Emotional intelligence as a way to develop soft skills of high school students

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Abstract. This article discusses theoretical concepts related to the definition of emotional intelligence in the context of its role in the formation of soft skills in high school students. The importance of developing emotional intelligence is discussed, considering the presence of its key components, soft skills, which need to be cultivated. During the experiment, it was found that at a low level of emotional intelligence among high school students, all its components are directly interconnected with each other and with the abilities that can be applied to soft skills. (emotional awareness; management of their emotions, self-motivation, and empathy). The data obtained indicate that the development of emotional intelligence is a key factor and an important prerequisite for the formation of soft skills in high school students. The regression model shows that individual measures of emotional intelligence (EI) have their influence on the development of soft skills (SS) in high school students.

It is recommended to actively work on the development of emotional intelligence and its components in high school students, realizing the need to improve their awareness, practice empathy, improve communication skills, and learning to cope with stress. For this purpose, it is necessary to organize teaching in the form of training on the development of emotional intelligence, with the inclusion of special games, digital tools, the use of various ready-made materials, and recommendations from proficient experts.

Keywords: soft skills, high school students, meta skills, success, correlation, emotional intelligence, competencies.

Introduction

The contemporary society, marked by incessant and swiftly shifting metrics, demands radical overhauls from the educational system. It is predetermined that that the changes in scientific, technical, social and economic spheres of life have determined new requirements from the civil, social and professional community to special personal and professional competencies necessary for modern man, one of them are soft skills, the means of development of which are various personal competencies, one of which is emotional intelligence. This is elucidated by the reality that nowadays simply having good knowledge has become an insufficient condition, as it does not allow one to have a competitive advantage in society and on the labor market. Since the indicators of "good study", which were quite relevant in previous decades, now have no proper results and need to be supplemented with soft skills. According to the state educational standards, the updated general secondary education should provide high school students with such expected results as a set of rigid and soft competencies, which will be manifested not only in knowledge, however, this also applies to comprehension and the display of acquired learning achievements (Aimagambetov, 2022).

The essential elements of the new idea of a soft social personality are quite other qualities important for ensuring various forms of success. In recent decades, emotional intelligence has been increasingly referred to such abilities as a rather soft indicator included in the first ten top-soft skills. This competence is presented in modern psychology and pedagogy as an important component in the composition of soft skills (a complex universal phenomenon encompassing important and necessary competences). Additionally, it is important to mention that emotional intelligence appears to form an essential component of professional and personal development of high school students and is expressed in the ability of high school students to recognize, comprehend and manage their own and others' emotions.

There is an interest in the study of emotional intelligence as an object of various kinds of scientific research. In foreign science and practice it is necessary to note the main theoretical models of emotional intelligence: the theory proposed by D. Caruso, J. Mayer and P. Salovey (emotional-intellectual abilities); the theory proposed by D. Caruso, J. Mayer and P. Salovey (emotional-intellectual abilities); the theory developed by D. Goulman (emotional intelligence). Goleman (emotional intelligence) and the nonconventional theory of emotional intelligence developed by R. Bar-On. It is also necessary to point out the works of modern foreign authors: C. Gillioz (2023), J. Maddocks (2023), and some others, as they reveal in their works important questions concerning theoretical and applied problems on the development of emotional intelligence, including in school. The problems of the development of emotional intelligence in the educational system are dealt with by Kazakhstani teachers and pedagogues: D. Mahmetova (2023), T. Kilybaev (2023), K. Taibolatov (2021). At the same time, it is important to note that their scientific research mainly focuses on one side of education, which is expressed in the issue of the evolution of emotional intelligence among young professionals and future teachers, ignoring the development of soft skills in the school atmosphere.

In general, it can be stated that there is insufficient research on the correlation between emotional intelligence and the acquisition of soft skills in the fields of international and national

scientific and applied psychology and pedagogy. Having said that, all studies established on the topic of emotional intelligence lack complete answers to all questions on the topic of our study.

The significance of the investigation is established by:

– a set of problems expressed in a large number of scientific studies of theoretical plans on the issues of emotional intelligence and soft skills, and the lack of research on their mutual impact;

– contradictions concerning a large number of scientifically grounded programs on the formation of emotional intelligence in education and the lack of methods of emotional intelligence development adapted to the conditions of modern education in general and the factor of development of soft skills of high school students, in particular.

The objective of the research is to determine the correlation between emotional intelligence among high school students and its soft elements.

Methodology

The examination of emotional intelligence as a contributing factor to the cultivation of high school students' soft skills is conducted thoroughly, aligning with the specified objective. Simultaneously, the focus of the investigation is delineated as follows: the characteristics of emotional intelligence among high school students. The scope of the study encompasses the progression of its softer elements within the high school context.

The methodology is grounded in a systemic approach to analyzing the research subject. Various general scientific methods (including induction, deduction, logical analysis, synthesis, identification, abstraction, and ascent) as well as specific methods employed in psychological and pedagogical sciences (theoretical and practical) were utilized in the study. The comprehensive utilization of all these methods facilitated a systematic approach and ensured the resolution of the designated tasks.

Throughout the research, all accessible materials were reviewed. The theoretical foundation consisted of classical theories and contemporary works by both foreign and domestic scholars relevant to the study's topic. Additionally, applied materials from authored monographs, scientific articles, and regulatory documents were incorporated. Primarily, literary analysis methods were utilized when examining these materials.

The peculiarity of the phenomenon of emotional intelligence (hereinafter its abbreviation - EI can be used) is based on the model of emotional intelligence (J. Mayer, P. Salovey, D. Caruso), which proposes to consider EI as a person's skills or abilities to transform the information contained in emotions (their own and others') for reasonable acceptance of correct results in the future (Savchuk, 2021). R. Bar-On (clinical psychologist) proposed a model of emotional intelligence, according to which EI includes five main components. At the same time, each of the EI components contains several subcomponents:

– self-knowledge skills (subcomponents: self-confidence, understanding of one's emotions, self-actualization, self-esteem, and independence);

– interpersonal skills (subcomponents: empathy, interpersonal relationships, and social responsibility);

– skills expressed in adaptability (subcomponents: problem solving, flexibility and connection to reality);

– stress management skills (sub-components: resilience and control of anxiety and impulsivity);

– prevailing mood skills (subcomponents: optimism and happiness.

The main components of emotional intelligence of high school students in another version are defined as: self-awareness and self-management, expressed through the possibility of more complete awareness and understanding of oneself and in the competence to effectively manage their emotions, empathy, stemming from an individual's ability to comprehend not only their own feelings and emotions but also those of others; Sociability, defined by the capacity to establish honest and sincere connections and relationships, to show interest in them and to be able to resolve possible conflicts and misunderstandings; personal influence, based on a person's ability to stimulate and inspire both himself and others; goal setting, which means through a person's ability to set and achieve his goals, live with his own mind and defend existing values.

Proceeding from it, according to the theme of the research, the emotional intelligence of the senior student is analyzed not only as a means of self-knowledge and cognition, but also as a factor of his success. Success is achieved most often due to soft components, which are inherent in emotional intelligence, under the conditions of its proper development.

Numerous authors emphasize the significance of soft skills, depicted as a collection of both professional and non-specialized abilities crucial for an individual's effectiveness in both professional and social contexts, contributing to high achievement. These skills are regarded as interdisciplinary competencies, given their relevance across various subjects and life domains (Trifonova, 2020; Sonmez, 2023; Feraco, 2023; Marle, 2023).

The connection or connection involving soft skills and indicators of success for an individual during the learning process is regarded as analogous to the relationship of success with hard skills (within academic subjects). For example, M. Jurado (2021) made his assurance that "soft skills" are related to the success expressed in academic work. In the work of J. Heckman and T. Kautz (2012) asserted that soft skills allow for ensuring success both in the competitive labor market and in the process of schooling. This arises from the necessity for students, during their educational journey, to acquire specialized soft skills while studying fundamental as well as specialized subjects.

In certain research, such as that conducted by T. Chamorro-Premuzik (2010), a positive correlation involving soft skills and indicators of academic achievement was identified. Consequently, students who engage in self-assessment tend to attribute greater significance to soft skills in their learning journey and recognize their relevance for success in societal life and future careers. At the same time, "soft skills" were also positively related to such indicators as emotional intelligence, but did not depend on individual personal characteristics possessed by students. It has been empirically proven more than 100 years ago that a person's success in life in a profession depends 15% on hard skills (special knowledge and skills) and 85% on so-called "life" skills, which are now called soft skills.

In the book by R.S. Nemov (academician, doctor of psychological sciences), the main factors that influence the indicators of human success in school learning are identified. One of them is the

development of emotional intelligence, as it affects the success directly, as well as the quality of education, and the indicators of independence and self-confidence, overcoming their emotions, especially under stress, responsibility in situations of choice, effective communication, calm response to critical or conflicting circumstances, and so on (Estrada, 2021).

Observations indicate that the progression of emotional intelligence within the educational setting, serving as a determinant of soft skills or achievement, unfolds in three distinct phases:

1. Cognition of the self;
2. Learning how to manage their feelings and emotions;
3. Mastering skills.

During high school, the enhancement of emotional intelligence occurs predominantly during the final two phases. This correlation is attributed to the specific characteristics of this stage of development, necessitating the acquisition of skills related to emotional regulation and mastery of key soft skills.

Emotional intelligence is also referred to as meta-skills, which are considered to be the basic qualities of an individual, as it is on their basis that other necessary skills are formed. Previously, meta-skills were considered to be indicators of a person's character, obtained at birth, but now they are increasingly spoken about a possibility of their formation throughout life. Most often, such indicators as artificial intelligence and empathy are referred to meta-skills. This assertion finds support in research conducted by D. Goleman, indicating the importance of assessing an individual's life success not solely based on their overall level of cognitive development, but also by the features of his rational thinking, which describes an individual's capacity to know himself, the ability to self-regulate his emotions, the ability to express his feelings, to understand the state of other people and be able to respond to them subtly (Wang, 2021, Mukhametkairov, 2024).

The connection of emotional intelligence in elders with other personal and meta-soft competences, regarding the outcomes of educational experiences at school in the volume of individual subjects, is revealed by M. Toscano-Hermoso (2020), in her monograph of 2021. In her study, the author also points out the connection of emotional intelligence with other soft skills and defines emotional intelligence as a contributor to the formation of fundamental skills of high school students. And he also points out that it is the high level of emotional intelligence that helps high school students in the formation of other personal competencies, for example, communication competencies and leadership, and soft skills. All this presents emotional intelligence as the main competence in the general list of modern skills. Nowadays, emotional intelligence is included in the top ten soft skills, both personal and meta-skills.

The analysis of legislative and regulatory documents on the topic of the study demonstrated that the enhancement of soft skills is provided in Kazakhstan, although it is not officially designated in any law, educational standard, or concept of program development.

The educational standards of our Ministry for general secondary schooling emphasize not only the broad enhancement of intellectual faculties but also the obligatory cultivation of competencies and personal traits tailored to age-specific characteristics.

The Education Development Concept of our Republic, designed for the timeframe until 2025, envisages the ongoing evolution of novel educational programs. aimed at creating a new model that will allow children to experience joy and satisfaction from their own knowledge and

understanding of the environment, to feel their importance and need for other people to society as a whole, to be able to receive positive emotions from communication and understanding from other people (Mamin, 2020). This concept indicates that at the level of secondary education, the problematic importance of the development of basic components of emotional intelligence in modern schoolchildren is increasingly noted, especially in high school.

The analysis of the content of educational programs on the issues of emotional intelligence in modern Kazakhstani schools has shown that these issues are considered most often in relation to inclusive education. Simultaneously, the requirements of emotional intelligence are most often noted not to students, but concerning teachers. Since the professional readiness of a modern teacher with a high level of EI development allows for ensuring the realization of a full-fledged process of upbringing and education in the conditions of inclusive education, which is currently considered the most difficult and urgent problem.

An analysis was conducted on the high school subject curricula to ascertain the inclusion of content pertaining to the cultivation of emotional intelligence. This examination revealed certain issues, notably the dearth of methodological literature addressing this specific area.

The empirical investigation utilized a variety of methodologies, which included Hohl's "Assessment of Emotional Intelligence" approach, Nütten's method of inducing motivation through free essay descriptions, content analysis of collected data, factor analysis, and statistical analysis techniques.

The data analysis was performed using the statistical software package Statistica 6.0.

Hall's Emotional Intelligence Assessment methodology is used because it covers four important areas of emotional intelligence at once: emotional awareness, emotion management, self-motivation, and empathy. This comprehensive approach allows for a comprehensive assessment of the level of emotional intelligence in Kazakhstani high school students. It is considered reliable (consists of eight scales), has been used for a long time and is confirmed by the most reliable results. Besides, this methodology is simple in application and in interpretation of results, which makes its methodology convenient for use in secondary school.

Nütten's method of motivational induction on the example of free essays-descriptions is based on the depth of analysis, as they allow with the help of completing the proposed incomplete sentences, to penetrate deeper into the motivational sphere of the schoolchildren's personality, revealing their hidden motives and values. At the same time, the methodology allows taking into account cultural and social contexts influencing the motivation and behavior of Kazakhstani high school students. In addition, the analysis of free descriptions makes it possible to approach each participant individually and identify unique features of their motivation. Limitations are considered to be labor-intensive, as it takes time to conduct and process the results, which usually limits the scale of application of this methodology. However, since the study is conducted by a teacher-psychologist and the study subjects are high school students who have the skills to freely express their thoughts, the use of this method was quite effective. Besides, the group of studied pupils is not large.

Content analysis of the obtained results was used in order to more objectively evaluate the obtained answers from the previous research, using both quantitative and qualitative parameters.

It should be noted that it is usually recommended, to determine the level of development of soft skills in high school students, to combine the methods we use:

– first, the Hall's method is used, as it will give a general idea of the level of emotional intelligence, and is a starting point for subsequent research;

– then free descriptions of motivational induction are used, as they will provide a deeper understanding of individual motives and needs of high school students;

– content analysis provides an objective assessment of changes in motivation and behavior, which makes it possible to monitor the effectiveness of the applied measures of soft skills development.

Factor analysis was conducted by comparing the principal components (factors): 1: Emotional Intelligence (EI), which consists of variables reflecting self-awareness, self-governance and social awareness of schoolchildren; 2: Soft Skills (SS), which includes variables that characterize sociability, adaptability and leadership qualities of schoolchildren. All these indicators are important for high school students. On their basis, a regression model is built, which shows how different aspects of emotional intelligence (EI) affect the development of flexible skills (FS) in high school students.

The pedagogical experiment seeks to achieve the following objectives:

• Evaluate the level of emotional intelligence and its association with personal development competencies among high school students.

• Determine the extent of overall soft skill development.

Experimental Procedure: A total of forty participants, divided into control and experimental groups and aged between 15 and 16, were involved. The experimental group underwent a series of diverse training sessions aimed at enhancing both general soft skills and emotional intelligence specifically.

Discussion and Results

The definition and meaning of emotional intelligence and soft skills of high school students are given. The main soft components are outlined. They include first of all: skills of cognition; skills of interpersonal communication; skills expressed in the ability to adapt; skills on management of stressful situations; skills of prevailing mood. The main components of emotional intelligence of high school students are also designated: self-awareness and self-management; empathy; sociality; personal influence and goal-setting. It is determined that the level of emotional intelligence of high school students is a soft component, it includes the sum of mental, behavioral and sensory skills that can develop a person's own awareness and understanding of feelings and emotions of others. Emotional intelligence helps high school students to be successful in life as well as in their studies.

Results of the empirical study

The findings from the comparative analysis of the data collected during the experiment regarding the emotional intelligence levels of high school students during the control phase are presented in Figure 1.
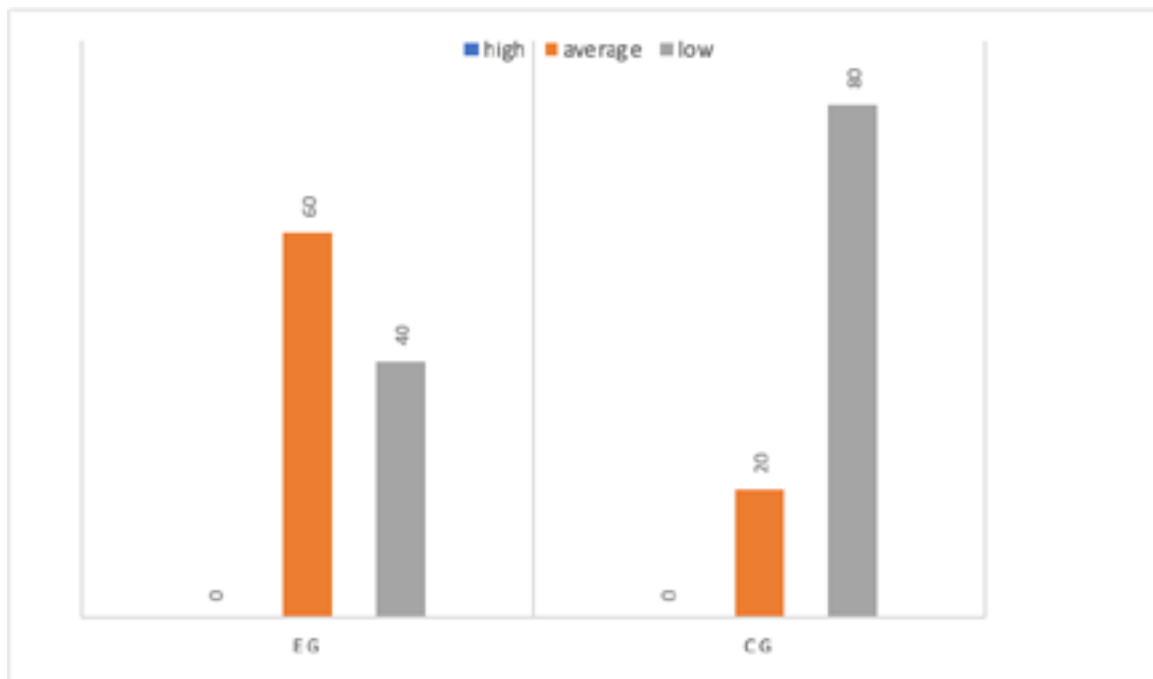
Figure 1. Results of comparative analysis of high school students' level of emotional intelligence (according to N. Hall's method), in %

The results of the study are also confirmed by different characteristics of the level of EI and on the scales of competence are reflected in Figure 2.
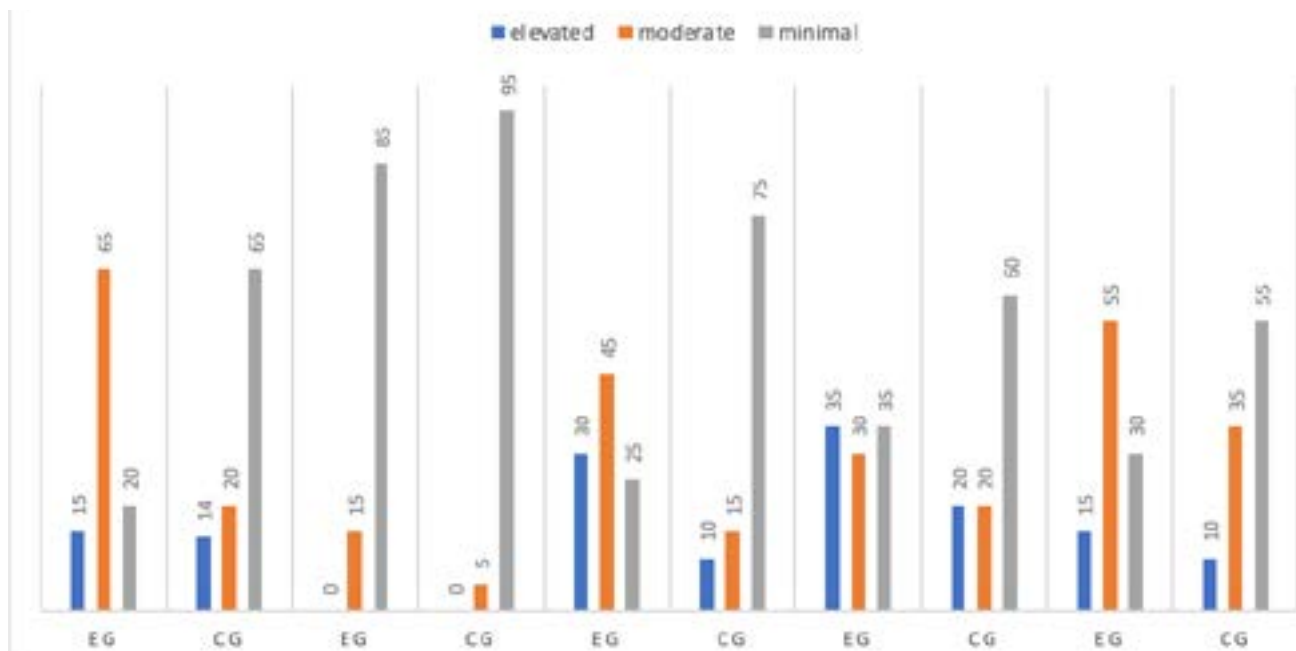

Figure 2. Results of comparative analysis of emotional intelligence competence scales, (on Hall's Emotional Intelligence Assessment) in %

Figure 3 demonstrates the results of the correlation analysis showing the presence of connections of emotional intelligence components and their closeness in high school students as learners in different conditions.
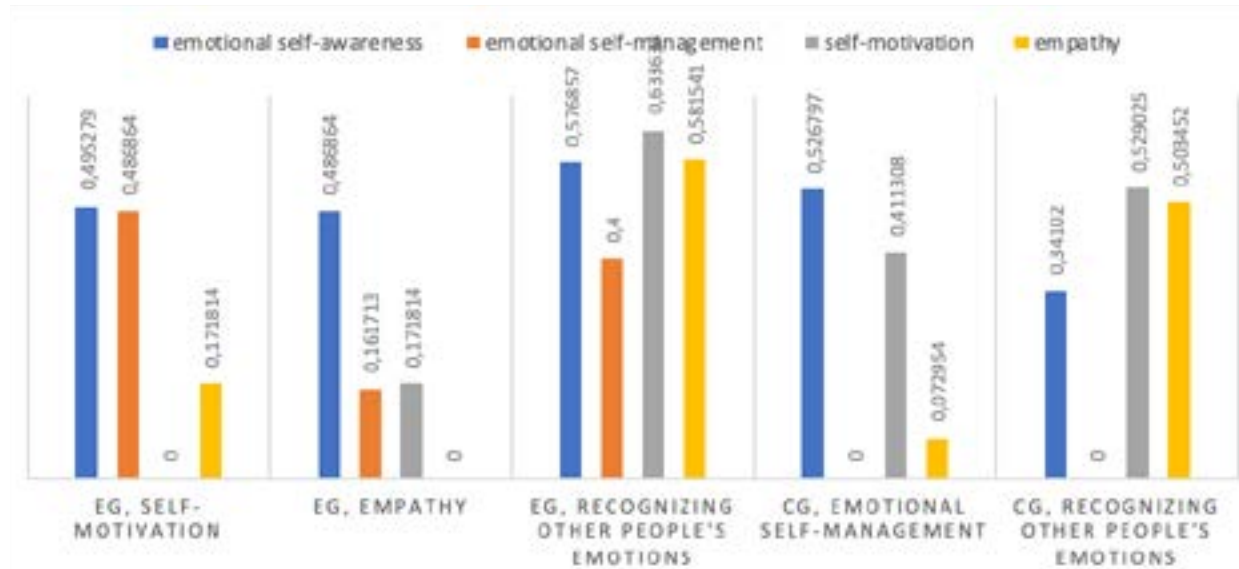

Figure 3. Results of correlation analysis in experimental and control groups, at p<0.05

Figure 4 shows the results of diagnostics by Nütten's method of motivational induction, which includes using free descriptive essays.
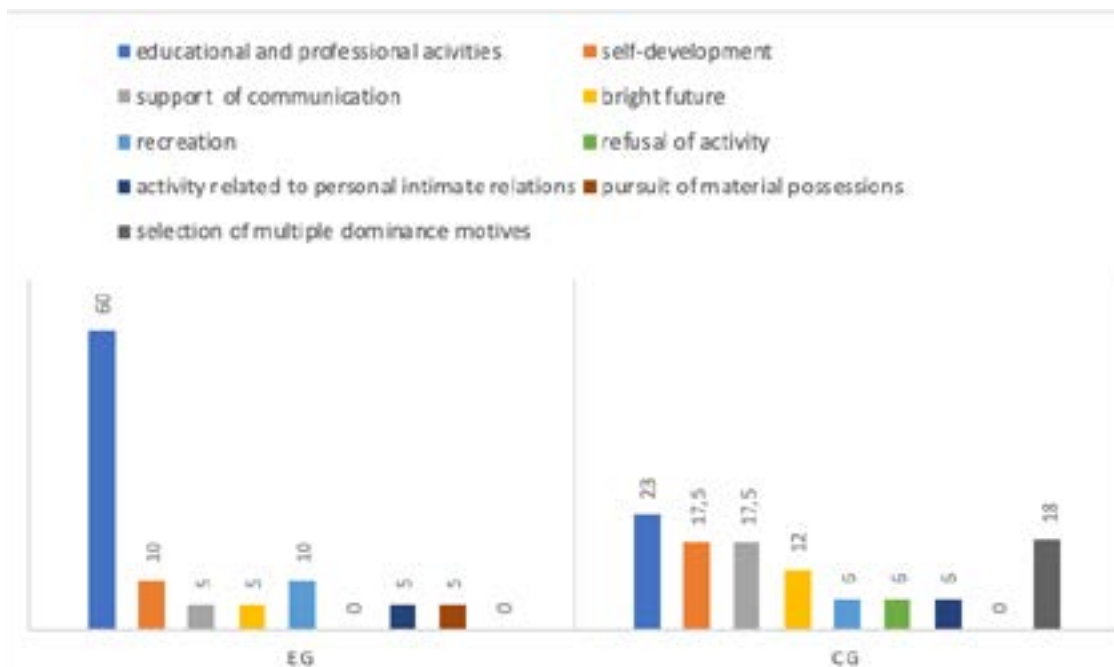

Figure 4. Findings from the examination of predominant motives in the experimental group (EG) and control group (CG) as a percentage.

Factor analysis of emotional intelligence as a factor in the development of soft skills of high school students is based on the assessment of emotional intelligence competencies and analysis of dominant motives established in high school students. A regression model is constructed to show how different aspects of emotional intelligence (EI) affect the development of flexible skills (FS) in high school students. Data from Tables 2 and 4 are used to include both quantitative measures of emotional intelligence and dominant motives. The calculation is carried out according to the formula (1).

$FS=\beta 0+\beta 1\cdot EIawareness+\beta 2\cdot EImanagement+\beta 3\cdot EImotivation+\beta 4\cdot EIempathy+\beta 5\cdot Motiveeducation+\beta 6\cdot Motivegrowth+\epsilon 1$.

Where:

– FSSS – level of soft skills development (dependent variable);

– EIawareness – level of emotional awareness;

– EImotivation – level of self-motivation;

– EIempathy – level of empathy;

– Motiveeducation – motivation for academic and professional activities;

– Motivegrowth – motivation for self-development;

– $\beta 0$ – free term (constant);

– $\beta 1$, $\beta 6$ – regression coefficients reflecting the influence of each independent variable on the dependent one;

– ϵ – random error.

We performed regression analysis on a sample of 40 people (20 in EG and 20 in CG). Using statistical software (SPSS), the following results were obtained, indicated in Table 1.

Table 1

Results of regression analysis

Independent variable	Coefficient (β)	Standard error	t-statistics	p-value
EI_awareness	0.15	0.03	5.00	<0.001
EI_management	0.08	0.02	4.00	<0.001
EI_motivation	0.20	0.04	5.00	<0.001
EI_empathy	0.10	0.03	3.33	0.002
Motive_education	0.25	0.05	5.00	<0.001
Motive_growth	0.12	0.03	4.00	<0.001
Constant (β0)	12.80	0.90	14.22	<0.001

Emotional intelligence is a necessary and important skill for high school students nowadays, as it includes and generalizes different soft components (emotions, their manifestation and management), EI and its components are necessary and important for a modern person for self-development and for ensuring success in all directions of life. For comparison it is

necessary to show also results of many other researches carried out in recent years, in which not sufficient development of emotional intelligence in high school students is noted, while the level of IQ of younger generation steadily grows, that tells us that only knowledge is gained in schoolchildren, and from different sources of modern communication, that does not allow to form emotional intelligence correctly. As the correct development requires live communication, the manifestation of various kinds of emotions and feelings is considered important, and only in those conditions one begins to feel him and others and will be able to learn to manage his emotional state.

The examination of the accumulated data from the comparative assessment of emotional intelligence uncovered that students from different groups showcase diverse degrees of emotional intelligence growth. A notable proportion of high school students within the experimental cohort displayed a moderate level of emotional intelligence expression.

On the contrary, most students in the control group exhibited a diminished level of emotional intelligence. None of the individuals were observed to exhibit a high level of emotional intelligence.

One aspect crucial to the advancement of emotional intelligence among senior students appears to be the techniques and methodologies for nurturing soft skills, enabling them to adjust to various situations and acquire more proficient interaction skills with individuals possessing diverse character traits.

Examination of the outcomes regarding the Emotional Awareness Level indicator disclosed that 15% of students exhibited a heightened level of emotional awareness, while an average level of emotional awareness was identified in 20% of students. The bulk, constituting 65% of high school students, demonstrated a diminished level of emotional awareness.

Analysis of the results on the scale "Level of emotional self-management" has shown that the average level of managing one's emotions has been revealed in 5% of senior students, the low level of self-management has been revealed in 95% of the students.

Examination of the findings concerning the "Level of Self-Motivation" scale indicated that 10% of high school students demonstrated a heightened level of self-motivation, while an average level of self-motivation was observed in 15% of students. The majority, comprising 75% of the students, exhibited a low level of self-motivation.

Examination of the findings regarding the "Level of Empathy" scale revealed that 20% of high school students demonstrated a heightened level of empathy, while an average level of empathy was observed in another 20% of high school students. The majority, comprising 60% of high school students, exhibited a low level of empathy.

Examination of the findings from the "Level of Recognizing Other People's Emotions" scale indicated that 10% of high school students demonstrated a heightened ability to recognize other people's emotions, while an average level of this ability was observed in 35% of high school students. The majority, comprising 55% of high school students, displayed a low level of proficiency in recognizing other people's emotions.

Analysis of correlations using the "Assessment of Emotional Intelligence" method by Hall's approach revealed more evident and distinct associations between emotional intelligence scales among high school students in the experimental group:

– with the component of self-motivation (at r=0.495279);

– with the component of empathy (at r=0,462152);

– with the component of recognizing other people's emotions (at r=0.576857);

2. The self-motivation component exhibits direct correlation:

• with the component of managing one's emotions (correlation coefficient r=0.486864);

• with the component of recognizing other people's emotions (correlation coefficient r=0.633634).

• Additionally, the component of empathy demonstrates direct correlation with the component of recognizing other people's emotions (correlation coefficient r=0.581541).

In the control group, the correlation analysis also showed clearly expressed closeness of correlations between the component scales, but to a lesser extent:

1. the component of emotional awareness is directly correlated with the component of managing one's emotions (at r=0.526797);

2. the component of self-motivation is directly correlated with the component of recognizing other people's emotions (at r=0.529025);

3. the component of empathy is directly correlated with the component of recognizing other people's emotions (at r=0.503452).

Only emotional self-management in CG is not correlated with other components.

The analysis of content analysis indicators utilizing the Nütten approach and free essay descriptions among experimental group high school students disclosed prevalent motivational orientations as outlined below:

– Around 60% exhibited a leaning towards opting for professional and educational endeavors.

– Each of the subsequent motivational orientations represented approximately 10%: a proclivity towards recreational activities and amusement, and a predilection for self-enhancement.

– Approximately 5% exhibited a desire for material possessions, efforts to facilitate communication, engagement in personal intimate relationships, and aspiration for a promising future.

– In contrast, among high school students in the control group, the dominant motives were as follows:

– Approximately 23% were driven by the pursuit of professional and educational endeavors.

– Approximately 17.5% expressed interest in self-development and fostering interpersonal connections.

– Each of the following motivational orientations accounted for approximately 12%: aspiration for a promising future and pursuit of happiness.

– Approximately 6% were characterized by engagement in educational and professional activities, leisure pursuits, reluctance towards certain activities, involvement in personal intimate relationships, yearning for freedom, and desire for a bright future.

All the obtained results confirm the relationship of emotional intelligence with soft skills.

Factor analysis revealed differences in the levels of emotional intelligence and dominance of motives between the experimental group (EG) and the control group (CG):

1. Emotional intelligence: In EG there is a higher percentage of high level of emotional awareness and self-motivation, while in CG the medium and low levels prevail. Significant differences are seen in the level of emotion management and empathy, with a greater number of students in EG having high and medium values, unlike CG where low levels prevail;

2. Dominant motives: In EG the aspiration to educational and professional activity is more pronounced, which reflects high motivation for learning and development. In the CG the motives of self-development and communication support became dominant, which may indicate a lower orientation to academic goals.

The results of factor analysis emphasize the significance of emotional intelligence in the formation of soft skills in high school students and show as the level of emotional intelligence and motivation differ between groups.

Conclusions on the interpretation of the results of the regression model.

Regression coefficients: Emotional awareness ($\beta 1 = 0.15$): A one unit increase in awareness leads to a 0.15 unit increase in flexible skills.

Emotion management ($\beta 2 = 0.08$): Improving emotion management by one unit increases soft skills by 0.08 units.

Self-motivation ($\beta 3 = 0.20$): Increasing self-motivation by one unit improves soft skills by 0.20 units.

Empathy ($\beta 4 = 0.10$): Increasing empathy by one unit improves soft skills by 0.10 units.

Motivation for academic and professional performance ($\beta 5 = 0.25$): A one unit increase in this motive leads to a 0.25 unit increase in soft skills.

Motivation for self-development ($\beta 6 = 0.12$): Increasing this motive by one unit improves soft skills by 0.12 units.

Free term: The constant $\beta 0 = 12.80$ represents the baseline level of soft skills at zero values of all independent variables.

All regression coefficients are significant at the <0.001 $p < 0.001$ level, indicating that the model is statistically significant, expressed by the fact that the investigated aspects of emotional intelligence (EI) do have their influence on the development of soft skills (SS) in high school students.

Conclusion

Through the analysis of literature, we've discovered that the emotional intelligence of high school students exhibits age-related characteristics typical of early adolescence. This is manifested through the development of self-awareness and self-esteem, which are fundamental elements in the growth of their personality. Additionally, this phase is marked by a heightened interest in both oneself and others, leading to a need for self-evaluation and comparison with peers, as well as a deeper comprehension of their own and others' emotional states. This developmental process is not limited to the acquisition of cognitive and emotional skills but also involves the formation and refinement of emotional intelligence and its softer components. In the journey of high school students' personal development, the ability to comprehend and assess their own emotions and those of others, as well as the capacity to influence them and gather pertinent information about their emotional states and the emotions of others, plays a pivotal role. Furthermore, there's an established connection between the emotional intelligence of high school students and the personal and soft meta-subject competencies they acquire through their learning experiences.

The experimental findings confirm the relationship between emotional intelligence and its softer skills. Overall, high school students demonstrate a low level of emotional intelligence, with their softer components showing greater development following additional developmental programs and displaying correlation with each other. Based on these outcomes, the experiment

suggests that emotional intelligence serves as a crucial factor in the cultivation of soft skills. Furthermore, the comprehensive analysis indicates that all components of emotional intelligence among high school students are interconnected and linked to abilities associated with soft skills, including emotional awareness, emotional self-regulation, self-motivation, and empathy. Consequently, it can be concluded that emotional intelligence plays a pivotal role and serves as a significant prerequisite for the development of soft skills.

On these terms, it is proposed to develop emotional intelligence and its soft components in high school students as follows:

– realize the development of their self-awareness (to understand their emotions, and their influence of influence on themselves and others; to analyze them), all this is designed to help them understand themselves and learn to control their emotions;

– to practice one's empathy: for this purpose, one should be able to understand the emotional state of other people, to understand better their feelings and needs, as this approach helps a person to create correct and harmonious relationships;

– to improve and develop communication skills, which also seems to be an important element of soft skills. One should be able to listen attentively, express one's thoughts and feelings clearly and constructively, and ask the right questions in time. As communication skills help high school students to avoid stress, quarrels, conflicts, and base their understanding of other people;

– to learn to manage stress, which has a serious impact on the emotional state of a person and on a person's ability to adapt to stressful situations. It is usually suggested to develop various stress management strategies to maintain emotional stability (meditation, deep breathing, physical activity); to develop and learn, or self-invest in one's personal development as well as professional development.

Contribution of the authors

Fominykh N.Y. – was responsible for collecting and analyzing existing research on the topic of emotional intelligence and its impact on the development of soft skills in high school students. She has compiled an extensive literature review, including key theories and models such as Daniel Goleman's model of emotional intelligence and Howard Gardner's theory of multiple intelligences. Along with this, she developed a methodological basis for the study, defining the main hypotheses, goals, and objectives. She has also developed questionnaires and questionnaires to measure the level of emotional intelligence and soft skills.

Mukhametkairov A.E. – organized and conducted the main experiment within the framework of the study. Coordinated work with the participants (high school students) and monitored compliance with all ethical norms and standards. He was also responsible for the collection and primary processing of data, including conducting interviews and questionnaires.

Kudysheva A.A. – conducted a statistical analysis of the collected data using correlation and regression analysis methods to determine the relationship between the level of emotional intelligence and the development of soft skills. The researcher also interpreted the results and highlighted the key conclusions, based on which recommendations were made on the implementation of emotional intelligence development programs in school practice.

Zhigitbekova B.D. – was responsible for writing and editing the text of the scientific article. Additionally, Zhigitbekova structured the materials prepared by other authors and provided a logical and consistent presentation of the research results.

Matayev B.A. – has developed educational programs and classes aimed at developing emotional intelligence in high school students. Matayev has created special training and interactive tasks that promote the development of self-awareness, self-regulation, empathy, and social skills. Conducted pilot testing of the developed programs in several schools, analyzed the results, and made adjustments based on the data obtained.

References

1. Аймагамбетов, А. (2022) Государственный общеобязательный стандарт дошкольного воспитания и обучения, начального, основного среднего и общего среднего, технического и профессионального, послесреднего образования. Утв. приказом Министра просвещения Республики Казахстан от 3 августа 2022 года № 348. – URL: https://adilet.zan.kz/rus/docs/V2200029031

2. Gillioz, C., Nicolet-dit-Félix, M., Wilhelm, O., & Fiori, M. (2023). Emotional intelligence and emotion information processing: Proof of concept of a test measuring accuracy in discriminating emotions. Frontiers in Psychology, 14, 1-12. https://doi.org/10.3389/fpsyg.2023.1085971

3. Maddocks, J. (2023). Introducing an attitude-based approach to emotional intelligence. Frontiers in Psychology, 13, 1-11. https://doi.org/10.3389/fpsyg.2022.1006411

4. Махметова, Д., & Унгарбаева, Ш. (2023). Психолого-педагогические основы развития гибких навыков в условиях профессионального образования. Вестник Евразийского национального университета имени Л.Н. Гумилева. Серия: Педагогика. Психология. Социология, 1(142), 361–378.

5. Қилыбаев, Т., Құдайбергенов, Н., & Молдагали, Б. (2023). Развитие эмоционального интеллекта ребенка в образовательной среде. Педагогика и психология, 2(55), 185–192.https://doi.org/10.51889/2077-6861.2023.30.2.018

6. Тайболатов, Қ.М., Бурдина, Е.И., & Ерофеева, Р. Ж. (2021). Эмоциональный интеллект обучающихся в контексте зарубежных теорий. Вестник Торайгыров университета. Педагогическая серия, 4, 515–527. https://vestnik-pedagogic.tou.edu.kz/storage/journals/351.pdf

7. Savchuk, B., Pantyuk, T., Dovgij, O., & Vysochan, L. (2021). The problem of the emotional intelligence formation of modern youth through the prism of vasyl stefanyk's creativity. Mountain School of Ukrainian Carpaty, 23, 108-112. https://doi.org/10.15330/MSUC.2021.24.108-112.

8. Trifonova, S. (2020). Mayer and P. Salovey Model of Emotional Intelligence. Diogenes. 28, 1, 111-117. https://doi.org/10.54664/zafw2187.

9. Sonmez, O. F., Kudysheva, A. A., & Mukhametkairov, A. E. (2023). High class students soft skills development technologies. Scientific Journal «Pedagogical Bulletin of Kazakhstan», 4, 33–46. DOI 10.52301/1991-0614-2023-4-33-46 https://pedvestnik.ppu.edu.kz/storage/journals/68.pdf

10. Feraco, T., Sella, E., Meneghetti, C., & Cona, G. (2023). Adapt, Explore, or Keep Going? The Role of Adaptability, Curiosity, and Perseverance in a Network of Study-Related Factors and Scholastic Success. Journal of Intelligence, 11(2), https://doi.org/10.3390/jintelligence11020034.

11. Marle, C., Parmentier, F., Weiss, P., Storme, M., Lubart, T., & Borteyrou, X. (2023). Effects of a New Soft Skills Metacognition Training Program on Self-Efficacy and Adaptive Performance. Behavioral Sciences, 13(3), 202-212. https://doi.org/10.3390/bs13030202.

12. Jurado, M., Pérez-Fuentes, M., Martínez, Á., Martín, A., Márquez, M., & Linares, J. (2021). Emotional intelligence as a mediator in the relationship between academic performance and burnout in high school students. PLoS ONE, 16(6), 1-14. https://doi.org/10.1371/journal.pone.0253552.

13. Heckman J.J., Kautz T. (2012). Hard evidence on soft skills. Labour economics, 4(19), 451–464.

14. Chamorro-Premuzic T. et al. (2010). Soft skills in higher education: Importance and improvement ratings as a function of individual differences and academic performance. Educational Psychology, 2(30), 221–241.

15. Estrada, M., Monferrer, D., Rodriguez, A., & Moliner, M. (2021). Does Emotional Intelligence Influence Academic Performance? The Role of Compassion and Engagement in Education for Sustainable Development. Sustainability, 13(4), 1721; https://doi.org/10.3390/SU13041721.

16. Wang, M., Binning, K., Toro, J., Qin, X., & Zepeda, C. (2021). Skill, Thrill, and Will: The Role of Metacognition, Interest, and Self-Control in Predicting Student Engagement in Mathematics Learning Over Time. Child development. https://doi.org/10.1111/cdev.13531.

17. A. Mukhametkairov, B. Matayev and etc. (2024). Impact of Utilizing the Project Method in the School Educational Environment on the Development of Soft Skills in High School Students. European Journal of Contemporary Education, 1(13), 162-171 DOI: 10.13187/ejced.2024.1.162 https://ejce.cherkasgu.press

18. Toscano-Hermoso, M., Ruiz-Frutos, C., Fagundo-Rivera, J., Gómez-Salgado, J., García-Iglesias, J., & Romero-Martín, M. (2020). Emotional Intelligence and Its Relationship with Emotional Well-Being and Academic Performance: The Vision of High School Students. Children, 7(12), 310. https://doi.org/10.3390/children7120310.

19. Мамин, А. (2021) Национальный проект «Качественное образование - Образованная нация». Утв. постановлением Правительства Республики Казахстан от 12 октября 2021 года № 726. – URL: https://adilet.zan.kz/rus/docs/P2100000726

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Эмоционалды интеллект жоғары сынып оқушыларының икемді дағдыларын дамыту факторы ретінде

Аңдатпа. Мақалада жоғары сынып оқушыларының икемді дағдыларын дамыту құралы ретінде эмоционалды интеллектті анықтаудың теориялық тәсілдері көрсетілген. Эмоционалды интеллектті дамыту қажеттілігі оның дамуға берілетін негізгі икемді компоненттерінің болуын ескере отырып көрсетілген. Эксперимент барысында жоғары сынып оқушыларының эмоционалды интеллектінің төмен деңгейімен оның барлық компоненттері бір-бірімен және икемді дағдыларға (эмоционалды хабардарлық; эмоцияларыңызды басқару; мотивация мен эмпатияның өзі) болатын қабілеттермен тікелей байланысты екендігі анықталды. Регрессиялық модель эмоционалды интеллекттің (EI) жеке көрсеткіштері орта мектеп оқушыларында жұмсақ дағдыларды (SS) дамытуға әсер ететінін көрсетеді.

Эмоционалды интеллект орта мектеп оқушыларының икемді дағдыларын дамытудың факторы және маңызды шарты болып табылады деп айтуға мүмкіндік береді. Жоғары сынып оқушы-

ларында эмоционалды интеллект пен оның икемді компоненттерін өзін-өзі тануды дамытудың маңыздылығын түсіну, эмпатияны қолдану, қарым-қатынас дағдыларын жетілдіру және дамыту, стрессті басқаруды үйрену арқылы дамыту ұсынылады. Ол үшін арнайы ойындарды, цифрлық құралдарды қоса отырып, эмоционалды интеллектті дамыту бойынша тренингтер түрінде оқытуды ұйымдастыру, тәжірибелі сарапшылардың әртүрлі дайын материалдары мен ұсыныстарын пайдалану қажет.

Кілтті сөздер: икемді дағдылар, жоғары сынып оқушылары, мета-дағдылар, сәттілік, корреляция, эмоционалды интеллект, құзыреттілік.

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Эмоциональный интеллект как фактор развития гибких навыков старшеклассников

Аннотация. В условиях модернизации образовательной системы и возрастания требований к личностным и профессиональным качествам обучающихся, эмоциональный интеллект становится ключевым фактором формирования гибких навыков (soft skills) у старшеклассников. Целью данного исследования стало выявление взаимосвязи между уровнем эмоционального интеллекта и развитием гибких компетенций обучающихся старших классов. Научная значимость работы заключается в обосновании роли эмоционального интеллекта как метакомпетенции, способствующей успешному развитию когнитивных, поведенческих и коммуникативных умений, необходимых в учебной и социальной сферах. Практическая значимость определяется возможностью использования полученных результатов для организации программ развития эмоционального интеллекта в школьной среде.

Методология исследования включала системный подход, использовались методики Н. Холла, Нюттена, контент-анализ, факторный и регрессионный анализы с применением пакета Statistica 6.0. Эксперимент охватил 40 старшеклассников, разделённых на контрольную и экспериментальную группы. Результаты показали, что у большинства учащихся наблюдается низкий уровень развития эмоционального интеллекта, однако после целенаправленного воздействия в экспериментальной группе отмечается рост всех компонентов EI: осознанности, управления эмоциями, эмпатии и самомотивации. Регрессионный анализ подтвердил статистически значимое влияние каждого из этих компонентов на уровень развития гибких навыков. Проведённое исследование вносит вклад в теоретико-методологическое обоснование эмоционального интеллекта как инструмента развития soft skills и предоставляет практические рекомендации по включению соответствующих тренингов в школьную программу.

Ключевые слова: гибкие навыки, старшеклассники, мета навыки, успех, корреляция, эмоциональный интеллект, компетенции.

References

1. Aimagambetov, A. Gosudarstvennyj obshcheobyazatel'nyj standart doshkol'nogo vospitaniya i obucheniya, nachal'nogo, osnovnogo srednego i obshchego srednego, tekhnicheskogo i professional'nogo, poslesrednego obrazovaniya. Utv. prikazom Ministra prosveshcheniya Respubliki Kazahstan ot 3 avgusta 2022 goda № 348 [State compulsory standard of pre-school education and training, primary, basic secondary and general secondary, technical and vocational, post-secondary education. Order of the Minister of Education of the Republic of Kazakhstan dated August 3, 2022 No. 348.] – URL: https://adilet.zan.kz/rus/docs/V2200029031

2. Gillioz, C., Nicolet-dit-Félix, M., Wilhelm, O., & Fiori, M. (2023). Emotional intelligence and emotion information processing: Proof of concept of a test measuring accuracy in discriminating emotions. Frontiers in Psychology, 14. P.1-12. https://doi.org/10.3389/fpsyg.2023.1085971.

3. Maddocks, J. (2023). Introducing an attitude-based approach to emotional intelligence. Frontiers in Psychology, 13, 1-11. https://doi.org/10.3389/fpsyg.2022.1006411.

4. Mahmetova, D., Ungarbaeva, SH. (2023). Psihologo-pedagogicheskie osnovy razvitiya gibkih navykov v usloviyah professional'nogo obrazovaniya [Psychological and pedagogical foundations of the development of flexible skills in professional education] // Vestnik Evrazijskogo nacional'nogo universiteta imeni L.N. Gumileva. Seriya: Pedagogika. Psihologiya. Sociologiya, 142(1), 361–378

5. Kilybaev, T., Kudajbergenov, N., Moldagali, B. (2023). Razvitie emocional'nogo intellekta rebenka v obrazovatel'noj srede [Developing a child's emotional intelligence in an educational environment] // Pedagogika i psihologiya, 55(2), 185–192. https://doi.org/10.51889/2077-6861.2023.30.2.018

6. Tajbolatov K.M., Burdina E.I., Erofeeva R.ZH. (2021) Emocional'nyj intellekt obuchayushchihsya v kontekste zarubezhnyh teorij [Emotional intelligence of students in the context of foreign theories] // Vestnik Torajgyrov universiteta. Pedagogicheskaya seriya. 4, 515-527 https://vestnik-pedagogic.tou.edu.kz/storage/journals/351.pdf

7. Savchuk, B., Pantyuk, T., Dovgij, O., & Vysochan, L. (2021). The problem of the emotional intelligence formation of modern youth through the prism of vasyl stefanyk's creativity. Mountain School of Ukrainian Carpaty, 23, 108-112. https://doi.org/10.15330/MSUC.2021.24.108-112.

8. Trifonova, S. (2020). Mayer and P. Salovey Model of Emotional Intelligence. Diogenes, 1(28), 111-117. https://doi.org/10.54664/zafw2187.

9. Sonmez, O. F., Kudysheva, A. A., & Mukhametkairov, A. E. (2023). High class students soft skills development technologies. Pedagogical Bulletin of Kazakhstan, 4, 33–46.

10. Feraco, T., Sella, E., Meneghetti, C., & Cona, G. (2023). Adapt, Explore, or Keep Going? The Role of Adaptability, Curiosity, and Perseverance in a Network of Study-Related Factors and Scholastic Success. Journal of Intelligence, 2(11), https://doi.org/10.3390/jintelligence11020034.

11. Marle, C., Parmentier, F., Weiss, P., Storme, M., Lubart, T., & Borteyrou, X. (2023). Effects of a New Soft Skills Metacognition Training Program on Self-Efficacy and Adaptive Performance. Behavioral Sciences, 3(13), 202-212. https://doi.org/10.3390/bs13030202.

12. Jurado, M., Pérez-Fuentes, M., Martínez, Á., Martín, A., Márquez, M., & Linares, J. (2021). Emotional intelligence as a mediator in the relationship between academic performance and burnout in high school students. PLoS ONE, 16(6), 1-14. https://doi.org/10.1371/journal.pone.0253552.

13. Heckman J.J., Kautz T. (2012). Hard evidence on soft skills. Labour economics, 4(19), 451–464.

14. Chamorro-Premuzic T. et al. (2010). Soft skills in higher education: Importance and improvement ratings as a function of individual differences and academic performance. Educational Psychology, 2(30), 221–241.

15. Estrada, M., Monferrer, D., Rodriguez, A., & Moliner, M. (2021). Does Emotional Intelligence Influence Academic Performance? The Role of Compassion and Engagement in Education for Sustainable Development. Sustainability, 13(4), 1721. https://doi.org/10.3390/SU13041721.

16. Wang, M., Binning, K., Toro, J., Qin, X., & Zepeda, C. (2021). Skill, Thrill, and Will: The Role of Metacognition, Interest, and Self-Control in Predicting Student Engagement in Mathematics Learning Over Time. Child development. https://doi.org/10.1111/cdev.13531.

17. Mukhametkairov A., Matayev B. and etc. (2024). Impact of Utilizing the Project Method in the School Educational Environment on the Development of Soft Skills in High School Students. European Journal of Contemporary Education. 1(13), 162-171 DOI: 10.13187/ejced.2024.1.162 https://ejce.cherkasgu.press

18. Toscano-Hermoso, M., Ruiz-Frutos, C., Fagundo-Rivera, J., Gómez-Salgado, J., García-Iglesias, J., & Romero-Martín, M. (2020). Emotional Intelligence and Its Relationship with Emotional Well-Being and Academic Performance: The Vision of High School Students. Children, 7(12), 310. https://doi.org/10.3390/children7120310.

19. Mamin, A. (2021) Nacional'nyj proekt «Kachestvennoe obrazovanie - Obrazovannaya naciya». Postanovlenie Pravitel'stva Respubliki Kazahstan ot 12 oktyabrya 2021 goda № 726 [National project "Quality Education - Educated Nation". Resolution of the Government of the Republic of Kazakhstan dated October 12, 2021 No. 726] - URL: https://adilet.zan.kz/rus/docs/P2100000726,

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