

THE EXPRESSION OF SOCIO-EMOTIONAL COMPETENCE AMONG YOUNGER LITHUANIAN ADOLESCENTS AS THE PRECONDITION FOR THEIR CREATIVITY

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Abstract. Socio-emotional education is sometimes referred to as the missing part that links academic knowledge to success in school, family, community, workplace, and life. Emotion intelligence is basically a construct that has gained rather great interest nowadays, especially its influence on interpersonal relationships by contributing to optimal social functioning. Recent events both in the country and in the world show how dangerous it is when children do not acquire a solid moral foundation in acquiring knowledge. Meanwhile, socio-emotional education linked to academic teaching helps to solve this issue. Recently, there has been more and more discussions about socio-emotional education and its positive impact on children's psychological health. Socio-emotional abilities (so-called "emotional intelligence", "social intelligence") are the abilities to work together with others, to learn productively, to play the most important roles in the family, community, workplace. Success not only in school but also in later life phases accompanies those students who: a) realistically evaluates oneself and one's possibilities (self-awareness); b) properly manages their feelings and controls their behavior (self-control); c) accurately interprets the signs of the social environment (social awareness); d) effectively resolves interpersonal conflicts (communication skills); e) makes good decisions in the face of day-to-day difficulties (responsible decision making). Therefore, this paper discusses on how to identify the knowledge and skills of students in socio-emotional education and at the same time to identify certain areas where some gaps still exist.

Keywords: communication competence, creativity, gender differences, grade differences, socialization, socio-emotional competence, socio-emotional education, younger adolescents.

Introduction

We all know that socialization as a process becomes of a high importance starting with the early childhood and continuing to adolescence. Generally, this process might be understood as a transitional stage, during which youngsters not only experience physical, cognitive and emotional changes, but also changes on the levels of social expectations and behavioural norms (Trigueros et al., 2020). Over the last two decades, the phenomenon of

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social-emotional competence has received increasing attention both from the public and the scientific community. Sometimes better known as social and emotional intelligence, this phenomenon refers to how individuals act in social situations and deal with intrapersonal or interpersonal emotional information (Brasseur et al., 2013). It is generally agreed among the researchers that healthy development of social-emotional competence at a young age creates a strong foundation for the academic success (Rakap et al., 2018). However, children and adolescents who have socio-emotional competence are not just successful in classes – they reach a success in life as well. Putting this in other words, socio-emotional competence in early childhood and throughout the further stages of growth is essential for mainly the positive life outcomes (Blair et al., 2018). Various research show that social and emotional development contributes to development of other domains as well, such as cognitive, physical, and communication. Promoting such competences can make a student to become competent and resilient person, who can overcome crisis even in more simple and much creative ways, and adversities happening in a society (Ahmed et al., 2020; Suratno et al., 2019). Therefore, the growth of social-emotional competence has historically been a central goal of school education.

Besides, a common understanding of socio-emotional competence exists, while sometimes revealing even the inconsistency in the definition by the various terminologies used, such as *social and emotional intelligence* (Salovey & Mayer, 1990), *emotional literacy* (Park et al., 2021) or *social and emotional competence* (Elias et al., 1997). However, in this paper authors decided to rely on the definition proposed by Denham (2006), saying that socio-emotional competence is basically a child's ability to behave appropriately by controlling adequately emotions. Thus, socio-emotional competence is the capacity to interact with others, control cognitive processes, regulate emotions and behavior, and approach difficulties in daily routine having rather creative attitude. Such abilities assure that children will be able to manage behaviors, actions, and emotions based on daily social tasks or other challenges. Those who may handle such tasks are considered as both socially and emotionally skilled (Ahmed et al., 2020).

On the other hand, along with increasing attention to the socio-emotional competence, researchers have developed a variety of different measures suitable for assessing this phenomenon (Humphrey et al., 2011). Academicians (Neale et al., 2011) proposed a measure called the Limbic Performance Indicator (LPI) which provides a strong framework for the assessment of both the social and emotional dimensions. It is a comprehensive scale that deals with the most critical aspects of socio-emotional competence as discussed in most leading theoretical models (e.g., Salovey & Mayer, 1990). The measure of the LPI (Neale et al., 2011) is based on the theory that socio-emotional competence integrates two separate but rather interrelated components of developmental and behavioral processes. The scale is comprised of 17 dimensions: 1) an ability to meet basic emotional needs (such as need for the security, autonomy and control, privacy and reflection, etc.); 2) ability to live according to personal values; 3) self-esteem (ability to unconditionally accept and evaluate one's personality); 4) respect for others (ability to unconditionally accept and value the personalities of others); 5) emotional self-perception (ability to analyze and perceive one's feelings and emotions); 6) emotional perception of others (ability to analyze and perceive the feelings

and emotions of others); 7) ability to manage stress; 8) positivity (ability to remain both optimistic and realistic); 9) balance (ability to allocate resources for the different areas of life); 10) ability to manage change; 11) authenticity (ability to remain yourself in different social situations); 12) active reflection (ability to learn from own experiences); 13) trust (ability to keep the trust in others); 14) ability to manage conflicts; 15) openness (ability to express one's thoughts and feelings in an open manner); 16) ability to collaborate with others; 17) support (ability to provide others with help and support). This scale is designed to meet the time challenges and intends to assist both educators and academicians in assessing the level of socio-emotional competence and to subsequently identify those areas that need for an improvement (Neale et al., 2011).

Therefore, following **problematic questions** were identified in this research: i) what are the most expressed socio-emotional competence elements among younger adolescents in the frame of selected sample and how these elements manifest based on different gender?; ii) what are the most expressed socio-emotional competence elements among younger adolescents in the frame of selected sample and how these elements manifest based on different grades?; iii) what is the role of socio-emotional competence while contextualizing the meaning of creativity?

The scope of the research – the expression of adolescents' socio-emotional competence based on different gender and grades in schools and the context of creativity.

The aim of this study is to examine the expression of socio-emotional competence among younger adolescents as the precondition of their creativity.

1. Theoretical considerations of socio-emotional competence and creativity expressions

Many preventive school programs – in regards of developing socio-emotional competence for children – mainly develop five areas: i) self-awareness skills; ii) self-management skills that deal with the ability to regulate one's emotions and behaviors; iii) social awareness skills that help to develop the ability to see things from the perspective of people from different cultures and backgrounds; iv) relationship skills, and v) skills in responsible decision-making (CASEL, 2022; Collaborative for Academic, Social, and Emotional Learning, 2012). Therefore, emotions can facilitate children's academic strive, commitment, and the success, as the relationships and emotional processes influence how and what we learn. Teachers are the main emotional leaders of their students, and promotion of the emotional balance while being in the groups is their ability to recognize, understand, and manage emotions (Cristóvão et al., 2020).

Following Mayesky (2010), and Goleman (2020) findings on creativity and socio-emotional intelligence, creative approach basically engage children both cognitively, language-wise, socially, emotionally, and physically (Mayesky, 2010; Mills, 2014). According to Reggio Emilia learning philosophy, every child has hundred ways to express him/herself (Malaguzzi, 1998). This philosophy points out that children get to know the world through touching, seeing, smelling, hearing, tasting, and acting as an independent explorer. Therefore, creativity is basically the ability to generate new ideas and solutions, develop new things and concepts.

Based on this learning and creativity development approach, children remain in a very centre of education and all the other assisting ways (*i.e.*, community, environment, teachers, family, arts and craft, projects, life experiences, *etc.*) serve as the measures for assuring both learning quality and possibilities to up-bring creativity (Malaguzzi, 1998; Lindsay, 2015).

Therefore, main creativity features are a) creative person; b) creative result, and c) creative process. As it is said, we do not learn from experience, but we do this by reflecting on our experience (Dewey, 2010). Robinson (2014) states that creativity is as important within education activities and all the learning process as literacy, along with socio-emotional competence, and we should treat it with the same status.

Another important factor for the upbringing creativity is the environment that undoubtedly serves for developing child's social, linguistic, cognitive, self-expression skills, and socio-emotional competence as well. For instance, spending up to 3–4 hours per day learning and playing positively affects children's intellectual coefficient, their innovative memory, and potential for creativity (Shaffer & Kipp, 2009).

Below is the figure representing key factors for a child's creativity development, its sustainability, and the links to socio-emotional competence (Figure 1).

Obviously, all these components play rather a huge role for the purposes of fostering, developing, and sustaining creativity of each child. According to Cristóvão et al. (2020), the importance of academic training in emotional intelligence and the development of social skills associated with the multiple aspects of creativity has proved to be valuable for the daily practice of teachers.

Therefore, developing the creativity, and the involvement of an artistic self-expression have a positive influence on each child's abilities to understand, observe, and listen. Also, imagination plays a key role in the child's search for knowledge and understanding of the surrounding world, which especially in early childhood is more important than a result.

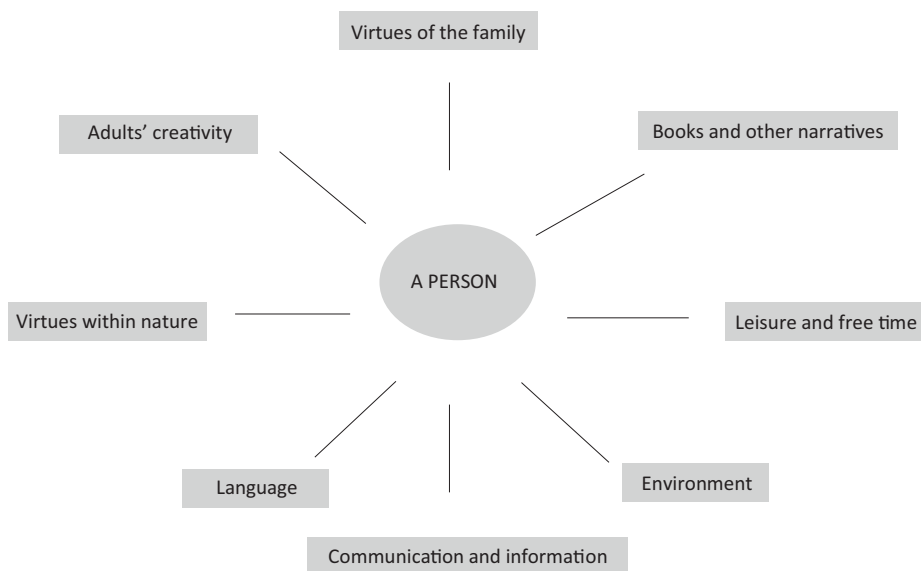


Figure 1. Factors influencing the creativity (source: created by authors)

2. Methods, data collection, and the results

This research was a part of Kaišiadorys district municipality (KDM), Lithuania strive to observe students' (of 5th–12th grades) socio-emotional competence. For this task we have chosen a type of a quantitative comparative study, while applying the case analysis for a maximum data collection. Non-probabilistic sampling among those seven secondary schools was applied.

Data collection: after obtaining the consents of the parents/guardians/legal representatives of the students, acquainting the school community and the students themselves and obtaining the permits of the school administration in selected cases, research of social-emotional education of 5th–12th grade students in seven formal general education institutions of KDM was conducted back in October 2020. The questionnaire was statistically validated and partially modified according to the LPI (Cronbach's $\alpha = 0.96$, $p < 0.000$) to assess this students' social-emotional competencies. The research instrument is adapted from its original version for adults and consists of individual statements that correspond to the content of emotional intelligence, social and emotional competence: a) basic emotional needs; (b) personal values; (c) self-sufficiency; (d) respect for others; (e) emotional self-perception; (f) emotional perception of others; (g) stress management; (h) positivity; (j) balance sheet; (k) changes; (l) authenticity; (m) active reflection; (n) trust; (o) conflict management; (p) openness; (r) cooperation; (s) support. Factor analysis, applying Kaiser–Meyer–Olkin test (KMOT) and Bartlett's test of sphericity, has showed that the correlation matrix is not an identity matrix and therefore the variables are related ideally for the factor analysis (KMOT = 0.872, $p < 0.000$). Statements are presented within an interval scale – from complete agreement to complete disagreement with the chosen statement. Empirical data were processed in the application program of mathematical statistics in social sciences *IBM SPSS Statistics 23.0*.

The following methods were used for the statistical analysis purposes:

- Cronbach's alpha coefficient – to assess the internal compatibility of the scale of socio-emotional competencies and its individual subscales;
- Kolmogorov–Smirnov test and Shapiro–Wilk test – to test the normality of the distributions of variables;
- Pearson correlation coefficient – to determine the correlations between variables.

2.1. Selection and characteristics of participants

In response to KDM statistical data of students in grades 5th–12th and the distribution of class composition in selected research cases in schools for the 2020–2021 school year, the main scope was 95% participation of all survey participants. In total, 1322 students (of grades 5th–12th) participated in this study.

2.2. Research ethics

The study observed the guidelines in the code of ethics, which respect and protect the rights of all research participants. These were informed about the aims of the study and that all data gathered would be treated anonymously and confidentially. Putting in other words, the principles of awareness, anonymity, voluntary participation, and confidentiality of the information received, as well as the constructive feedback, were applied in this survey.

2.3. Calculation of internal compatibility of social-emotional competencies

The Cronbach's alpha coefficient was found to be greater than 0.7 when evaluating the overall consistency of the scale used. Therefore, it can be stated that this group of 27 statements, from which the general scale of socio-emotional competencies is formed, can be assessed as homogeneous and internally valid (Table 1).

Table 1. Coefficient of internal compatibility for the general scale of socio-emotional competencies (source: created by authors)

Cronbach's alpha	n of items
.96	27

Thus, although there are subscales in the scale of socio-emotional competencies, the statements of which are poorly coordinated with each other, the overall assessment of the internal coherence of the scale is quite high. In addition, the Kolmogorov-Smirnov criterion $p < \alpha$ and the Shapiro-Wilk criterion $p < \alpha$ have showed that the distribution of the overall scale of socio-emotional competencies was statistically significantly different from normal (Table 2).

Table 2. Results of the Kolmogorov-Smirnov and Shapiro-Wilk criteria for the variable total scale. Tests of normality (source: created by authors)

	Kolmogorov-Smirnov*			Shapiro-Wilk		
	Statistic	Difference	Significant	Statistic	Difference	Significant
General scale	.032	.1322	.003	.997	.1322	.008

Note: *Lilliefors test's significance correction.

Also, the statistical analysis has showed that neither the absolute values of asymmetry nor the excess coefficients exceed one unit (Table 3).

Table 3. Coefficients of excess and asymmetry for the variable general scale. Descriptives (source: created by authors)

			Statistic	Standard error
General scale	Mean		94.1687	.33373
	95% confidence interval for Mean for	lower bound	93.5140	
		upper bound	94.8234	
	5% trimmed mean		94.1907	
	Median		94.0000	
	Variance		147.241	
	Standard deviation		12.13429	
	Minimum		35.00	
	Maximum		130.00	
	Range		95.00	
	Interquartile range		17.00	
	Skewness		-.068	.067
	Kurtosis		.185	.134

Thus, considering both the overall socio-emotional competence scale and the results of its individual subsets Kolmogorov–Smirnov and Shapiro–Wilk criteria, asymmetry and excess coefficients, further calculations should be based on nonparametric tests (since the distributions of variables are slightly deviated from normal). However, after estimating the extremely large sample size ($n = 1322$) and the fact that parametric tests are more sensitive to differences between the measured variables (*i.e.*, can detect them more efficiently), parametric tests were used in further calculations.

2.4. Evaluation of socio-emotional competence scale and differences in its subscales according to pupils’ sociodemographic characteristics

First, it was examined whether the dependent variables (*i.e.*, the overall scale of socio-emotional competencies and all its subscales) are interrelated in both social and demographic groups and whether their interdependence is linear. The statistical analysis of the data revealed that the correlations of the dependent variables in the different groups of social and demographic variables are mainly of medium strength, negative and positive, which satisfies the statistical assumptions of the multivariate analysis of variance.

The interdependencies of the dependent variables in the groups are approximately linear. The differences in the dependent variables (*i.e.*, the overall scale of socio-emotional competencies and all the subscales that make it up) across gender groups (females and males) were examined. In this respect, the Wilks’ lambda distribution (WLD) criterion was considered when assessing the multidimensional effect. The data showed that the influence of gender on the dependent variables is statistically significant ($WLD = 0.857, p < 0.05$). The results of the analysis of variance (ANOVA) statistical analysis revealed that variables such as personal values, self-esteem, respect for others, emotional perception of others, stress management, positivity, balance, authenticity, active reflection, basic emotional needs, and support differ statistically significantly between the two gender groups ($p < 0.05$).

Also, the calculation of the means of the dependent variables showed that the values of personal values, respect for others, emotional perception of others, balance, support, basic emotional needs are higher in the group of female. Meanwhile, the scores of self-esteems, stress management, positivity, authenticity, and active reflection were higher in the group of male (trends from A to L are presented in Figure 2).

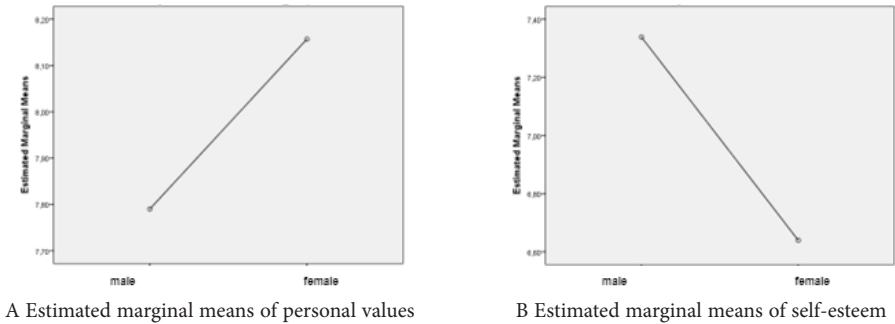
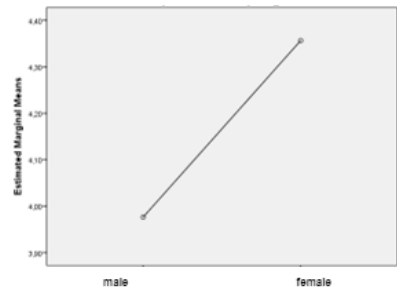
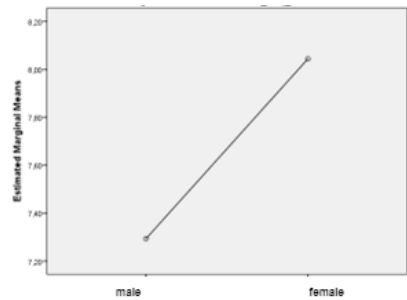


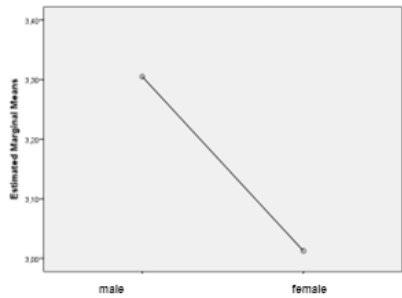
Figure 2. To be continue



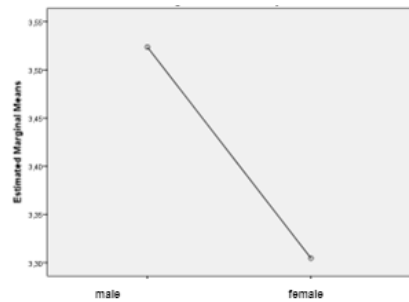
C Estimated marginal means of respect of others



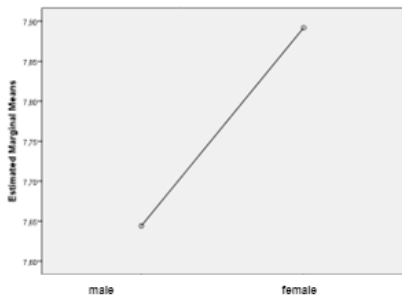
D Estimated marginal means of emotional understanding of others



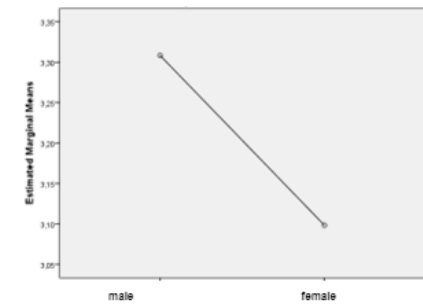
E Estimated marginal means of stress management



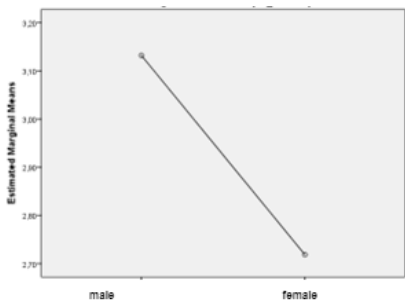
F Estimated marginal means of positiveness



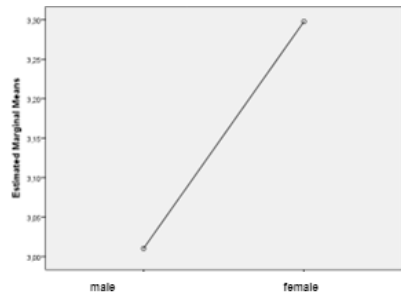
G Estimated marginal means of balance



H Estimated marginal means of being authentic

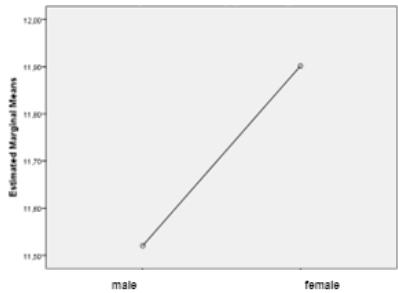


J Estimated marginal means of active reflection



K Estimated marginal means of suport/assistance

Figure 2. To be continue



L Estimated marginal means of emotional needs

Figure 2. Evaluation of socio-emotional competence in terms of participants' gender (n =1322)
(source: created by authors)

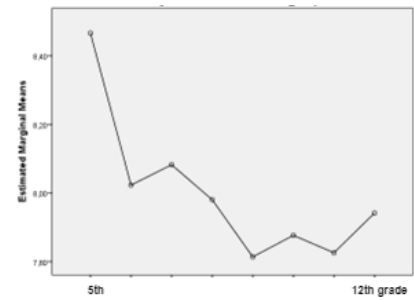
The presented pictures (A to L) show the main differences in social emotional abilities and the strength of their expression in terms of the gender of the study participants, when:

- Females have more personal values, respect for others, the identification and application of the emotional perceptions, balance, support, basic emotional needs of others at the level of behavior;
- Meanwhile males – more self-esteem, stress management, positivity, authenticity, active reflection externalization at the behavioral level.

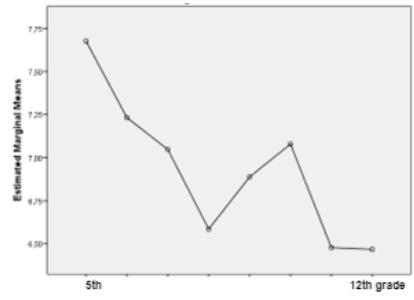
Thus, to ensure access to a holistic personality and full implementation of the results of socio-emotional education, more attention should be paid to strengthening self-esteem, stress management, positivity, authenticity and active reflection skills in the female group, and personal values, respect for others, emotional the internalization of perception, balance, support and basic emotional needs and the expression of these socio-emotional abilities in everyday situations.

Further the analysis of the data also examined how the dependent variables (the overall scale of socio-emotional competencies and all the subscales that make it up) differ in different grades. The Wilks' lamda (WL) criterion was considered in assessing the multidimensional effect. The influence of the grade on the dependent variables was found to be statistically significant (WL = 0.813, $p < 0.05$). The results of ANOVA statistical analysis showed that variables such as personal values, self-esteem, emotional perception of others, stress management, positivity, balance, authenticity, active reflection, openness, cooperation, support, and the overall scale of socio-emotional competencies differ statistically significantly across grades: the means of the dependent variables show that personal values differ most between 9th and 5th grade students. Self-esteem differs the most between 11th and 5th, 8th and 5th, 12th, and 5th grade students. Positivity differs most between 10th and 5th grade students. The balance is most different between 10th and 5th, 10th, and 8th grade students. Authenticity differs most between students in grades 5th and 11th, 9th and 6th, 11th and 6th, 12th and 6th, 5th and 12th, 5th and 9th. Collaboration is most different between 8th and 5th grade students.

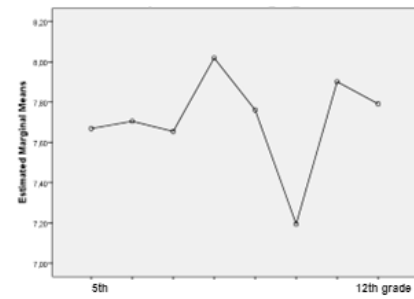
Although students' assessments of the emotional perception of others, stress management, active reflection, openness, support, and the overall scale of socio-emotional competencies were found to be statistically significantly different in different grades, these differences were not significant (while $p > 0.05$). Below is a graphical trend from A to M of the means of the measured variables for which the influence of the grade was statistically significant (Figure 3).



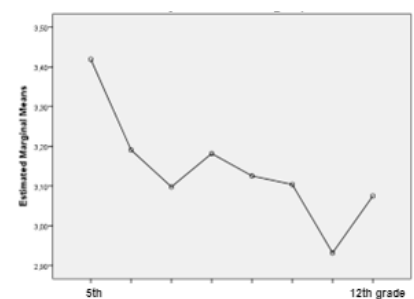
A Estimated marginal means of personal values



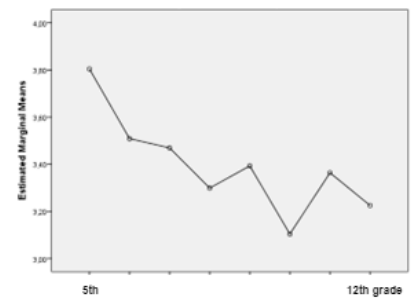
B Estimated marginal means of self-esteem



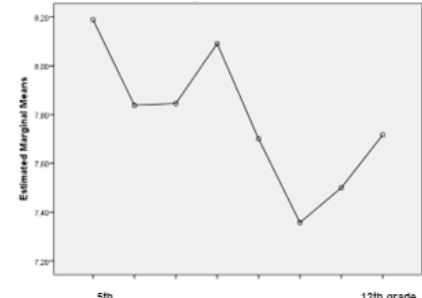
C Estimated marginal means of respect of others



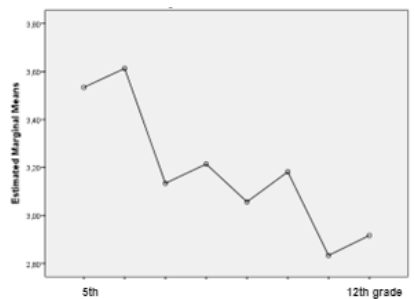
D Estimated marginal means of stress management



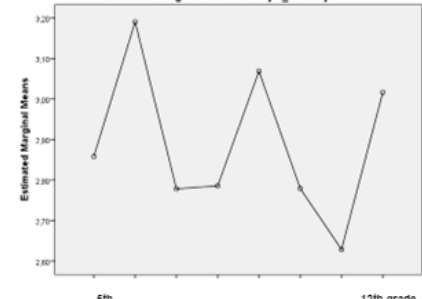
E Estimated marginal means of positiveness



F Estimated marginal means of balance



G Estimated marginal means of being authentic



H Estimated marginal means of active reflection

Figure 3. To be continue

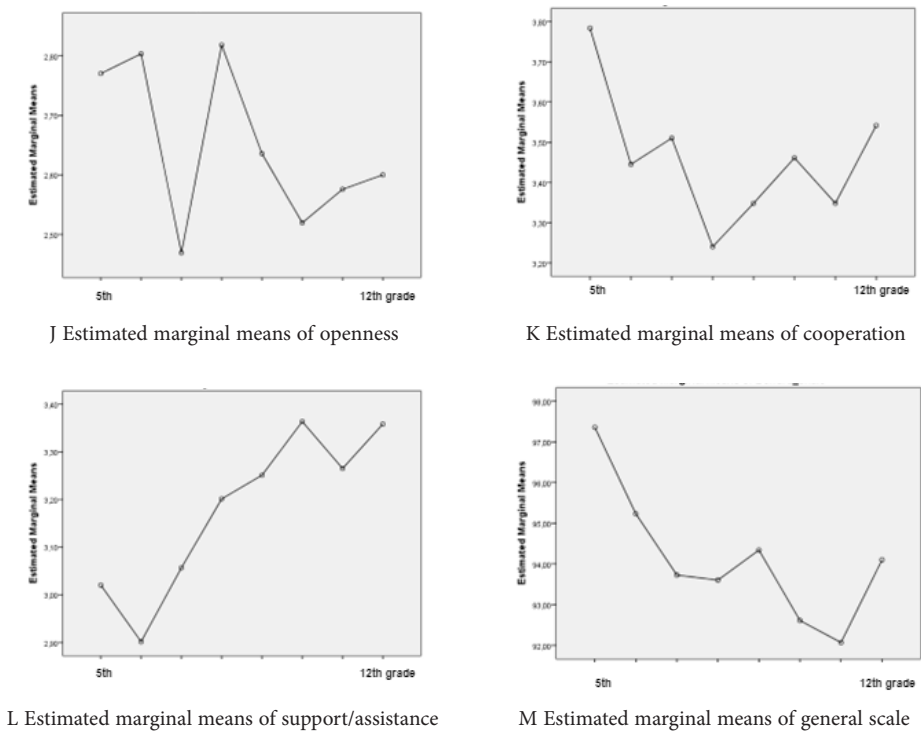


Figure 3. Evaluation of subscales of the general scale of socio-emotional competence in terms of the influence of different grades (n = 1322) (source: created by authors)

The statistical representation of the data in the figures (A to M) shows the significant differences between the socio-emotional competences of children in different grades of those participating schools:

- Personal values are particularly strong among 5th, 7th, and 12th grade students. In other classes, falls and low scores are observed;
- Self-esteem is highest in grade 5th and partly in grade 10th. For other classes, this socio-emotional ability is particularly weak, such as in grades 8th, 11th, and 12th;
- The emotional perception of others is mostly expressed in grades 8th and 11th, while in other grades this ability did not score very high;
- Students in grades 5th, 8th and 12th have the highest levels of stress management skills, while students in grade 11th have the most difficulty;
- Internal balance is also most prevalent among students in grades 5th, 8th and 12th, with the lowest score among students in grades 10th in terms of this ability;
- Active reflection is most common in grades 6th, 9th and 12th, and at least in grades 11th;
- Openness is mostly expressed among students in grades 6th and 8th, with a very low degree of expression in grade 7th;
- Students in grades 5th, 7th, 10th and 12th are most likely to cooperate, and students in grade 8th are the least likely to cooperate;
- In terms of support, the highest degrees stand out for students in grades 10th and 12th, and the lowest in grade 6th.

The overall scale shows the highest expression of socio-emotional competence in grade 5 and partly in grades 9th and 12th. In grades 10th and 11th, meanwhile, the expression of those competence in the general context is significantly weakened. Consequently, it would be advisable to pay special attention to the strengthening of the socio-emotional abilities of 6th, 7th, 8th, 10th, and 11th grades, especially in the individual blocks of behavior and value orientations already listed above.

Discussion

Socio-emotional abilities (so-called “emotional intelligence”, “social intelligence”) are the abilities to work together with others, to learn productively, to play the most important roles in the family, community, and workplace. Success not only in school but also in later life phases accompanies those students who: a) realistically evaluate oneself and one’s possibilities (self-awareness); b) properly manage their feelings and control their behaviour (self-control); c) accurately interpret the signs of the social environment (social awareness); d) effectively resolve interpersonal conflicts (communication skills), and e) make good decisions in the face of day-to-day difficulties (responsible decision making).

In Lithuanian educational institutions, as in many other countries of the world, a great deal of attention is paid to strengthening cognitive abilities. Compulsory social and emotional education of students is increasingly being tackled in educational institutions. Socio-emotional competence education is one of the most effective means of ensuring good mental health and preventing violence, and it is also the basis for developing positive not only academic but also social, emotional, healthy lifestyle and citizenship results, along with creativity higher expression levels (Šukytė, 2016; de la Barrera et al., 2019), especially in the period of the pandemic, when children face rather difficult problems (Rogers et al., 2021).

Meanwhile this present research revealed that some significant differences in social emotional abilities and the strength of their expression in terms of gender of the study participants could be detected, when females are more characterized by identification and application of personal values, respect for others, emotional perception of others, balance, support, basic emotional needs; while males relying on the categories of more self-esteem, stress management, positivity, authenticity, active reflection externalization at the behavioural level. Thus, to ensure access to a holistic personality and full implementation of the results of socio-emotional education, more attention should be paid to strengthening self-esteem, stress management, positivity, authenticity and active reflection skills in the female group, and personal values, respect for others, emotional the internalisation of perception, balance, support and basic emotional needs and the expression of these socio-emotional abilities in everyday situations.

Conclusions

Creativity mainly deals with the process of getting new and original ideas through child’s explorative and discovery activities. Children develop the creativity using their life experiences while acting, rather than making concerns about the finished product. Thus, creativity should stand on the one line with literacy, socio-emotional competence, and other domains in children’s life.

Children who participated in the study together had a greater expression of personal values, respect for others, internal balance, cooperation, emotional perception of others or basic emotional needs.

Estimates of personal values, respect for others, emotional perception of others, internal balance, support, basic emotional needs are higher in the group of females. Meanwhile, scores on self-esteem, stress management, positivity, authenticity, and active reflection were higher in the group of males.

Students' assessments of the emotional perception of others, stress management, active reflection, openness, support, and the overall scale of socio-emotional competence were found to be statistically significantly different in different grades.

Additionally, the analysis of correlations revealed the following significant dependencies between the studied features of socio-emotional competence as a meaningful precondition for creativity: a) basic emotional needs and emotional self-perception – as the estimates of basic emotional needs of students increase, so do the estimates of emotional self-perception; b) self-esteem and emotional self-perception – as self-esteem estimates increase, so do emotional self-perception estimates; c) emotional self-perception and cooperation – as students' assessments of emotional self-perception increase, so do their assessments of cooperation; d) confidence and conflict management – confidence estimates increase, as do the conflict management estimates.

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References

- Ahmed, I., Binti Hamzah, A., & Ng Lee Yen Binti Abdullah, M. (2020). Effect of social and emotional learning approach on students' social-emotional competence. *International Journal of Instruction*, 13(4), 663–676. <https://doi.org/10.29333/iji.2020.13441a>
- Barrera, de la U., Schoeps, K., Gil-Gómez, J.-A., & Montoya-Castilla, I. (2019). Predicting adolescent adjustment and well-being: The interplay between socio-emotional and personal factors. *International Journal of Environmental Research and Public Health*, 16(23). <https://doi.org/10.3390/ijerph16234650>
- Blair, C., McKinnon, R. D., & Daneri, M. P. (2018). Effect of the tools of the mind kindergarten program on children's social and emotional development. *Early Childhood Research Quarterly*, 43, 52–61. <https://doi.org/10.1016/j.ecresq.2018.01.002>
- Brasseur, S., Grégoire, J., Bourdu, R., & Mikolajczak, M. (2013). The Profile of Emotional Competence (PEC): Development and validation of a self-reported measure that fits dimensions of emotional competence theory. *PLoS One*, 8(5). <https://doi.org/10.1371/journal.pone.0062635>
- CASEL. (2022). *What does the research say? Demand for SEL is on the rise, and it is easy to see why: SEL makes a difference.* <https://casel.org/fundamentals-of-sel/what-does-the-research-say/>
- Collaborative for Academic, Social, and Emotional Learning. (2012). *CASEL Guide 2013. Effective social and emotional learning programs: Preschool and elementary school edition.* <https://files.eric.ed.gov/fulltext/ED581699.pdf>

- Cristóvão, A. M., Candeias, A. A., & Lopes Verdasca, J. (2020). Development of socio-emotional and creative skills in primary education: Teachers' perceptions about the Gulbenkian XXI school learning communities project. *Frontiers in Education*, 4. <https://doi.org/10.3389/feduc.2019.00160>
- Denham, S. A. (2006). Social-emotional competence as support for school readiness: What is it and how do we assess it? *Early Education and Development*, 17(1), 57–89. https://doi.org/10.1207/s15566935eed1701_4
- Dewey, J. (2010). Professional spirit among teachers. In D. J. Simpson & Jr. S. F. Stack (Eds.), *Teachers, leaders, and schools: Essays by John Dewey* (pp. 37–40). Southern Illinois University Press.
- Elias, M. J., Zins, J. E., Weissberg, R. P., Frey, K. S., Greenberg, M. T., Haynes, N. M., Kessler, R., Schwab-Stone, M. E., & Shriver, T. P. (1997). *Promoting social and emotional learning: Guidelines for educators*. Association for Supervision and Curriculum Development.
- Goleman, D. (2020). *Emotional intelligence: Why it can matter more than IQ*. Bantam Books.
- Humphrey, N., Kalambouka, A., Wigelsworth, M., Lendrum, A., Deighton, J., & Wolpert, M. (2011). Measures of social and emotional skills for children and young people: A systematic review. *Educational and Psychological Measurement*, 71(4), 617–637. <https://doi.org/10.1177/0013164410382896>
- Lindsay, G. (2015). Reflections in the mirror of Reggio Emilia's Soul: John Dewey's foundational influence on pedagogy in the Italian educational project. *Early Childhood Education Journal*, 43, 447–457. <https://doi.org/10.1007/s10643-015-0692-7>
- Mayesky, M. (2010). *Creative activities for young children*. Wadsworth Cengage Learning.
- Malaguzzi, L. (1998). History, ideas, and the basic philosophy. in C. Edwards, L. Gandini, & G. Forman (Eds.), *The hundred languages of children: The Reggio Emilia approach – advanced reflections* (pp. 49–97). Elsevier Science.
- Mills, H. (2014). The importance of creative arts in early childhood classrooms. *Texas Child Care Quarterly*, 38(1). http://www.childcarequarterly.com/pdf/summer14_arts.pdf
- Neale, S., Spencer-Arnell, L., & Wilson, L. (2011). *Emotional intelligence coaching: Improving performance for leaders, coaches and the individual*. Kogan Page Limited.
- Park, J., Haddon, A., & Goodman, H. (2021). *The emotional literacy handbook: Promoting whole-school strategies*. Routledge.
- Rakap, S., Balıkcı, S., Kalkan, S., & Aydin, B. (2018). Preschool teachers' use of strategies to support social-emotional competence in young children. *International Journal of Early Childhood Special Education*, 10(1), 11–25. <https://doi.org/10.20489/intjecse.454103>
- Robinson, K. (2014). NPR/TED Radio Hour: How do schools kill creativity? Sir Ken Robinson. <https://www.sirkenrobinson.com/nprted-radio-hour-how-do-schools-kill-creativity/>
- Rogers, A. A., Ha, Th., & Ockey, S. (2021). Adolescents' perceived socio-emotional impact of COVID-19 and implications for mental health: Results from a U.S.-based mixed-methods study. *Journal of Adolescent Health*, 68(1), 43–52. <https://doi.org/10.1016/j.jadohealth.2020.09.039>
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185–211. <https://doi.org/10.2190/DUGG-P24E-52WK-6CDG>
- Shaffer, D. R., & Kipp, K. (2009). *Developmental psychology: Childhood and adolescence*. Wadsworth Publishing.
- Suratno, S., Komaria, N., Yushardi, Y., Dafik, D., & Wicaksono, I. (2019). The effect of using synectics model on creative thinking and metacognition skills of junior high school students. *International Journal of Instruction*, 12(3), 133–150. <https://doi.org/10.29333/iji.2019.1239a>
- Šukytė, D. (2016). *Socialinis ir emocinis ugdymas*. Baltic Printing House.
- Trigueros, R., Sanchez-Sanchez, E., Mercader, I., Aguilar-Parra, J., López-Liria, R., Morales-Gázquez, M. J., Fernández-Campoy, J. M., & Rocamora, P. (2020). Relationship between emotional intelligence, social skills and peer harassment. A study with high school students. *International Journal of Environment Research and Public Health*, 17. <https://doi.org/10.3390/ijerph17124208>