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TÍTULO: Formación de la inteligencia emocional en los estudiantes como método de mejorar la calidad de la educación.

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RESUMEN: Hay escasez de documentos que prueben la conexión entre la inteligencia emocional (IE) de los estudiantes y la calidad de la educación. Identificar la relación es de fundamental importancia para mejorar el crecimiento profesional. Este estudio tiene como objetivo modelar situaciones comunicativas para formar la IE de los estudiantes. Se realizó un estudio entre estudiantes de la Universidad Técnica Don. Se comprobó la correlación entre la IE de los estudiantes y el crecimiento profesional. Los métodos de diagnóstico demostraron la eficiencia de las situaciones comunicativas. El documento amplía los límites de la investigación para formar la IE de los estudiantes. Está comprobado que la IE mejora los resultados educativos y la autorrealización.

PALABRAS CLAVES: inteligencia emocional, autorrealización, condiciones comunicativas, crecimiento profesional, componentes de la inteligencia emocional.

TITLE: Forming students' emotional intelligence as a way of improving education quality.

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ABSTRACT: There is a shortage of papers proving connection between students' emotional intelligence (EI) and education quality. Identifying the relationship is of fundamental importance for improving professional growth. Therefore, this study is aimed at modeling communicative situations to form students' EI. A study was conducted among students of Don technical university. The correlation between students' EI and professional growth was tested. Diagnostic methods proved the efficiency of communicative situations. The paper expands the research boundaries of forming students' EI. It is proved that EI improves education results and enhances self-actualization.

KEY WORDS: emotional intelligence, self-actualization, communicative conditions, professional growth, EI components.

INTRODUCTION.

Modern socio-economic development requires increased levels of students' professional and communicative competences, which are closely connected with emotional intelligence (EI) as a main condition of personal and professional growth.

Professionals with high self-control, self-regulation, empathy and developed abilities to control and recognize emotions of their own and other people are considered to be more competitive nowadays. The conducted survey at Don State Technical University showed that only 5% of the students have high EI; 32% of the students have average EI, but most students (63%) have low EI.

The survey proved the authors' supposition that practically all students have great motives in increasing their EI as the way of improving self-actualization; most of them admit the importance of EI for efficient interaction and effective communication; 75% of the students point out that they connect EI with their personal and professional growth. More than half of the students (69%) are not able to adjust themselves to communicative conditions and recognize emotions of other people. The most students are not confident in determining their own emotions; they cannot convince, empathize and sympathize to other people due to low EI.

The students understand the importance of improving emotional intelligence in education environment of technical university connecting it with personal and professional success. Therefore, there are contradictions between modern requirements to specialists' communicative and professional competences and insufficient attention to forming students' EI; the necessity for the students to determine and control emotions and their inability to adjust to flexible communicative situations; humanistic essence of the concept EI and traditional approaches to forming it at technical university determine the problem and the aim of the paper; therefore, the paper is aimed at pedagogic mechanisms of improving students' professional development and support students' sustainable self-development in communicative environment of technical university.

The hypothesis is based on supposition that the higher students' EI, the higher is their personal and professional growth. The main research tasks are to examine students' EI, taking into account synergetic approach as the way of students' personal and professional growth; prove the effectiveness of forming EI.

DEVELOPMENT.

Literature review.

The literature analyses state that important part of EI is based on developing personal abilities to recognize and honestly describe inner emotions in social environment (Mayer & Cobb, 2000); as communicative skills to avoid panic, conflicts, tension and rejection of “negative emotions” (anger, jealousy, irritation, envy, anger) (Salovey et al., 1995).

It is proved that people who are able to express and identify their feelings openly can see the world through the eyes of other people but preserve individuality and integrity as self-actualization in modern world (Mayer et al., 2001). Thus, the literature analysis proves that EI is important individual ability to identify her/his own emotions and emotions of others, to form positive interaction (Salovey & Mayer, 1990, Gross, 2002).

EI plays a crucial role in increasing self-satisfaction, self-actualization (Petrides & Furnham, 2006), self-motivation and self-realization in effective professional activity (Salovey & Mayer, 1990). The term "emotional intelligence" was introduced into scientific use by American psychologists P. Salovey and J. Meyer in 1990 but it has a lot of various interpretations. Some researchers defined it as “the ability to process information contained in emotions: to determine the value of emotions, their connection with each other, to use emotional information as a basis for thinking and decision-making” (Salovey & Mayer, 1990, p. 189; Mayer et al., 2004a, p. 34). A.I. Savenkov (2006) singles out EI as a main condition of personal and professional success. The abilities describing EI (Davis, 2006) contribute to the achievement of personal and professional success, and insufficient development of EI leads to real difficulties in professional activity and personal life. EI components (according to D. Goleman, 1998) are: self-awareness (based on knowledge of their internal states, preferences, and capabilities), self-control (ability to cope with internal emotions), motivation (emotional tendencies that direct or facilitate the achievement of goals), empathy (awareness of

feelings, needs and concerns of other people) (Gross, 1998), relationship skills (the art of evoking in other people the desired reaction) (Goleman, 1998).

Many Russian psychologists determine emotional intelligence as the ability to understand emotions. Lyucin D.V. (2004a, 2004b, 2009) identifies intrapersonal intelligence (the ability to understand and control person's emotions) and interpersonal intelligence (the ability to control other people's emotions). It is pointed out that EI is the main factor of positive communicative behavior which depends on personal features (Makhnach & Bushov, 1988).

It is noted that the development of emotional regulation can help people interact more effectively with others (Goleman, 1995; Soltovets et al, 2019). A person with high EI is capable of creating emotionally positive relationships (Beloborodov & Cimanuk, 2018). All existing studies can be divided into several groups: the dependence of person's mental health from EI; relationship of EI and other personal characteristics: as degree of anxiety (Abdollahi & Mansor Abu Talib, 2015); level of moral self-consciousness (Kornilova & Novototsky-Vlasova, 2011); improving the professional activity (Stroo & Serov, 2011); making management decisions (Polyanova, 2015), performing current tasks and maintaining mental performance (Hui-Hua & Schutte, 2015). So there are a lot of definitions that can be explained by various approaches and tasks. There is no clear description of pedagogic conditions of forming it, education potential of learning foreign language is often ignored; besides synergetic parameters of forming EI are not considered.

Taken into account these gaps, the conceptual idea of the present research is that synergetic conditions of communicative situations stimulate EI as inner activity of students' personal structures to focus on the basic cultural values of EI (Gill et al., 2015). In this case, the humanistic potential of teaching foreign languages can stimulate value-semantic activity of students' consciousness: reflexivity, motivation, criticality, sense-making, self-control, empathy, etc., being the criteria of students' self-actualization and professional growth correlating with EI components.

It is due to different levels of value-semantic inner activity of students' consciousness, it is possible to indicate various levels of students' EI and prove the efficiency of the developed model (Lyusin, 2004a, 2004b, 2009, Mathews & Zeidner, 2000). Thus, external pedagogic conditions create (internal) motivational basis for students' communicative creativity as a complex of personal-developing knowledge generated by students' cognitive consciousness in the process of learning foreign languages and indirectly contribute to inner value-motivated attitude towards EI. It can be determined as self-formation of significant components of EI.

Methods.

In order to diagnose students' emotional intelligence, a set of techniques were used: "Methods of diagnosis of social and psychological adaptation" by J. M. Diamond and K. Rogers (1993), adapted by A.K. Osnitsky (1996). Questionnaire on emotional intelligence "EmIn" by D.V. SAT (Self-actualization Test) by E. Shostrom in the adaptation of L.Ya. Gozman, M.V. Kroz and M.V. Latinskaya (1995). An analysis of the correlation of EI components, self-actualization and personal and professional growth revealed correlations corresponding to a level of statistical significance of $p \leq 0.01$, proving that EI forms relationship with self-actualization as professional growth (cognitive, value-semantic, reflexive-valued, motivational-behavioral).

The correlation analysis was carried out using the Spearman's rank correlation coefficient. To fix the changes in emotional intelligence the following parameters were selected: emotional awareness (EA), management of external manifestations of one's emotions, self-motivation was tested according to the Hall's questionnaire; internal control of emotions, the ability to control them, supporting some and calming others, control the ability to understand and accept emotions, reflecting intrapersonal emotional intelligence were carried out on Lyusin scale (2004a, 2004b, 2009).

All positive changes are fixed as self-observation and self- assessment. Three groups of students of technological faculty were volunteers of the conducted experiment. At Don State Technical University. The experiment was organized among students of technical faculty, conducted during 2017-2018 among the first-year students with problems in learning foreign languages. There were selected 30 students who were sorted into three groups. The subject “Foreign language ‘is learnt by the first-year students who as a rule have a lot of personal problems in adjusting to communication, education environment of technical university so conducted research helped students to overcome personal communicative problems to improve communicative competences and EI.

Methods for diagnosing students’ EI components were based on self-reported data analyses and presented as self-assessment and self-evaluation to get true analyses from other participants of the experiment.

Results and Discussion.

As a rule, communicative situations contain synergetic principles based on a set of invariant communicative reactions, so the calculation of points is carried out on the basis of consensus or given standards while all invariant answers were supposed to be creative as they are personal peculiarities. Paying attention that communicative creativity is oriented on emotional reaction of other people, it is important to determine emotions of other people.

EI consists of 30 statements and contains 5 scales by N. Hall (Fetiskin et al., 2002). They were adapted to research task and modeling communicative conditions. The most important components are: "Emotional awareness" (EA) is the ability to observe changes in one's feelings; ability to analyze and overcome negative feelings; understanding the awareness of their emotions; “Managing Emotions” (ME) is the ability to find a way out of hard communicative situations; “Self-motivation” (SM) is the ability to control emotions; the ability to cause a wide range of positive emotions; ability to be creative in interacting, solving life problems; to gain easily a state of calm

and concentration; "Empathy" (E) is the ability to listen to the people's problems; to feel sensitivity to the emotional needs of others; understanding other people's emotions; recognition of emotions by facial expression; trapping characters in communication that indicate what others want and need. "Recognizing the emotions of other people" (RE) is the ability to influence emotional states of other people; to express adequate reaction to the mood, to meet the desires of other people; is realized as ability to improve the mood of other people. Paying attention to these EI components, there are five kinds of modeling communicative situations stimulating consciousness activity:

1. To express awareness and understanding of emotions (reflection, self-motivation).
2. To manage and control emotions (self-control).
3. To identify and recognize other people's emotions (criticality, collision).
4. To understand emotions of communication partners (empathy).
5. To express support, understanding and sympathy (self-actualization).

Pedagogic observation let the participants evaluate levels of EI in the beginning and at the final stage of the experiment.

Table 1. The authors' results of students' emotional intelligence changes.

Scales/personal structures	In the beginning of the experiment			At the final stage of the experiment		
	st1	st 2	st 3	st 1	st 2	st 3
1. EA/(reflection, self-motivation)	4,3	3,7	5,2	7,94	8,09	8,4
2. ME/(self-control)	5,2	4,6	6,4	6,7	7,94	7,1
3. SM/(criticality)	6,2	4,1	5,9	6,9	5,6	7,9
4. E/(Empathy)	4,1	3,8	5,1	6,81	7,67	8,8
5. RE/(self-actualization)	3,4	4,2	4,8	7,6	4,0	5,3
Integrative emotional intelligence	23,2	21,4	27,1	41,9	47	53,5

Source: authors.

Calculation of the received results was carried out on each scale pointed above, by means of summing positive or negative answers of students to questionnaires. The greater amount of the positive points, the more pronounced is the manifestation of a certain emotional component. Thus, it is possible to get integrative evaluation of students' emotional intelligence, taking into account the dominant points.

Integrative indicator of emotional intelligence is equal to 27.1 in the beginning of the conducted study. According to the standard values (70 and more characterize high level of EI; 40-69 - medium level; 39 and less low level), so 53,5 is medium EI at the end of the experiment. The standard values for each scale describe students' EI for each of the five scales (high levels begin from 14; for medium from 8–13 is medium; 7 and less is low). On the EA scale is 7.94 points and on the E is 6.81. The Emotional Awareness scale describes how attentive the subjects are to their own emotions in communicative creativity, whether they are eager to understand other people emotions, share them and adjust to them or not.

The Empathy scale shows how sensitive a person is to the emotional needs of other people, whether they can understand the external expression of emotions, or understand the emotions of others. On the remaining scales ("Emotion Management", "Self-Motivation", "Recognizing the Emotions of Other People"), it is possible to say about students' levels of self-actualization. To identify the relationship between the results of the study of emotional intelligence (EI) and students' successful self-actualization, a statistical correlation method was used according to K. Pearson (Kapustina, 2016). Correlations between general indicators of emotional intelligence and levels of personal and professional growth can be treated as students' self-actualization in communicative situations were revealed. It is possible to refer to negative correlation ($r = -0.236$ with $p = 0.014$). This indicates that the students' abilities to understand and manage one's emotions, to respect other people's emotions, and the ability to preserve autonomy and self-actualization are the basis for developing

the ability to maintain relationships with other people, to interact and realize individuality and common features uniting all people to cope with ordinary life stresses, to work productively and fruitfully. Thus, it can be stated that medium students' emotional intelligence is associated with the ability to understand the other people in communication without stereotypes, fairly evaluating other people's behavior, the ability to adapt to different situations and characters, habits and desires of others.

Revealed significant correlations were applied between such a component of EI as "Empathy" and "Self-motivation" ($r = -0,297$ with $p = 0,002$). This indicates, in our opinion, the ability to be sensitive to the emotional needs of others, to understand that the emotions of other people are connected with self-actualization. Significant correlations were found between such component as "Recognition of other people's emotions". Additional important components of self-actualization were added. The correlation for three of the four scales of EI: awareness of own emotions is ($p = 0,018$), recognizing emotions in others is ($p = 0,031$), and ability to manage other's emotions is ($p = 0,013$) points out about improving of EI components. There was no change for ability to control own emotions ($p = 0,570$). The results are demonstrated in Table 2.

Table 2. The authors' results of correlation on scales of EI.

Scales	Control groups			
	Starting stage		Final stage	
	M1	D1	M2	D2
1. Emotional awareness	37,91	2,31	38,42	1,62
2. Managing emotions	33,05	4,02	38,4	1,54
3. Self-motivation	41,01	2,10	38,31	2,47
4. Empathy	40,04	4,0	45,55	2,46
5. Recognizing the emotions of other people	21,64	1,057	21,85	1,10
6. Self-actualization	16,47	0,871	19,36	0,562
7. Self-esteem	21,94	0,712	28,4	0,89
8. Accepting aggressiveness	31,76	3,1	38,7	3,92
9. Self-control	29,84	3,1	38,8	2,13

Source: authors.

CONCLUSIONS.

The study revealed that students' EI components improve education results of learning foreign languages, enhance self-actualization as the main indicator of personal and professional growth. The main criteria of communicative situations stimulating activity of students' consciousness is problem character.

The students are active participants and creators of education process. Open character of communicative situations enhances communicative creativity at practical classes of learning foreign languages. The repeatability of received results proves the effectiveness of communicative situations and demonstrates a significant increase in students' EI. The correlation of three of the four scales: awareness of own emotions ($p = 0.018$), recognizing emotions in others ($p = 0.031$), and ability to manage other's emotions ($p = 0.013$) points out about the improvement of EI components.

There was no change for ability to control own emotions ($p = 0.570$). It can be explained by short period of experiment duration and communicative creativity oriented to emotions of other people. The results indicate sound expression of EI, as students' emotions and recognition of the emotions of other people are associated with a number of communicative competences aimed at positive interaction with other people. Received results proved the hypothesis but to state about the validity of the diagnostic techniques and synergetic conditions it is necessary to conduct the study on greater number of respondents.

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