a low level of development of communicative inclinations, which may be evidence of a low ability to establish and maintain contacts. Such people do not defend their opinion and have a hard time taking insults.

Today, the world is more interconnected than ever before. Therefore, teachers need to practice teamwork more often to develop cooperation skills in students, involve them in joint work outside the university, as well as implement various projects aimed at achieving the goals of sustainable development thus way, increasing the level of communicative tendencies.

Information on organizational inclinations is presented in Fig. (3). Regarding the development of organizational inclinations, only 4.5% of students showed the highest level of this quality development. A high level is characteristic of more than half of the respondents – 36.4%. This proves their ability to make decisions in difficult non-standard situations. They help relatives and friends and are not lost in a new environment.

9.1% of respondents show an average level of development of organizational inclinations. They can be characterized as those who stand up for themselves, although the potential of their inclinations is not characterized by high stability. 27.3% of the subjects had below-average organizational inclinations. They rarely take the initiative and avoid making independent decisions. A low level of development of these inclinations was found in 22.7% of the subjects. They do not take the initiative in social activities at all and avoid making independent decisions in many cases.

Spearman's rank correlation method was used to identify and analyze in detail the relationships between the components of emotional intelligence and the features of their communication abilities. To do this, we compared the results of the study using the methods of the "Definition of emotional intelligence" (according to N. Hall) and "KOI-2" (described by V. Fedoroshin). Detailed calculation of the correlation dependence was carried out using the package of statistical software IBM SPSS Statistics for Windows, Version 23.0.

Based on the results of the calculations, we can state a direct moderate linear correlation between the indicators of emotional intelligence and the level of development of communicative inclinations of the subjects, Spearman's coefficient rs = 0.555, the correlation between these indicators has a statistically significant relationship p≤0.05 (we used the Student's t-distribution).

Thus, we can state that the higher the level of emotional intelligence of students, the higher the level of development of their communication skills. In practice, the better the studied students are at emotions, the more accurately they can recognize certain emotions in other people, and the better they can realize their feelings and manage them, the more they can establish communication with others and be engaged in active communicative activity.

Emotional intelligence produces non-standard methods of activity to achieve goals and satisfy needs. Unlike abstract and concrete intelligence, which reflect the patterns of the external world, emotional intelligence reflects the inner world and its connections with individual behavior, interaction with reality, and relationships with society (Reva, 2022).

In America, the saying "IQ gets you hired, but EQ gets you promoted" has now become widespread. Psychologists claim that if an employee has a high IQ, but the level of his EQ is low, he will not be able to competently fulfill his managerial

Today, more scientists are considering artificial intelligence, which is developing so swiftly that we may soon have to compete with it. And the only way to compete with robots is to develop emotional intelligence (EI), which is inaccessible to machines. EI is a certain set of skills that allows you to recognize and understand other people's emotions and intentions, as well as control yourself to solve practical tasks. Employers are sure that for a successful career, a person will need to possess three things - adaptability, the ability to work with information, as well as and the ability to find common ground with any person. This is emotional intelligence. Today, to get to Elon Musk's team, you need to play a special online game where artificial intelligence asks you to

determine what emotion a person is experiencing in a particular photo. The results are then analyzed and sent to the potential employer (Social, 2020).

Considering the results of the conducted research, we have developed a corrective program, which purpose is to develop students' communicative inclinations. The most effective method, in our opinion, for improving communication skills and for acquiring interpersonal communication skills is socio-psychological training.

The study presents an experimental correctional program compiled by us based on the research results, which incorporated adapted foreign and domestic technologies of group work, some of which were repeatedly tested in different groups (Zhyhaylo, 2012). Social-psychological training consists of three parts, which are "warming up", the main content of the lesson, and the conclusion (reflection of the les-

The first stage of the training work is the introduction, "warming up" aimed at creating a friendly, warm atmosphere in the group. Warming up can become a ritual and then every training day will begin with it. This will allow participants to quickly immerse themselves in the working atmosphere.

In the first stage, the following exercises are used: "Mutual presentation", "Wishes", "Discussion according to the rules", "Signal", and "Smile in a circle". Here are some examples. Exercise "Signal". Participants stand close enough in a circle and hold hands. Someone, lightly squeezing the hand, sends a signal in the form of successive quick or longer squeezes. The signal is transmitted in a circle until it reaches the au-

Exercise "Smile in a circle". This exercise is a good way to start or end a class. Participants sit in a circle and hold hands. The first participant turns to his neighbor on the right or left and smiles at him. At the same time, you can "take" a smile in the palm of your hand and carefully pass it to another. By using the ritual beginnings of classes, we aimed to reduce confusion, activate, and immerse ourselves in the "here and now" situation.

The second stage of training includes two blocks of exercises aimed at self-knowledge, self-awareness, the formation of adequate self-esteem, and the development of communication skills. At this stage, we used the following exercises: "Who can do more?", "Show emotion", "Our fears", "Who are you?", "Parts of Me", "I am real", and "I am perfect".

For example, the exercise "Parts of Me". The presenter invites the participants to remember what they are like in different situations, depending on the circumstances. Then, he suggests drawing these different parts of "Me". It can be a symbolic drawing.

Exercises "I am real" and "I am perfect". The presenter invites the participants to draw themselves as they are, and as they would like to be. Drawings are discussed.

Exercise "Siamese twins". Each couple imagines themselves as Siamese twins who have joined parts of the body. The presenter says that they should act as one and try to move around the room. Then, the group should be shown an episode from their life together – how they dress, have breakfast, etc. This exercise trains the skills of unified interaction.

Being able to build the correct relationships, overcome obstacles, have an adequate self-image, and manage one's emotional state is the key to the success of any future specialist.

The training program for the development of communication and leadership skills offered by us also included exercises as follows:

- 1. Exercises on listening skills. "Can we listen?", "Shoulder to shoulder", "What does the answer depend on?", and "Conversation through the glass".
- 2. Exercises to develop communication styles. "Exchange", "Share your worries with me".
- 3. Exercises to develop the ability to interact in pairs. "Observation", "Shadow",
- 4. Exercises on establishing and maintaining trust. "Defining trust", "Establishing trust between people".

The third stage was integrational. It included techniques for consolidating the acquired skills and summarizing. At this stage of the training, not only the summaries are made in general, but also the ways of further work on oneself and each member of the group are outlined. Here, the participants express their attitude to the training as an active method of developing managers' communication and leadership skills.

To prove the effectiveness of the corrective program implemented by us, a control section of the level of development of communicative abilities of the experimental group was conducted. Analyzing the results according to the KOI-2 method (V.V. Sinyavsky & V. A. Fedoroshin) "before" and "after" the correction program, it should be noted that the number of people with an average level of development of communication skills increased from 13.6% to 22.0%, and with low – decreased from 18.2% to 10.0%.

The analysis of the research results calls for the development of practical recommendations for further improvement and development of students' emotional intelligence and their communicative and organizational abilities. For people with a low and average level of development of these abilities, we offer the following practical recommendations:

- 1) taking into account the positive dynamics of the correctional program, students should continue to attend training classes aimed at developing communication skills and the communication sphere in general;
- 2) memorize poems and prose works that contain a dialogue/dispute, and recite them properly. This will contribute to an adequate awareness of one's emotional state, will help to diversify the ways of behavior in difficult life situations;
- 3) every day, learn 10 new words from different realms/fields of activity and understand their meaning. This will increase your vocabulary, expand your horizons, and increase the range of conversational topics to be confidently engaged in;
- 4) attend psychological circles where you need to solve various cases. This will contribute to an adequate awareness of one's emotional state, expand the circle of friends and acquaintances, form a sense of responsibility for the result of joint activities with others, and allow getting out of one's comfort zone, which leads not only to the development of

communication skills but to the personality development in general;

- 5) join public organizations and engage in volunteering. Such a good way will not only expand the circle of acquaintances but also teach you to defend, and argue your own opinion, as well as take into account the positions of others;
- 6) set a goal to meet two or three new people by the end of the month (timescales may vary depending on the individual characteristics of the young person). This task is also effective for people with self-doubt and communication barriers. Achieving the set goal, a person overcomes isolation, selfconsciousness, as well as other communication barriers.

In our opinion, university teaching related to sustainable development is considering and teaching aspects related to sustainable development as a separate discipline. It also involves critical reflection on unsustainable events in society (sustainability as thematic educational content). Besides, it is also necessary to use appropriate didactic approaches to reveal the complexities of sustainability issues. These include discursive (to develop communication skills), participatory forms of education (aimed at overcoming inertia and passivity of stereotyped forms of the educational process in institutions of higher education), problem-oriented reasoning, as well as interdisciplinary and transdisciplinary approaches.

Sustainability teaching in universities should aim to create awareness and problem-solving skills among students for the goals and content of sustainable development so that graduates can participate in the development of sustainable solutions to social problems or problems related to processes of decision-making and learning This requires the development of appropriate teaching programs (Gryshova et al., 2019; Karagozlu, 2021).

The methodological basis of teaching programs based on the principles of sustainable development is the statement that a student is an active and creative individual capable of learning and self-development (Shakhovska, 2016; Gryshova et al., 2017; Kazarian et al., 2019). While studying, students get the opportunity to form their way of life and value system, as well as to understand how the everyday life of each person and collective affect sustainable development. During such training, the teacher's role changes. He acts as an organizer of students' actions, inspires, and encourages them, and directs their efforts. It is the students who choose the method of activity, perform the selected actions, discuss them making independent decisions. The teacher only creates conditions for a safe and effective learning process and invites to participate in it. He must be able to listen and hear students. An important factor is the teacher's demonstration of models of behavior aimed at the sustainable development of students (Savytska et al., 2021; Savytska et al., 2019).

4.CONCLUSION

Education is the primary and most important factor for ensuring the sustainable development of humanity. The sustainable development of society, in particular its educational aspects, is formed in all higher education institutions without exception as general approaches, teaching methodologies of certain problems, and the search for ways to solve them are generated there. It is obvious that education focused on sus-

tainable development requires new pedagogical conditions, models, culture, and content.

Emotional intelligence is, on the one hand, the ability to understand, analyze, and control own feelings and emotions, and on the other hand, being able to feel and understand the moods of the surrounding. As for the level of emotional intelligence, scientists have not yet come to a consensus. Emotional intelligence surely has a genetic basis, but many psychological studies point to a huge role in upbringing. Moreover, emotional intelligence can increase with age. Most scientists are inclined to think that EQ can be developed and, as a result, increased.

Having high-level communication skills allows you to effectively interact with other people in various activities. Communicative development follows different paths. This is quantitative accumulation (increase in vocabulary and volume of speech) and qualitative changes (pronunciation, development of coherent speech, and understanding of the language addressed to you). However, the main criterion for the intensity and success of the formation of a communicative personality is the ability to understand, set, and solve communicative tasks of different natures, that is, the ability to use one's speech correctly and optimally and thinking activity in communication with other people through information and with oneself.

As a result of the study, a circle of students with a low level of emotional intelligence and low indicators of the development of communication skills was determined, we consider it necessary to carry out corrective measures aimed at improving the level of emotional awareness of the subjects, the ability to manage own emotions, and the ability to recognize the emotions of others. This issue still needs further scientific inquiry.

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CONFLICT OF INTEREST STATEMENT

The authors declare that they have no conflict of interest.

REFERENCES

- Anderson, R. (2015). The Content Reform of Education for Sustainable Development / Rudite Andersone. Rural Environment. Education. Personality. (REEP). Proceedings of the International Scientific Conference, Jelgava; LLU, P. 75-81.
- Bar-on, R. (1997). The Emotional Intelligence Inventory (EQ-i): Technical Manual. Toronto: Multi-Health Systems.
- Bondar, L. H. (2018). Socio-psychological factors and conditions for the development of communicative competence of a specialist in the field of public administration. Scientific Notes of V. I. Vernadsky Taurida National University. Vol. 29 (68). №. 3. P. 28-32.
- Karagozlu, D. (2021) Creating a Sustainable Education Environment with Augmented Reality Technology. Sustainability. 13(11), 5851. https://doi.org/10.3390/su13115851
- Diagnostics of "emotional intelligence" Hall). URL: https://www.pdau.edu.ua/content/
- Dotsenko, L., Karyaka, I., & Voloshyna, O. (2020) Discussion as a method of developing communicative competence of students of practical psychology. Actual problems of psychology. https://er.nau.edu.ua/bitstream/NAU/45608/1/
- Emotional intelligence. URL: https://uk.wikipedia.org/wiki

- Urválková, E.S., & Surynková, P. (2022). Sustainable Development Indicators-Untapped Tools for Sustainability and STEM Education: An Analysis of a Popular Czech Educational Website. Sustainability, 14, 121. https://doi.org/10.3390/
- Fedotiuk, T. I. (1997). Psychological peculiarities of empathy development as an element of communicative ability of a practical psychologist: Author's abstract of the dissertation for the degree of Candidate of Psychological Sciences / M.P. Dragomanov National Pedagogical University, Kviv, 19 p.
- Fitsula, M. M. (2002). Pedagogy: a study guide for students of higher pedagogical institutions. Kviv: Vydavnychvy tsentr "Akademiya". 560 p.
- Goleman, D. (1996). Emotional Intelligence. Why it Can Matter More Than IQ. Bloomsbury.
- Gryshova, I., Koshkalda, I., Demchuk, N., Stebliuk, N., & Volosova, N. (2019). Strategic Imperatives of Managing the Sustainable Innovative Development of the Market of Educational Services in the Higher Education System. Sustainability. https://doi.org/10.3390/su11247253.
- Gryshova, I., Nikoliuk, E., & Shestakovska, T. (2017). Conceptualization of the organizational management mechanism of the development of the national education system in the context of its quality. Sci. Educ. 10, 118-125. https://doi.org/10.24195/2414-4665-2017-10-
- Kazarian, G., Gryshova, R., & Durglishvili, N. (2019). Regulatory Environment for the Formation of Leadership Positions for the Persons with Disabilities. In Sustainable Leadership for Entrepreneurs and Academics; Strielkowski, W., Ed.; Springer Proceedings in Busiand Economics; Springer: Cham, Switzerland https://doi.org/10.1007/978-3-030-15495-0_18.
- Koreneva, I. M. (2018). The phenomenon of "Education for Sustainable Development": the essence and modern features of the concept. Ukrainian Pedagogical Journal. 2. S. 113-123.
- Lopes, P. N. (2004). Emotional Intelligence and Social Interaction. Pers. And Soc. Psychol. Bull. 2004. Vol. 30. P. 1018-1034.
- Lyusina, D.V., & Ushakova, D.V. (2009). Social and emotional intelligence. From processes to measurements. M.: In-t psikhologii RAN. 2009.
- Ma, X., Gryshova, I., Koshkalda, I., Suska, A., Gryshova, R., Riasnianska, A., & Tupchii, O. (2022). Necessity of Post-War Renewal of University Teachers' Potential in Terms of Sustainable Development in Ukraine. Sustainability. 14(19):12598. https://doi.org/10.3390/su141912598
- McKeown, R. (2006). Education for Sustainable Development Toolkit. Paris: Printed in UNESCO's workshop. 130 c
- The technique of identifying communicative and organizational tendencies (KOI-2) by V. V. Sinyavskyi and V. A. Fedoroshin. URL: http://um.co.ua/9/9-10/9-101876.html
- Nosenko, E. L., & Kovryha, N. V. (2003). Emotional intelligence: conceptualization of the phenomenon, basic functions: monograph. Kyiv: Higher School. 126 p.
- Orban-Lembryk, L. E. (2004). Social psychology: textbook: u 2 kn., Kn. I: Sotsialna psykholohiya osobystosti i spilkuvannya. Kyiv: Lybid.
- Parkinson, B. (2021). Author Reply: Aligning Social Relations With Faces, Words, and Emotions Emotion Review. 13(2), P. 96-100.
- Parkinson, B. (2021). Heart to Heart: A Relation-Alignment Approach to Emotion's Social Effects. Emotion Review. 3(2), P. 78–89.
- Plyaka, L.V. (2018). Psychological features of the formation of communication skills in future pharmacists. URL: https://bit.ly/3KgZ4BE
- Reva, M.M. (2022). Characteristics of emotional intelligence of students with different levels of communication skills development. Psykholohiya i osobystist. 1 (21). P.143-153.
- Savytska, N., Kashchena, N., Chmil, H., Muda, I., & Olinichenko, K. (2021). Entrepreneurial characteristics as factors of human development. International Journal of Entrepreneurship, 25(6), 1-9. https://www.abacademies.org/articles/entrepreneurialcharacteristics-as-factors-of-human-development.pdf
- Savytska, N., Chmil, H., Hrabylnikova, O., Pushkina, O., & Vakulich, M. (2019). Behavioral models for ensuring the security of functioning and organizational sustainability of the enterprise. Journal of Securitv and Sustainability. Issues 9(1): 63-76 https://doi.org/10.9770/jssi.2019.9.1(6)
- Sergiyenko, Ye. A., & Vetrova, I. I. (2010). The Emotional Intelligence Test by J. Mayer, P. Salovey, D. Caruso (MSCEIT v. 2.0): manual.

- Moscow: Institute of Psychology, Russian Academy of Sciences. 2010.
- Shakhovska, A. (2016). Educational aspects of sustainable development of Ukraine. Scientific Notes. Series: Problems of methodology of physical-mathematical and technological education. Issue 10(2). P. 152-155. URL:http://nbuv.gov.ua/UJRN/nz_pmfm_2016_10(2)38.
- Solomka, E. T., Oliynyk, V. V., Ivats, O. M., & Khlopek, A. B. (2020). The communicative potential of a psychologist's personality is a prerequisite for the formation of a specialist's communicative culture. *Education and Science*. V 1(28). P.144-150.
- Thorndike, R. K. (1920). Intelligence and Its Uses. Harper's Magazine. 140, P. 227-335.
- Social. (2020). An interesting change to the Z generation is the new Alpha generation.URL: https://tutkatamka.com.ua/diti/cikava-zmina-pokolinnyu-z-nove-pokolinnya-alfa/
- Tyshakova, L. T., & Balabanova, K. V. (2021). The role of individual emotional competence in overcoming emotional barriers in communication. *Bulletin of the National University of Defense of Ukraine*. 6 (64), P.119-123.
- Zhyhaylo, N. (2012). The role of communication and leadership skills in the professional activity of a manager. *Lviv University Herald*. 2012. 47. P. 35-43.

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