

Emotional Intelligence of Schoolchildren in the Educational Process

Olha BABIAK¹,
Svitlana SYTNIK²,
Olena ZHAROVSKA³,
Iryna KONDRATIEVA⁴,
Liudmyla SMOKOVA⁵,
Uliana VARNAVA⁶

¹ Mykola Yarmachenko Institute of Special Education and Psychology of the NAES of Ukraine, <https://orcid.org/0000-0001-6337-1202>, olga-babjak@ukr.net

² The state institution "South Ukrainian National Pedagogical University named after K. D. Ushynsky", Ukraine, svetlanasytnik2000@gmail.com, <https://orcid.org/0000-0001-5875-919X>

³ Public Higher Educational Establishment «Vynnytsia Academy Of Continuing Education», Ukraine, movam@ukr.net, <http://orcid.org/0000-0002-4154-1458>

⁴ The State institution "South Ukrainian National Pedagogical University named after K. D. Ushynsky, Ukraine, irasp1975@gmail.com, <https://orcid.org/0000-0003-0360-4072>

⁵ Odessa I.I. Mechnikov National University, Ukraine, liudmyla.smokova@onu.edu.ua, <https://orcid.org/0000-0003-2478-0155>

⁶ Odessa I.I. Mechnikov National University, Ukraine, ulyankk@gmail.com, <https://orcid.org/0000-0003-4043-8050>

Abstract: *This article is based on a questionnaire of a relatively limited number of Ukrainian teachers-practitioners. We proved that emotional intelligence (hereafter – EI) in an educational institution can be sufficiently diagnosed by observation, and without using psychometric methods. We also classified and presented the main components of emotional intelligence, their essence, correlation with other qualities of psyche; gave markers for the definition of EI and markers of their dynamics over time. The article has theoretical nature, which determines the analytical and generalizing approach to its writing. While it has been writing, we had used a sociological survey (to collect data) and a number of theoretical methods: analysis, generalization, statistics (frequency selection, ranking) etc. The main data were obtained by analyzing the thematic literature and questionnaires of primary school teachers with sufficient experience (120 persons). The questionnaire was filled out mainly in electronic form, and sporadically in-person. The result was the systematization, correlation and labeling of the most common qualities of EI. Also, the hypothesis put forward in the article found theoretical confirmation (it is confirmed by the analysis of the experience of primary school teachers). The article is based on an investigation of only one, central, region of Ukraine, so it is representative and needs to expand the scope of research. This fact is a limitation of the study.*

Keywords: *Psychometric measurements; tests; determination of the level and dynamics of development; markers and components.*

How to cite: Babiak, O., Sytnik, S., Zharovska, O., Kondratieva, I., Smokova, L., & Varnava, U. (2023). Emotional Intelligence of Schoolchildren in the Educational Process. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 14(4), 14-29. <https://doi.org/10.18662/brain/14.1/404>

Introduction

Since the 2000s, scientists have debated whether classical tests of EI (such as the Mayer-Salovey-Caruso) are universal and pedagogically applicable to primary school children directly in school. Researchers have shown that the overall effectiveness of such tests is sufficient, but their evaluation on a four-factor scale was low. B. Palmer and others, based on a large sample, identified fundamental limitations of the Mayer-Salovei-Caruso EI test and initiated a discussion on choosing simpler methods for diagnosing EI in preschool and primary school children (Palmer et al., 2005). Another side is with middle school children, i.e. teenagers. Relevant studies of this universal test have proven the reliability of convergent, factor discriminant and prognostic components (Fernández-Berrocal et al., 2018). In addition, in middle school children, these tests allow to identify the feasibility and quality of pedagogical intervention, the connection with other manifestations of higher nervous activity. We can make an intermediate conclusion: for children aged 5-8, simpler tests or pedagogical observation of a trained teacher are more valid. The aim of the article is to analyze and constructively present the opinion of teachers-practitioners who work with EI (identify, form, diagnose), using the simplest, most comprehensive and most efficient method – the pedagogical observation.

A criterion for the analysis of the presented literature was determined by the principles of selection: the list of references presents the latest, thematically most relevant articles and articles with opposite or significantly different views on the subject. Thus, a preliminary review of scientific journals showed that over the past 1-2 years, the relevance of diagnosis and methods of development has increased sharply, even in children with special needs (Garbenis et al., 2020) or and brain damage or pathology (Guerra-Bustamante et al., 2019). This, in turn, has led to a new reinventory and revision of the traditional experience of working with EI in children (Norboevich, 2020). Therefore, we believe that EI is part of the neurophysiological subjective natural nature of an individual; we believe that the article is directly related to the specifics of the journal.

Relevance of research. In the following sections we shall try to analyze the validity and effectiveness of the work of an ordinary teacher without various psychometric tests and indicators. At the beginning of the study, we suggested that the pedagogical observation of an experienced teacher and a primary school pupil will allow to better identify the factor structure and dynamics of EI than individual psychological testing. The latter cannot be performed often, they show individual sections and are

stressful for the primary school children themselves. Instead, observation is constant, flexible, multifaceted, and holistic.

Consequently, the hypothesis of our study is the thesis: teachers can identify and assess the degree and dynamics of EI of primary school children. The teacher can do this without the involvement of a psychologist or complex psychometric techniques, only by observing and linking potential signs of EI with other neurophysiological or social traits and psychological symptom complexes (Kosholap et al., 2021; Prots et al., 2021; Sarancha et al., 2021). This hypothesis arose among Ukrainian methodologists and primary school teachers (which include the authors of the article too). As a result, we do not have a regular opportunity to measure the presence and dynamics of EI by psychometric or laboratory methods. For the direct diagnosis of EI (as the basis of our hypothesis - the validity of pedagogical observation) we also take into account the relationship of heterogeneous, but phenotypically, genetically or morphofunctionally personality traits. For example, a child with a labile psyche (regardless of changes) can be either over-adapted or maladapted, and a child with a controlled flexible psyche almost always shows a high level of EI.

The hypothetical possibility and pedagogical readiness for the initial and current control of EI in the framework of daily school work is the relevance of our study.

The aim of our study is to identify the views of experienced primary school teachers on the possibilities of the method of pedagogical observation to detect and monitor the development of EI. For this purpose, we set three tasks: 1. In the questionnaire to determine the components of EI, their essence and markers of definition through pedagogical observation. 2. Identify the most valid qualities of EI that can be observed as markers of dynamics. 3. We plan to present the results in the form of tables with the appropriate ranking and explications.

Methods. We used a sociological survey based on a questionnaire developed by the authors (it is not presented due to a significant volume), and in processing data we used statistical principles and methods (frequency of use by keywords and phrases, ranking of selected positions, etc.). We also used theoretical methods of analysis, generalization and materialist logic (determination of cause-and-effect relations, clarity of reasoned position, and transition of quantitative to qualitative indicators, etc.

We have surveyed more than 120 Ukrainian teachers with more than five years of experience and created a table of components of EI, explaining their essence and representing the main markers of definition through pedagogical observation.

Approaches to understanding emotional intelligence and its definition in children

Because in recent years the approach to understanding the ontology of the subjects of the educational process has expanded significantly, there are many alternative ways to determine the presence and extent of EI of pupils. However, these studies are conducted and promoted by teachers mainly among adolescents as relatively mature subjects, and also require specific conditions (conducted outside the classroom). This once again confirms the relevance of our work. On the other hand, most of the alternative ways of measuring EI of adolescents under certain procedural age adaptation can be made quite valid for use among pupils of primary school.

The most original method of determining social and emotional intelligence is the method proposed by A. Alonso and a group of his colleagues. This is almost the only method, which is based not on the mental but on the physical aspect. The authors suggested that the presence of early trauma, family conflicts, violence, etc. that cause the destructive phenomenon of rejection of a child for oneself. Because emotions are the closest units to the corporeality of neurophysiology, researchers have suggested that rejection or distortion of the idea of their corporeality indicates a disharmony that prevents the full development of emotional and social intelligence in the early stages (Alonso et al., 2020). This approach seems to us absolutely valid for use in primary classes by the method of observation, because an experienced teacher can easily determine the nature of the child's reflection, self-satisfaction, attitude to own body and its image, positioning oneself in front of others. The design of such study could be completely descriptive and invariantly consist of attitudes towards oneself and one's image.

Consequently, based on D. Goleman's model of EI, for modern teachers one-dimensional (by one parameter) methods of measuring EI are offered, which can be adapted for use in primary classes (Goleman, 1998). For example, Raghavan and his colleagues proposed testing a child's self-esteem with the following factor analysis: self-report - self-description - self-presentation (Raghavan & Panboli, 2018, p. 207). Despite the pilot nature of this method and its experimental application, next tests using by other methods have proven the high validity and reliability of self-oriented methods as simple, natural and new ways for a child to measure his emotional intelligence.

Furthermore, we try to find typical correlations of psychological characteristics of children with different levels of EI, such as EI - attention,

EI - academic successfulness, etc. due to analysis of articles and research papers. Most of these patterns have been identified by rather complex psychometric means, which in practice are difficult to apply to a primary school teacher. Most modern research on EI is aimed at elucidating the academic, social, mobile, and creative traits of adolescents as relatively mature individuals.

In particular, researchers MacCann, Jiang, Brown, Double, Bucich & Minbashian conducted a meta-analysis of the relationship between success and EI of adolescents. Some results were stable, others - contradictory. Example (if the level of variance is not taken into account), the self-analysis of adolescents with high EI showed a willingness to demonstrate the best academic abilities. Such readiness could not be shown by standardized tests, which are more objective (2020, p. 150). However, researchers have made three important conclusions about academic performance and EI: a) success increases with the greater ability of pupils to regulate academic emotions; b) success increases when didactic material and methods, etc. correspond to the emotional and intellectual profile of the pupil (academic content coincides with EI); c) the academic performance of a pupil with high EI increases with a more developed level of social relations in the classroom. Thus, academic performance has been dependent on EI, but in various aspects that are difficult to individualize directly in education.

It is obligatory to mention a group of methods, which are based not on the perception / evaluation of oneself, but on the perception, reaction and emotional evaluation of other objects and / or subjects. Particular interest has the perception and evaluation of objects that have aesthetic and social significance and promote reflection and reception. These are various artefacts: from paintings and music to cartoons and movies. Moreover, already in the first stages of the project, scientists have noticed that primary schoolchildren are the least sensitive to static images, due to age psychology. Interestingly, different types of art and their specifics arouse different interpretations and interests in elementary schoolchildren, and therefore have different diagnostic potential. To illustrate above-mentioned, here are two different experiments that have shown different validity.

In 2018, in Korea an attempt to use the aesthetic and expressive potential of live music to define, shape or at least modify school pupils in live instrumental performance for a long time was made. The basic part was regular listening of live classical instrumental music in real performance for pupils of elementary school. Markers of EI, aggression and anxiety were recorded to avoid one-object quasi-experimental research. Appropriate measurements were made at the beginning and end. The result was quite

unexpected: after 24 weeks of perception of live music, minor changes occurred only in the scale of aggression (reduction), anxiety (reduction and ability to perceive sensory information more calmly), while no changes in EI were observed in basic parameters (Kim & Kim, 2018). Thus, we can draw an important conclusion, which we will face in the analysis of the correlation of EI with other major manifestations of higher nervous activity. This conclusion is as follows: the increase in aesthetic sensitivity, the presence / absence of musical abilities of perception or performance is in no way related to EI, which is a separate and stable substructure of personality in early school age.

A year later, scientists from another continent developed a new interpretation test for primary school children, but dynamic artefacts became the object of perception and interpretation - cartoons, movies, clips. We will not go into the specifics of the diagnosis (read in the authors' article (Sastre et al., 2019), but the effectiveness, validity and multifaceted results exceeded all expectations. According to the result with different percentages, all pupils were divided into three groups: naive, very interpretive and sensitive. This test, after analytical processing, has proven to be a universal tool for identifying the gender specificity of EI (sensitivity), high EI and its social manifestations (openness, empathy, constructive behaviour, high EI). It is also valid for identifying social and behavioural problems (naive interpreters), pupils with mental disorders (naive), etc. The use of dynamic affective artefacts proved to be the most revealing tool, and the project itself was named EMOCINE (Sastre et al., 2019).

Therefore, in our case, the study of traditional models of detection and diagnosis of EI, there are no special difficulties. This is due to the fact that, first, EI is at the intersection of cognitive and emotional abilities. They help to effectively adapt and socialize in the world. Secondly, and most importantly, the history of the study of EI is only few decades. Even some of the pioneers (D. Caruso, R. Salovey) and others once predicted: the number of models-definitions and methods of assessing the diagnosis of EI at this stage is quite limited and concentrated around the main categories - abilities (emotions + cognition) (Mayer et al., 2004).

Another popular model is the mixed one, which at the ontological level is a constructive conglomeration of mental and personal qualities that are individual to each. Recently, models that can diagnose only one aspect of EI have also become popular.

Nevertheless of the choice of model, the main pedagogical issue is to identify and measure the quality of EI of a pupil. D. Goleman made a great contribution to the pedagogical and psychological measurement of the level

of EI. Based on his observations, he suggested that traditional comprehensive school assessment tests (SATs), diagnosis of the level of desires while professional orientation and detection of high IQ level don't guarantee successful professional and personal life (Goleman, 1995).

This conclusion was largely revolutionary and led to the recognition that the natural ability to perceive, to control and to use emotions, etc. is much more important than the partial rational or competency properties of an individual. D. Goleman was one of the first to give a simple and comprehensive definition of EI, which can be the basis for the development of observational diagnostics of EI among elementary schoolchildren. The scientist argues that EI is "such personal abilities as self-motivation, resistance to stress and frustration, control over outbursts of affect and the ability to refuse pleasure; self-regulation of mood and the ability not to allow experiences to dominate the processes of thinking, empathy and hope" (Goleman, 1998, p. 86). As can be seen from the definition, the external manifestations of EI can be easily observed and qualitatively qualified by an experienced teacher, based on the parameters of adequacy, stability, a certain length of time and appropriate self-control of the teacher.

Inside the framework of a mixed model of EI the most valid is method of measurement proposed by Bar-On (2000). The scientist to some extent contrasted EI with rational on the basis of neurotic disorders (rationalization is one of the mechanisms of anxiety). The scientist argued that the basis of EI is external to the world abilities, mostly non-cognitive, which are differentiated into specific skills. The psychologist identified 5 general personal competencies, which are based on a constructive and consistent optimistic attitude to one's own natural "Ego". We consider it expedient to summarize them briefly: perception and knowledge of one's own personality; need and skills of interpersonal communication; need and ability for social adaptation; the ability to control emotions (especially in their extreme manifestation - impulsivity, affect, stress, etc.), as well as given by nature the ability to perceive most life events in a positive light (feelings of happiness is dominated). It seems to us that this classification is evolving to reach one of the basic needs - the ability to choose, organize or imagine a safe world around.

The tests proposed by D. Goleman and their rating scale for determining EI were based on a quick and effective optimal solution of predicted life situations, which was based not so much on decision-making but response. Such a simple system can be easily transformed to observe the solution of primary pupils' educational personal and social problems. An analysis of this approach by researchers of the following generations

revealed that the basic and elementary components of a quick and easy method of assessing EI are based on emotional control, self-esteem and compassion (Dewis, 2018).

Consequently, generally accepted tests show a significant age orientation. If in primary school they do not show correlations of EI with other hidden or overt manifestations of consciousness, then in adolescence and high school pupils can be observed level of awareness of their EI and predisposition to depression. On the other hand, children's lability don't allow to do it. These processes are still poorly understood by primary schoolchildren. Thus, A. Lombas and others have proven that such subrating scales of EI as awareness of correction suggests on high level of own EI that can be found in the basic of own stress (Lombas et al., 2014). We can assume that in the primary school age the factor of excessive emotional attention to oneself can be regarded as relatively pathological.

Recently, there have been attempts experimentally to prove the link between EI and creativity in primary school children. Interestingly, the experiment showed a gender correlation, but no association was found between EI and creativity. That is, creativity is more related to fantasy, intuition, and imagery, while the manifestation of EI is connected with pragmatism and objectivity (Salavera et al., 2017).

The previous experiment involved Spanish pupils. About 10 years ago in the UK, it was attempted to figure out the activity of EI and academic achievement. The experimenters used a cross-sectional survey by Rice. The results show that EI and social performance currently have a strong impact on academic ability. However, different components of EI have different implications for academic success: the main predictors were low impulsivity and high motivation associated with social adaptability (Vidal et al., 2012). An analysis of scientific publications of 1990s tried to substantiate the idea that EI is the same autonomous entity as the traditional concepts of analytical and logical intelligence.

However, present-day researches have shown that the deep fusion of an individual with globalization, socio-economic and spiritual (cultural, postmodern, and therefore undefined) changes in society have changed the emotional and behavioural nature of human. Scientific papers demonstrated that EI became a natural continuation of the development of human ontogenesis. Now it seems strange to contrast people with the presence or absence of such intelligence; it is incorrect to analyze it autonomously, introduce special psychological tests or involve psychologists to detect it.

Identification of EI and its correlation through the teacher pedagogical observation

There is no doubt that the modern understanding of human psychology should be minimally associated with external stimuli and motives. We do not miss the idea that the presence of the development and application of EI is determined only by external factors. Therefore, among the many definitions, we are most impressed by the construction of EI of Mayer and Salovey. In the following short discourse, we will try to extrapolate the components they offer to the primary school age in order to further realize the main purpose of our article. Thus, the interpretation of EI by Mayer and Salovey, taking into account the leading Ukrainian educators, including the authors of this study (in the form of a semi-open questionnaire), reveals the following main practical correlations.

The need and ability to manage emotions. This pattern represents the interaction of thinking and emotions. This demonstrates the integrity, synergy of a healthy child's psyche, which when choosing behaviour, successful decision-making tries to do holistically without even understanding it.

Awareness and response to heterogeneous emotions. This aspect means that a child perceives all channels of information and its processing, including irrational, intuitive, emotional, etc., as equal and natural. In addition, such pupils feel the authenticity / non-authenticity of their own or others' emotions, the nature of their origin, the adequacy of expression in words and gestures, and so on.

Feeling and understanding of emotions – is the use of emotions in practice.

Finally, we consider the most important ability to assess and accurately express emotions of ones and other people. These emotions can be caused by real external or internal mental processes, but as a rule, for a person is not particularly important in the intra- or extroverted nature of the origin of events.

The authors of this article, who analyzed their own experience, scientific and methodological literature, have opinion to consider separately the most important correlation: "dynamics, flexibility of EI - the speed of society" fully meet the homogeneous qualities of EI. In addition, we propose to replace the concept of EI as a mechanism of external adaptation onto the internal immanent nature. Self-realization, adaptation, the desire for knowledge are completely congruent with those systemic changes that determine the nature of modern society. Of course, it is not for everyone. As before, there is now a proportional quality of the ratio of opportunities and

those who can / cannot finish them, i.e. the correlation of quality and quantity.

In this context, two opposing definitions of EI are very interesting for our study. You may not find them alone, but we've summarized them based on an analysis of many sources. The definitions concerning EI as an externally oriented mechanism of survival, adaptation and socialization were ancient and the first. For example, R. Bar-On almost 40 years ago believed that EI is a set of abilities of competencies to provide solutions for external problems of situations of aspects of survival (Bar-On, 1988). However, it is worth acknowledging that even then the scientist recognized: externally oriented potential of EI (adaptive abilities, communication skills, self-presentation skills, ability to overcome difficulties) corresponds to internal qualities: self-confidence, social responsibility, emotional flexibility, self-control, optimism and more.

All abovementioned have very general considerations. In the past, it was believed that a natural clear contrast between reason and emotion existed in many countries under Soviet Union influence. However, pupils with high EI successfully use emotions in solving practical problems. The decisive here is not so much objectivity but the naturalness and adequacy of how they feel in a particular situation.

We used the above international experience and the experience of Ukrainian teachers (including the modest experience of the authors of these lines) and presented some useful generalizations related to the purpose of the work (see Table 1).

Table 1. The components of emotional intelligence, their essence and markers of definition due to pedagogical observation

The component of EI	The essence of the EI component (according the dominant definition)	How is manifested by observation or correlation with other qualities
Awareness of emotions	The ability to be aware of one's own and others' emotions, to understand their meaning and the need behind them	It is manifested by a quick and adequate reaction to other people's emotions, quick switching and lability of one's own; adequate actions as reactions to others or their own emotions.
Assertiveness (by S. Covey - Win-Win)	Ability to adequately, in accordance with the internal	It is manifested by the absence of self-conflicting

situation)	needs, to express thoughts, emotions and intentions, to defend them, but not to violate the rights of others.	emotions (anger, aggression, resentment, etc.) and the ability to gently, diplomatically and naturally express own needs in order to implement them in society
Self-esteem	The ability to recognize and calmly relate to ones positive qualities and shortcomings.	It is expressed in adequate or slightly inflated self-esteem and the absence of internal conflicts due to the diversity of qualities.
Independence	The ability to be confident in own intentions, views, beliefs.	It is manifested, first of all, in emotional independence from habits, temptations and other people.
Flexibility	The ability to naturally without affectation to change the role and manner of behaviour, way of thinking, emotions, etc.	It is manifested in such lability, which has not a selfish, but a constructive and socially beneficial nature. A pupil does not conflict with reality, but flexibly interacts with it.
Non-impulsiveness	The ability no respond to instinctively significant stimuli and postpone their satisfaction until adequate comprehension and evaluation	It is manifested in the relative strength of will (as for a primary schoolchildren) and the choice of long-term strategic success instead of short and fast.
Reality assessment	The ability to zoom their feelings, thoughts, dreams as close as possible to the laws of reality (first of all social).	It is manifested in the absence of excessive dreaminess, magic of thinking, expression of unrealistic conclusions, proposals.
Empathy	The ability to empathize	It turns out that the emotions and states of others are important to a pupil and he responds to

		them with his emotions and behaviour.
Optimism	Possessing end-to-end quality to give all events of the external and internal world a positive connotation.	It is observed as faith in oneself and own strength to solve or experience different situations in a positive way. Also, such a pupil does not allow destructive thoughts or attitudes.
Happiness	A person's higher ability to accept oneself and the world around as a beautiful and favourable environment.	It is manifested in inspiration, joy and high spirits here and now, as well as love for oneself and others.

Source: Author's own conception

Surveys of teachers-practitioners to observe the dynamics of EI of primary schoolchildren for some time the most valid were the qualities that can be observed and recorded in a short time or artificially created educational conditions: cognitive openness, inner freedom, stress, spontaneity, self-esteem. Dynamics markers and averaged (invariant) explanations are presented in the next section (conclusions) in table 2 in order to avoid epistemological recurrences.

It should be noted that the data summarized as a result of the analysis of the questionnaires (manifestation, components, dynamics of EI development) have become so noticeable even in natural observations that politics, culture and education must respond. For example, last year's research in Eastern Europe (Russia) showed that over the past few years, EI as an internal correlate of rapidly evolving social reality has risen sharply among pupils. This pushed to the background traditional methods and ways of teaching, instead of performance, dramatization, play, improvisation, self-presentation, design has become very popular and effective (Suleyeva, 2021). It shows that EI in comparison with the rational component is becoming increasingly important in the learning and self-realization of a child. In this regard, in Russia, Ukraine and other republics of Eastern Europe there is a sharp problem of developing innovative programs for the new school. All programs should take into account the relationship of rational emotional and intuitive in the cognitive activity of a child.

Conclusions

We formulate the first general conclusion as follows: due to the growth of multidisciplinary and psychological approaches, the concept of "components of emotional intelligence" as a group of natural qualities that cannot be fully listed due to functional intersection with other manifestations of central nervous system. For the same reasons, there have been alternative methods of diagnosing EI in recent years.

We define the most important correlation as the dynamic connection of EI with society ("dynamics and flexibility of EI – is the speed of development of society") absolutely correspond to the homogeneous qualities of EI. In addition, we propose to replace the concept of EI as a mechanism of external adaptation to the internal immanent nature. Self-realization, adaptation, the desire for knowledge are completely congruent with those systemic changes that determine the nature of modern society

The following correlations were most often marked during pedagogical observation: the need and ability to manage emotions; awareness of emotions and response to heterogeneous emotions; feeling and understanding of emotions; ability to assess and accurately express emotions. The components of EI, their essence and markers of definition are given in more detail in table. 1.

Below, in table. 2, we present the components of EI that are easiest, simplest and most validly diagnosed by teachers:

Table 2. EI components and their main markers

Quality	Marker
Cognitive openness	The teacher can easily observe the dynamics of this quality due to the emergence of new social roles in pupils, and increasingly mature. Accordingly, the activities are becoming more complicated, especially aimed at self-realization and gaining experience.
Inner freedom	This dynamic quality is manifested in the fact that pupil is easier, simpler and more efficient to make the right choice, without being hampered by limiting factors: a sense of responsibility, collective cooperation and more. The schoolchild is increasingly inclined to a more flexible education system, and the effectiveness of his educational activities is growing. He acts freely, easily and creatively in accordance with his intention, which he is largely aware of.
Stress resistance	The teacher can observe the growth of this quality by increasing the appropriate lability of emotions and their stability in situations

of uncertainty, stress and so on. At the same time, communication with new people or pupils who do not have sufficient liability, causes high empathy in the owners of high EI as a manifestation of emotional culture.

Spontaneity	This feature can be observed in the development of reflection as a natural manifestation of the maturity of the subject. Reflexivity with development becomes more and more multi-vector: from the awareness of their own mental processes - to complex social roles. But owner of EI is always has a natural introspection that allows to quickly and spontaneously perform actions and deeds.
Self-assessment	It is the main marker of the development of the growth of adequacy, and positive coloration. The teacher has many markers for observing such dynamics: from academic success to effective communication and leadership.

Source: Author's own conception

Therefore, we point out that at the theoretical level, the hypothesis, if not proven, is at least justified, as personal data on a limited group of respondents confirm its practical validity.

Research limitations. It should be noted that the surveyed teachers represented only one region of the country, so the article is more demonstrative than the final factual nature and requires territorial expansion.

Acknowledgment

The authors sincerely thank the teachers who took part in the survey, and also report that the study is completely authentic and is based on numerical indicators. To confirm this, we inform that the sociological part of the work was performed by AUTHOR 1, statistical - AUTHOR 2. The analysis of international literature on several aspects was performed by AUTHOR 3 and AUTHOR 6, and the main generalizing and concluding work was done by AUTHOR 4, and the chief editor became AUTHOR 5.

References

- Alonso, A., D., León-del-Barco, B., Mendo-Lázaro, S., & Iglesias Gallego, D. (2020). Examining Body Satisfaction and Emotional–Social Intelligence among School Children: Educational Implications. *International journal of environmental research and public health*, 17(6), 2120.
<https://doi.org/10.3390/ijerph17062120>
- Bar-On, R. (1988). *The development of a concept of psychological well-being* [Unpublished doctoral dissertation]. Rhodes University.

- Bar-On, R. (2000). Emotional and social intelligence: insights from the Emotional Quotient Inventory (EQ-i). In R. Bar-On & J.D.A. Parker (eds.), *Handbook of emotional intelligence*. Jossey-Bass.
- Dewis, P. (2018). *Children's Public health. Early Childhood Studies: A Student's Guide*. Sage.
- Fernández-Berrocal, P., Ruiz-Aranda, D., Salguero, J. M., Palomera, R., & Extremera, N. (2018). The Relationship of Botín Foundation's Emotional Intelligence Test (TIEFBA) with Personal and Scholar Adjustment of Spanish Adolescents. *Revista de Psicodidáctica (English ed.)*, 23(1), 1-8.
<https://doi.org/10.1016/j.psicoe.2017.07.005>
- Garbenis, S., Geležinienė, R., & Šiaučiulytė, G. (2020). Development of emotional intelligence in students with special educational needs. *Social welfare: interdisciplinary approach*, 10(1), 106-120.
<https://epublications.vu.lt/object/elaba:78424493/>
- Goleman, D. (1998). *Working with Emotional Intelligence*. Bantam Books.
- Goleman, D. (1995). *Emotional Intelligence*. Bantam Books.
- Guerra-Bustamante, J., León-del-Barco, B., Yuste-Tosina, R., López-Ramos, V. M., & Mendo-Lázaro, S. (2019). Emotional intelligence and psychological well-being in adolescents. *International journal of environmental research and public health*, 16(10), 1720. <https://www.mdpi.com/1660-4601/16/10/1720>
- Kim, H. S., & Kim, H. S. (2018). Effect of a musical instrument performance program on emotional intelligence, anxiety, and aggression in Korean elementary school children. *Psychology of Music*, 46(3), 440-453.
<https://doi.org/10.1177/0305735617729028>
- Kosholap, A., Maksymchuk, B., Branitska, T., Martynets, L., Boichenko, A., Stoliarenko, O., Matsuk, L., Surovov, O., Stoliarenko, O., & Maksymchuk, I. (2021). Neuropsychological Bases of Self-Improvement of Own Physical Health of Future Teachers in the Course of University Education. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(3), 171-190.
<https://doi.org/10.18662/brain/12.3/226>
- Lombas, A. S., Martín-Albo, J., Valdivia-Salas, S., & Jiménez, T. I. (2014). The relationship between perceived emotional intelligence and depressive symptomatology: The mediating role of perceived stress. *Journal of Adolescence*, 37(7), 1069-1076.
<https://doi.org/10.1016/j.adolescence.2014.07.016>
- MacCann, C., Jiang, Y., Brown, L. E. R., Double, K. S., Bucich, M., & Minbashian, A. (2020). Emotional intelligence predicts academic performance: A meta-analysis. *Psychological Bulletin*, 146(2), 150–186.
<https://doi.org/10.1037/bul0000219>
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional intelligence: Theory, findings, and implications. *Psychological Inquiry*, 15, 197-215.

- Norboevich, T. B. (2020). Analysis of psychological theory of emotional intelligence. *European Journal of Research and Reflection in Educational Sciences*, 8(3), 99-104. <http://www.idpublications.org/wp-content/uploads/2020/03/Full-Paper-ANALYSIS-OF-PSYCHOLOGICAL-THEORY-OF-EMOTIONAL-INTELLIGENCE.pdf>
- Palmer, B. R., Gignac, G., Manocha, R., & Stough, C. (2005). A psychometric evaluation of the Mayer–Salovey–Caruso emotional intelligence test version 2.0. *Intelligence*, 33(3), 285-305. <https://doi.org/10.1016/j.intell.2004.11.003>
- Prots, R., Yakovliv, V., Medynskiy, S., Kharchenko, R., Hryb, T., Klymenchenko, T., Ihnatenko, S., Buzhyna, I., & Maksymchuk, B. (2021). Psychophysical Training of Young People for Homeland Defence Using means of Physical Culture and Sports. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(3), 149-171. <https://doi.org/10.18662/brain/12.3/225>
- Raghavan, N., & Panboli, S. (2018). Measuring Emotional Intelligence of School Children – A Pilot Study (January 1, 2018). *IMPACT: International Journal of Research in Humanities, Arts and Literature*, Vol. 6(1), 207-218.
- Salavera, C., Usán, P., Chaverri, I., Gracia, N., Aure, P., & Delpueyo, M. (2017). Emotional intelligence and creativity in first-and second-year primary school children. *Procedia-Social and Behavioral Sciences*, 237, 1179-1183. <https://doi.org/10.1016/j.sbspro.2017.02.176>
- Sarancha, I., Maksymchuk, B., Gordiichuk, G., Berbets, T., Berbets, V., Chepurna, L., Golub, V., Chernichenko, L., Behas, L., Roienko, S., Bezliudna, N., Rasskazova, O., & Maksymchuk, I. (2021). Neuroscientific Principles in Labour Adaptation of People with Musculoskeletal Disorders. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 12(4), 206-223. <https://doi.org/10.18662/brain/12.4/245>
- Sastre, S., Artola, T., & Alvarado, J. M. (2019). Emotional intelligence in elementary school children. EMOCINE, a novel assessment test based on the interpretation of cinema scenes. *Frontiers in psychology*, 10, 1882. <https://doi.org/10.3389/fpsyg.2019.01882>
- Suleyeva, K., Tovma, N., & Zakirova, O. (2021). Developing emotional intelligence in elementary school children in Russia: verbal and non-verbal communication. *Education 3-13*, 1-12. <https://doi.org/10.1080/03004279.2021.1934060>
- Vidal Rodeiro, C. L., Emery, J. L., & Bell, J. F. (2012). Emotional intelligence and academic attainment of British secondary school children: a cross-sectional survey. *Educational Studies*, 38(5), 521-539. <https://doi.org/10.1080/03055698.2011.643115>