

DYNAMICS OF SOCIO-EMOTIONAL COMPETENCIES OF STUDENTS IN THE PROCESS OF THEIR PROFESSIONAL PEDAGOGICAL TRAINING

Original scientific paper

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Abstract

*This paper presents the results of a diagnostic study of socio-emotional skills of future teachers from Physical Education and Sports and Pre-school and Primary School Pedagogy study programs. During the course of the first and fourth study years, features of five spheres of socio-emotional competence have been examined: self-control, self-knowledge, motivation, empathy and social skills concerning the professional training of students as future teachers. Study was conducted on a sample of 197 students from SWU “Neofit Rilski”, Blagoevgrad. Obtained data were analyzed using *t* – test, ANOVA and Person’s coefficient of correlation. The results indicate high self-assessment of the students regarding the components of socio-emotional intelligence and problems in the influence of professional training on the development of these competencies.*

Keywords: *emotional intelligence, self-control, self-knowledge, motivation, social skills, empathy, teacher’s professional training*

INTRODUCTION

In the overall professional and personal appearance of a teacher, emotional intelligence takes on an important place and ranks among the most frequently mentioned professional and personal characteristics, such as pedagogical observability, pedagogical sociability, pedagogical creativity and emotional sustainability.

Emotional intelligence can be defined as “a complex set of behaviors, abilities (or competencies), beliefs and values that help a person successfully realize their vision and mission if they are given the choice.” (Merlevede, Bridou, Vandam, 2005, pp: 12). It possesses a pronounced intrapersonal aspect that expresses a person’s abilities to determine their moods, feelings and other mental states and their influence on behavior and self-motivation. Another aspect is the interpersonal or social intelligence, defined as “recognizing emotions in others, using this information as a guideline for behavior, and building and maintaining relationships” (Merlevede, Bridou & Vandam, (Мерлеведе, Бриду, & Вандам) 2005, 16). Particularly valuable manifestations of emotional intelligence in the professional activity of a teacher are emotional receptivity, emotional responsiveness and emotional assessment. The effectiveness of the pedagogical process depends to a large extent on their favorable combination in a teacher’s profile.

The foundation of emotional intelligence is the awareness of emotions and the ability to identify them. Equally important is the management of those two, related to the ability of the individual to display flexibility and adaptability in a variety of situations. Self-motivation allows the professional to direct efforts to achieve goals and solve problems targeted at a successful realization of the personality (Gituni (Гитуни), 2003). The recognition of someone else’s emotions and the ability to maintain good relations are, as well, important elements of emotional intelligence. Mastering interpersonal relationships involves “managing the emotions of others according to own motivations and emotions” (Gituni (Гитуни) 2003, pp: 44).

Revealing the essence of emotional intelligence, R. Wood and H. Tolley (2007) point out the importance of five areas of competence:

- self-control - ability to manage and control one’s emotional state;
- self-knowledge - knowledge of one’s own emotions and the essence of one’s personality;
- motivation – the strive for achieving goals by guiding emo-

tions;

- empathy - knowing and determining the emotions of others;
- social skills - the influence on others and the attitude towards them (Wood & Tolley, 2003, pp: 14).

Self-knowledge is closely related to the process of reflection in teacher’s professional pedagogical activity. The ability to identify one’s feelings and emotions is extremely important for the pedagogue. Awareness of real emotions creates confidence in the ability to exercise control over one’s emotional world and on relationships with others. For the teacher, this is of particular importance as it is directly related to his ability to organize communication with other subjects of pedagogical activity. The higher the level of awareness of the emotional status of the participants in the pedagogical process is, the more active and effective the “teacher-student” interaction becomes. Self-knowledge, self-analysis, reflection are parts of the conscious management of the educational process and a condition for its effectiveness. The search for self-knowledge is related to the self-esteem of the professional as well as to their satisfaction with the performed activity. The knowledge of the self which a person acquires also provides confidence in asserting one’s principles in their private and professional life. The correct perception of one’s feelings and emotions is a beneficial factor for displaying authenticity in a teacher’s relationship with other pedagogical subjects, with parents and with the broad social environment. Self-knowledge paves the way to getting to know others and facilitates the conformation to their peculiarities and the acceptance of their differences.

Self-control is another important component of emotional intelligence. Controlling one’s emotional state is a prerequisite for emotional sustainability and balance in the behavior of the educator during the implementation of the educational process. During the pedagogical interaction with his students and colleagues, the teacher is expected to exhibit the necessary emotional stability. Teacher’s self-control is at the heart of the emotional and psychological comfort of students. “The ability to control emotions and their adequacy is an ability built upon our self-awareness” (Golman (Голман), 2000, pp:86). D. Golman’s (2000) research highlights the relationship and interdependence between self-knowledge, self-awareness and self-control. These characteristics find clear manifestation in the behavioral pattern demonstrated by teachers and have a corresponding effect on the behavior of their students.

Empathy is a component of the emotional intelligence displayed by the teacher during the pedagogical process is another valuable personal and professional characteristic. Empathy is related to a highly developed personal sensitivity to the verbal and non-verbal messages of others. This sensitivity is usually accompanied by an emotional response expressed in empathy, co-experience. In professional-pedagogical communication, empathy is a kind of catalyst for the success of the educational process. Empathy is related to self-knowledge as a component of emotional intelligence. Through the knowledge of self as a person and a professional, the teacher finds his way to others and increases one's sensitivity to their emotions and experiences.

Motivation is an extremely valuable component of teachers' emotional intelligence which is in close correlation with self-control and self-knowledge. Teachers' internal motivation determines their focus on achieving important goals in professional-pedagogical work (Totzeva (Тоцева), 2013). Motivation is connected to dedication in the profession of a teacher, the selfless commitment to high educational goals in support of the development of the growing personality. The motivation of the teacher is of importance for manifestations of determination, confidence and optimism in the pedagogical interaction, which undoubtedly contributes to the effectiveness of the educational process.

All the areas of competence discussed above are closely related and interdependent with yet another valuable manifestation of emotional intelligence, namely -social skills. They allow the teacher to understand human relations and, in the relevant social context, make an authentic interaction with learners, influence their behavior, stimulate their cognitive activity. The pedagogue's level of formation of social skills is a prerequisite for effective pedagogical communication. This type of skill also implies a high degree of empathy and self-control in the pedagogical interactions of the teacher.

In practical terms, the social, economic and demographic characteristics of Bulgarian society pose with particular importance the problem of training and qualification of future teachers, whose professionalism depends on the successful implementation of new policies and the implementation of innovative ideas and practices in the system of pre-school and school education. The report of the World Bank on the Importance of Skills for the Labor Force in Bulgaria: the Relationship between Cognitive and Social-Emotional Skills and the Conduct of the Labor Market (Levin et al., 2016) summarizes the results of a nationally representative study of cognitive and socio-emotional skills of the work age population. The report shows that the level of formation of cognitive and socio-emotional skills is very important for the Bulgarian labor market. The problem is that the workforce, including future teachers, enters the labor market with insufficiently formed professional and social competencies.

The relevance and importance of the problem of the formation of specific socio-emotional skills of prospective teachers gave reason to draw our attention to the diagnostics and analysis of the dynamics of "soft" skills in the context of the professional training of students from various educational fields. The focus of the analysis falls on the characteristics and dynamics of the socio-emotional skills of the students in the process of their professional pedagogical training. It is assumed that: 1) future educators choose the field of professional realization with high self-assessed personal social competences; 2) professional training is expected to have an impact on the development of these competences.

The verification of these hypotheses is related to criteria - "level of assessment"; "consistency", internal coherence; changes in the level of assessments.

METHOD

The empirical results which are discussed below were obtained in a study carried out in the spring of 2017 among students from SWU "Neofit Rilski", Blagoevgrad, among a sample of 197 students, of which 161 women and 36 men. The students are enrolled in the following study programs: pre-school and primary school pedagogy, pre-school pedagogy and foreign language, primary school pedagogy and foreign language, physical education and sports. Further, concerning the topic, attention is paid mainly to the results of the students from physical education and sports (PES) program in a certain comparison with those of the pre-school and primary school pedagogy (PPSP) program.

Wood & Tolley's tests for emotional intelligence diagnostics (Wood & Tolley, 2007) were used in the empirical study. In the authors' concept, the test examines the five co-related components of emotional intelligence (competences of self-control, self-knowledge, motivation, empathy and social skills) through a set of assertions that the tested person assesses on a three-step Likert scale. The test answers are coded at three levels: high, medium and low. The quantification of results at the first level is awarded with three ballots, the second one –with two, and the third –with one.

The total number of people surveyed is more than 50% of the actual students enrolled in the training process, thus, the sample is a representative one, as well as the group of each of the studied study programs.

The number of surveyed students enrolled in the PES program is 38 (Table 1. FE). They are divided into two subgroups: enrolled in the first and fourth study year. For the whole group and the subgroups regarding the level of assessments, we compare common and average values of the components of emotional intelligence. The Anova: Single Factor method is applied to the results by components and by subgroups, which verifies the difference in the average values for the high, medium and low test levels (the consistency criterion). By using t-Test: Paired Two Sample for Means in Excel, the significance of the differences in the average values for the subgroup of freshmen and fourth-year students is checked. For both subgroups, r - Pearson's correlation coefficient is calculated. The results obtained are compared with the results of the students enrolled in the PPSP program. Further in the article, the terms "competence" and "competences" and "skills" as well as "emotional" and "socio-emotional" intelligence are used as synonyms.

RESULTS

Results from the analyses are presented in several tables. Tables from 1 to 7 present results obtained from the students included in the study program PES (physical education and sport), particularly, distribution of study sample by years of study and gender, average module values, results from ANOVA and calculated t - test etc.

Table 3 presents the average module values and differences between different years, while values of person's coefficient of correlation is presented in Table 5.

Table 1. FE Surveyed students, PES program

Indicator/study year	1 st year	4 th year
Average age	21,4 г.	27,6
Men (%)	18 (86)	14 (82,4)
Women (%)	3 (14)	3 (17,6)

Table 2. FE Average values PES program

Values	1 st year
Overall average	2,076
Average 1st year	2,194
Average 4th year	1,931
Difference in years	0,262

Table 3. FE Average module values –PES study program according to study years

Module/ study year	Components	1st year	4th year	Difference
M1	Self-control	2,46	1,020	1,45
M2	Self-knowledge	1,079	0,0833	0,996
M3	Motivation	2,292	2,529	-0,237
M4	Empathy	2,444	2,578	-0,134
M5	Social skills	2,365	2,5	-0,135
Max: 3	Average:	2,194	1,931	0,262

Table 4. FE– PN Values of Pearson Correlation, PES and PPSPstudy programs

Subgroups	Values – PES	Values- PPSP
1 st year – 4 th year	0,612	0,882

Table 5. FE Values in modules, Anova: Single Factor; PES study program

Module/study year	1 st year		4 th year		
	Statistics	F	P-value	F	P-value
M1		66,20484	6,57E-16	42,15111	2,71E-11
M2		1,378968	0,259704	6,146341	0,004202
M3		156,6934	1,51E-24	71,41652	4,11E-15
M4		91,54375	1,59E-18	83,26726	2,48E-16
M5		40,4217	7,63E-12	44,29066	1,26E-11
	F crit	3,15	F crit	3,19	

Table 6. FE-PN Values in modules t_{test}1-4 study years, students enrolled in the PES and PPSP study programs

Modules	t Stat-PES	t Stat-PPSP
M1self-control	1,208	2,278
M2self-knowledge	2,364	2,2
M3motivation	1,064	1,67
M4empathy	4,666	1,278
M5social skills	2,736	1,611

Note: For both study programs the critical levels in one-sided and a two-sided test (t Critical one-tail u t Critical two-tail) based on overall values are 2,92 u 4,30 accordingly.

Table 7. FE Overall score by levels and modules, PES study program

Score-study year	High scores		Medium scores		Low scores	
	1 K	4 K	1 K	4 K	1 K	4 K
M1	249	67	36	16	25	21
M2	53	48	40	33	43	24
M3	270	201	48	44	12	13
M4	237	216	48	34	23	13
M5	210	186	64	58	24	11
	t Stat					
	1,866		3,431		2,587	
t-Test	P(T<=t) one-tail		0,067696		0,013	
	t Critical one-tail: 2,132					
	P(T<=t) two-tail		0,135		0,027	
t Critical two-tail: 2,777						

Table 8. PN Tested students from the PPSP program

Indicator/study year	1 st year	4 th year
Average age	20,67 r.	25,8
men	0	0
women	44	25

Table 9. PN Average values, PPSP program

Values	Estimates
Overall average	2,380
Average 1st year	2,386
Average 4th year	2,371
Difference in years	0,015

Table 10. PN Average module values –PPSP study program according to study years

Module/ study year	Components	1st year	4th year	Difference
M1	Self-control	2,261	2,307	-0,045
M2	Self-knowledge	2,189	2,113	0,076
M3	Motivation	2,477	2,447	0,031
M4	Empathy	2,625	2,520	0,105
M5	Social skills	2,375	2,467	-0,092
Max: 3	Average:	2,386	2,371	0,015

Table 11. PN Values in modules, Anova: Single Factor; PPSP study program

Module/ study year	1 st year		4 th year		
	Statistics	F	P-value	F	P-value
M1		113,043	4,330E-29	145,964	4,6E-26
M2		65,269	2,613E-20	33,346	5,6E-11
M3		141,095	3,368E-33	92,704	1,2E-20
M4		370,897	3,225E-54	129,525	1,4E-24
M5		108,285	2,498E-28	57,857	1E-15
	F crit	3,066	F crit	3,124	

Table 12. PN Overall score by levels and modules, PPSP study program

Score-study year	High scores		Medium scores		Low scores	
	1 K	4 K	1 K	4 K	1 K	4 K
M1	420	267	106	36	71	43
M2	342	186	172	86	64	45
M3	462	258	164	90	28	19
M4	558	291	116	68	19	19
M5	441	249	138	104	48	17
	t Stat					
	9,398		6,646		2,999	
t-Test	P(T<=t) one-tail		0,0004		0,001	
	t Crit. one-tail: 2,132					
	P(T<=t) two-tail		0,0007		0,0027	
t Crit.l two-tail: 2,776						

Tables from 8 to 12 present results obtained from the students included in Pre-school and primary school pedagogy“ (PPSP) study program particularly, distribution of study sample by years of study and gender, average module values, results from ANOVA and calculated t – test etc.

DISCUSSION AND CONCLUSION

(A) Students enrolled in the „Physical education and sports“ study program

The obtained results (Table 3. FE and Table 7. FE) indicate that the subjects surveyed mostly give high scores of their emotional

competence for each component of emotional intelligence. Regarding the internal consistency between the high, middle and low scores for each module for first and fourth study years (Table 5. FE), there is a significant difference, with a categorical predominance of high scores. An exception is M 2 (“self-knowledge”), where the zero statistical hypothesis of absence of difference in the average values for the three types of scores is confirmed, in the fourth study year, however, this hypothesis is not present. It should be noted that gender differences were not checked. Students most likely enroll and graduate with high self-esteem on their way to the profession.

It can be seen that generally in the fourth study year the scores decrease. This decrease is statistically significant in the medium scores, while the difference in the low and high scores is not statistically significant (Table 7. FE). The decreased values of assessment of the surveyed on the components of emotional intelligence at the personal level during the fourth study year may be a sign of an increasing restraint in respondents’ reactions. As far as test items cover typical interpersonal relationship situations, concerning the chosen professional orientation this finding can hardly be interpreted as a sign of a problem in emotional intelligence towards the end of the education program.

The dynamics in the average values of all emotional intelligence components in a decreasing direction (Table 3. FE and Table 7. FE) may rather be interpreted as a sign of striving for more realism in the manifestations of self-control and self-knowledge (they show a decrease in values) in social relations. As the high self-assessment values among the surveyed young people drop in the fourth year of study, it could be concluded that a prerequisite for readiness of entering the teaching profession is present, which requires consideration of more choices in responses, control and flexibility in socio-emotional relationships with students (Zhekova (Жекова), 1984).

Because of the future profession of the surveyed one can see a sign of opportunities to further feed conservatism in interpersonal relationships, which are essential elements in the exercise of the profession. However, studies (Andreev (Андреев), 1998: 309-313) indicate that with the accumulation of professional experience the possibility of conservatism increases. Problems in establishing professional skills related to observability, communication, emotional sustainability appear (Zhekova: 1984, 58-71). The data highlights a controversial situation: an opportunity to move towards preventing mistakes in hasty reactions in social situations, but also a risk in the professional interpersonal relationships for future physical education and sports teachers.

Comparing the differences between the emotional intelligence components (Table 3. FE), an increase in values for empathy, motivation and social skills is observed. Most likely, in the course of education, some accumulations are due to the understanding of the importance of precisely these aspects of emotional intelligence regarding the future professional activity. Investing in them can also be seen as an opportunity to counteract the emerging signals of pre-conditions for conservatism in relations.

Based on the average values of the subjects in their first and fourth study years of the PES program, empathy, social skills and motivation stand out among the other components of emotional intelligence. On the one hand, they are important for the education of future sports pedagogues. On the other hand, as far as research shows, for students, especially from upper grades, with whom the subjects are to work in the future, not only the content, but also the emotional aspect of the relations with the teacher is important (Petrova (Петрова), 2010), the attention of those subjects to socio-emotional relations is very important for their professional activity and reflects

the aspect of slightly upward dynamics of the socio-emotional skills in the process of professional training of future specialists in physical education and sports.

The comparison of the differences in the t-test values in total for the three assessment levels (high, medium and low) by modules (Table 6. FE-PN) as a whole indicates that the differences in the awarded scores between the three levels are not significant. The opposite is true for the empathy component (M4) for which the zero hypothesis is not valid. In terms of content, this means that for individuals from both groups (first and fourth study year), education does not lead to significant “added value” in the components of socio-emotional competence, except for empathy, which differs significantly in the fourth study year. It seems that the realization of future professional activity, the accumulation of knowledge and initial pedagogical experience gained from practical training, an essential part of the study program, help increase the attention of students to empathy.

Pearson’s correlation coefficient has the value of $r=0,612$ which means that between the two surveyed groups a moderate correlation is present. This is a sign that the changes do not lead to profound alterations.

(B) Students enrolled in the „Pre-school and primary school pedagogy“ study program

The sample consists entirely of female students (Table 8. PN). The empathy, motivation and social skills of those surveyed in the subgroup of freshmen and fourth-year students have the highest average. The picture is similar to that of the students enrolled in the PES program (Table 9. PN).

Similarly, there is a general reduction in overall averages, but the decrease is less (0.262 vs. 0.015). The decrease in the average values per module (Table 10. PN) is strongest in the empathy component, but the sample is homogeneous regarding the differences between the average values between the first and the fourth-year students. The score for M1 - self-control and M5 - Social skills is increased.

High scores are predominant among grades, with the difference between them in study years being significant. It is confirmed that there is no internal coherence between the three types of scores (low, medium and high) for each module in the first and fourth year students (Table 12. PN). For each group of scores, t-test values indicate that they differ significantly in the surveyed subgroups of the first and fourth year (Table 7. PN). Clearly, against the backdrop of the overall decrease in grades from first to fourth study year, a typical picture remains: the differences between the score groups by modules in the two study stages are not to be ignored, they are in favor of the high scores. The Pearson’s coefficient has a value of $r = 0.882$ (Table 11. FE - PN). This can be interpreted as a similarity in the two subgroups in their average characteristics regarding levels of self-assessment, meaning there is no significant added value at the end of the training, and it is smaller compared to the PES study program.

The analyzed results from the PES study program show that the hypothesis of high self-assessment about their socio-emotional competencies is confirmed. As for the second hypothesis, the “added value” of advancing in the course of training is not particularly significant.

The study of the subject “Pre-school and Primary School Pedagogy” also confirms the expectation of high scores on the components of socio-emotional competence. By the end of training, this subgroup shows a smaller difference in the level of assessment compared to the beginning of the training in the first study year.

If social intelligence develops (Golman (Голман), 2000), professional training has no direct impact, especially in the group of subjects from the second study program. The high self-assessment

levels in individual socio-emotional intelligence components lead to an expectation that professionals who have appreciated their socio-emotional competences as a good basis for successful professional inclusion have oriented themselves to becoming school teachers. It is confirmed that considering empirical data, the development of socio-emotional competencies is an important task (Popkochev, Marulevska, & Topalska (Попкочев, Марулевска & Топалска), 2017) which should be solved during the course of training, but its results are likely to have an indirect character as they refract through the personality. Such a task should be solved with appropriate technological provision and following contemporary settings in pedagogy and psychology in view because of the social situation in which modern education takes place.

REFERENCES

- Andreev, M. (1998). Общество и образование. Педагогическа социология. [Society and education. Pedagogical Sociology. In Bulgarian] София: УИ „Климент Охридски“.
- Гитуни, М. (2003). Емоционалната интелигентност [Emotional Intelligence. In Bulgarian.] София: Просвета.
- Голман, Д. (2000). Емоционална интелигентност [Emotional Intelligence. In Bulgarian.] София: Кибса.
- Левин, В., и сор. (2016). Значение на уменията за трудовата реализация в България: отношението между познавателните и социално-емоционалните умения и реализацията на пазара на труда. [Importance of skills in the labor market in Bulgaria: the relationship between cognitive and social-emotional skills and the realization of the labor market. In Bulgarian] World Bank Report. Retrived at August 16, 2018 from <http://documents.worldbank.org/curated/en/346341467997284649/pdf/102627-WP-P156890-Box394840B-PUBLIC-BULGARIAN-Web-BG.pdf>
- Мерлеведе, П., Бриду, Д., & Вандам, Р. (2005). 7 стъпки към емоционалната интелигентност [7 Steps to Emotional Intelligence. In Bulgarian] София: ИК “Класика и стил”.
- Петрова, Д. (2010). Общуването между ученици и учители: психологически аспекти [Teacher-Student communication: psychological aspects. In Bulgarian.] Годишник на Софийския университет „Св. Климент Охридски“ (121 - 139), Философски факултет. Книга Психология. Том 100.
- Попкочев, Т., Марулевска, К., & Топалска, Р. (2017). Диагностика на социо-емоционалните компетенции при учители и студенти-педагози [Diagnostics of Socio-emotional Competences in Teachers and Students-Pedagogues. In Bulgarian.] International Journal Knowledge. Knowledge in Practice 20(2), 811-816.
- Тоцева, Я. (2013). Мотивацията на учителите за работа в мултикултурна среда. [Teachers' motivation to work in a multicultural environment. In : Motivation in Teachers' Work. In Bulgarian] In Proceeding book from conferences Motivation of teachers in their work (pp: 65 - 77), Varna, Bulgaria.
- Wood, R. & H. Tolley (2007). Професионални тестове за емоционалната интелигентност [Professional Tests for Emotional Intelligence. In Bulgarian.] София: Локус.
- Жекова, С. (1984). Психология на учителя [Teacher's Psychology. In Bulgarian.] София: ДИ „Народна просвета“.

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