



EMOTIONAL INTELLIGENCE OF TEACHERS AND THEIR OPENNESS TO NEW EXPERIENCES

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Abstract. The professional functioning of a teacher, their pedagogical effectiveness and the educational success of students largely depend on their emotional intelligence. Hence, in shaping the behaviour of students and young people, and especially in dealing with problems, an important role is played by the teacher's way of experiencing the world and their openness to new experiences. The ability to effectively manage emotions prevents excessive levels of stress and, moreover, helps to deal with complicated situations during the lesson without negatively affecting the students in general. Recognizing the importance of this issue, also in the context of this journal, I undertook empirical research. I tried to determine to what extent openness to new experiences can explain the phenomenon of teachers' emotional intelligence. The obtained results indicate that this is a positive relationship. The more teachers are open to new experiences, their adaptability increases accordingly, the ability to learn the value and importance of stimuli and events, mobilizing them to think and act as well as express their emotions.

INTELIGENCJA EMOCJONALNA NAUCZYCIELI A ICH OTWARTOŚĆ NA NOWE DOŚWIADCZENIA

Słowa kluczowe: nauczyciel, inteligencja emocjonalna, otwartość na doświadczenia

Streszczenie. Funkcjonowanie zawodowe nauczyciela oraz jego efektywność pedagogiczna i sukcesy edukacyjne uczniów w znacznym stopniu zależą od jego inteligencji emocjonalnej. Stąd w kształtowaniu zachowań uczniów i młodzieży, a szczególnie w radzeniu sobie z problemami, ważną rolę odgrywa sposób przeżywania przez nauczyciela świata i jego otwartość na nowe doświadczenia.

Umiejętność skutecznego zarządzania emocjami zapobiega bowiem nadmieremu poziomowi stresu i pomaga radzić sobie ze skomplikowanymi sytuacjami w trakcie lekcji, bez negatywnego wpływu na uczniów. Uznając znaczenie tej problematyki, również w kontekście niniejszej publikacji, podjęłam badania empiryczne. Dążyłam do określenia, w jakim stopniu otwartość na nowe doświadczenia pozwala wyjaśnić fenomen inteligencji emocjonalnej nauczycieli. Uzyskane wyniki wskazują, że jest to zależność dodatnia. Im bardziej nauczyciele są otwarci na nowe doświadczenie, tym bardziej wzrasta ich zdolność adaptacyjna, umiejętność poznawania wartości i ważności bodźców oraz wydarzeń, mobilizująca do myślenia i działania, a także wyrażania swych emocji.

Introduction

A teacher, entering into various social relationships with their pupils, their parents, and other teachers, must demonstrate both high professional competencies and the ability to use emotions in solving various didactic and educational problems (Przybylska, 2006; Grabowiec, 2013; Twardowska-Staszek, Alber-ska, 2020). Emotional intelligence plays a significant role in social situations involving emotions. It fulfils a regulatory and adaptive function, thereby enabling the optimal use of personal resources. Moreover, it minimizes the negative impact of too strong emotions and generates positive emotions with a mobilizing direction, supports thinking processes and problem-solving, and helps in setting priorities (cf. Wosik-Kawala, 2013; Zubrzycka-Maciąg, Kirenko, 2015; Biernacka, 2017, p. 75).

According to the creators of the concept of emotional intelligence, P. Salovey and J. Mayer (1990), emotions are reactions that direct the behaviour of an individual, serving simultaneously as information helping them achieve their goals. Emotions consist of three components: 1) Cognitive-experiential, encompassing thoughts and awareness of emotional states, i.e., feelings; 2) Behavioural-expressive, encompassing speech, body movements, facial expressions, body posture, and gestures, i.e., visible signs of emotions; 3) Physiological-biochemical, encompassing physical states, reflected in brain activity, heart rate, changes in skin conductivity, and hormone levels. Phenomena within the scope of the cognitive-experiential and physiological-biochemical components are usually not observable from the outside (Salovey, Mayer, 1999, p. 34). Thus, emotions on the one hand serve as a motivator, enabling effective social interaction, but they can also be responsible for the subjective distortion of information and deformation of evaluations, especially in a state of strong emotional arousal.

Daniel Goleman (1997; 1999) significantly contributed to the development of the concept of emotional intelligence. Based on his research, he states that emotional intelligence refers to “the ability to recognize our own feelings and the feelings of others, to motivate ourselves, and to manage emotions in ourselves and in our relationships”. He distinguishes two main types of competencies within emotional intelligence – personal and social. Personal competencies include: a) self-awareness: knowing what we feel at a given moment; using these feelings to guide our decision-making process; a realistic assessment of our abilities and a well-founded belief in our capabilities; b) self-regulation: controlling emotions so that instead of hindering our current task, they facilitate it; conscientiousness and the ability to postpone reward for later in order to focus on achieving a set goal; quick recovery from emotional distress. Social competencies include: a) motivation: being guided by our highest preferences in setting and pursuing goals, taking the initiative and striving for self-improvement, and persisting in efforts despite failures, setbacks, and disappointments; b) empathy: sensing other people, being able to look at situations from their perspective, creating and maintaining bonds and understanding with them; b) social skills: good management of emotions in interactions with others, accurate recognition of social situations and networks of connections, maintaining conflict-free relationships with others, and using these skills for leadership, negotiation, conflict resolution, cooperation, and teamwork (Goleman, 1997, p. 440).

Similarly to Goleman’s approach, Jan Strelau views emotional intelligence as a conglomerate of personality traits, motivation, cognitive abilities, and social intelligence. According to him, emotional intelligence is manifested in the following human abilities: knowledge of one’s own experiences, managing emotions, self-motivation, recognizing emotions in others, and establishing and maintaining intimate relationships (Strelau, 2002, p. 69).

Steve Simmons and John C. Simmons (2001) believe that emotional intelligence should form the basis for defining the characteristics of a professional worker. They equate this concept with character, as the traits they identify contribute to a person’s life success. Guided by their indications, one can define the necessary traits of a competent teacher in relation to their social functioning and pedagogical activity. Firstly, emotional energy is necessary, used to satisfy personal needs and desires, which will allow them to face stress, frustration, conflict, and pressure. In turn, a teacher’s resilience to stress should determine the extent to which they succumb to unpleasant feelings that upset their balance, introduce tension, and disrupt their functioning. Necessary for them is

optimism, indicating the degree to which they are inclined to perceive the world in a positive or negative light, and positive self-esteem encompassing a sense of self-worth and self-acceptance, as well as commitment meaning diligence and thoroughness, manifesting in focus on the task and enthusiasm for work, orientation to change. Accompanying these traits must also be courage understood as the readiness to risk, discomfort, and inconvenience to achieve a chosen goal, independence in forming opinions, setting goals, and making decisions. While assertiveness in a teacher's professional functioning becomes essential to respect their own boundaries and those of others, be tolerant and accept a broadly understood diversity, show care for students and school youth – care expressed through understanding, responsibility, being helpful, and open to cooperation (cf. Simmons, Simmons, 2001, pp. 36-240). As noted by Paulina Grabowiec, emotional intelligence enables “[...] individualizing the educational process, taking into account the emotional state, needs, and capabilities of the student. A teacher who intelligently manages their emotions can strengthen this art in students. Among the abilities that make up emotional intelligence, the most important seems to be the way a teacher deals with emotions, especially negative ones. »Emotional wisdom« turns a teacher into a leader” (Grabowiec, 2013, p. 64).

Aleksandra Jaworowska and Anna Matczak, analysing the current state of research, emphasize that emotional intelligence “constitutes the abilities conditioning the use of emotions in problem-solving, especially in social situations” (Jaworowska, Matczak, 2001, p. 5). In educational and caregiving work, it is thus a condition for effective pedagogical action. It means “[...] the ability to read emotional meanings and consider them in reasoning and problem-solving [...]”; which includes: “the ability to accurately perceive, assess, and express emotions; the ability to access or generate feelings when they facilitate thinking; the ability to understand emotions and acquire emotional knowledge; the ability to regulate emotions for the benefit of emotional and intellectual development” (Matczak, Jaworowska, 2006, p. 5). A. Matczak's concept (2001) is the theoretical basis for these empirical studies.

On the other hand, openness to experiences according to Paul T. Costa and Robert R. McCrae (1999) is a dimension describing an individual's tendency to seek and positively value life experiences, tolerance for novelty, and cognitive curiosity. Openness understood in this way includes several components: imagination, including fantasy and creative imagery, aesthetics, feelings, and openness to the emotional states of other people, actions understood as active searches for stimuli, and ideas constituting intellectual curiosity, interests, and

values being the readiness to analyse social, political, and religious values. Open individuals are unconventional, independent in their judgments and opinions, focused on discovering new, unknown things that pose a challenge (Zawadzki et al., 1998, pp. 16-17).

According to Longina Strumska-Cywik, openness is a construct that undergoes change, as “[...] it is reflected in the way of thinking, action strategies, in experienced and expressed emotions, verbal and non-verbal communication. In interpersonal relationships, openness means the courage of being oneself assertively, the ability to manifest one’s true self”. Open individuals are generally identified with people who are friendly, empathetic, communicative, and creative. Openness is thus understood as a readiness to accept new perspectives, ideas, knowledge, thinking, or action strategies, forcing one to go beyond the defined frames and face responsibility, risk, i.e., forcing entrepreneurship (Strumska-Cylwik, 2005, pp. 125, 310).

Therefore, teachers open to new experiences will be characterized by innovation, leading to the search for new ideas from various sources, considering original solutions to existing educational problems. Furthermore, they will propose new initiatives, skilfully adapt to diverse requirements, changing priorities, and adjust their reactions and ways of acting to the dynamic changes in education and social reality, as well as correct their way of perceiving events and respond to them (cf. Goleman, 1999, p. 140).

Methodological assumptions of empirical research

In accordance with the theoretical assumptions, the aim of the undertaken empirical research is to attempt to determine significant relationships between teachers’ emotional intelligence (dependent variable) and openness to new experiences (independent variable). The main research problem was formulated as a question to be resolved: Is there a statistically significant relationship between the emotional intelligence of the teachers surveyed and their openness to new experiences? A working hypothesis was put forward to this research problem, assuming significant positive correlations between these variables. As openness to new experiences develops, the adaptive ability of teachers increases correspondingly, the ability to recognize the value and importance of stimuli and events, mobilizing thinking and action, as well as expressing their emotions.

The diagnosis of emotional intelligence (dependent variable) was made using the Emotional Intelligence Questionnaire INTE (Jaworowska, Matczak, 2001),

consisting of 33 items, of which 13 concern the perception, assessment, and expression of emotions, 10 – regulation of emotions, and 10 – the use of emotions in thinking and action. The individual being assessed rates on a scale from 1 to 5 how much they agree that each statement applies to them (from 1 – “strongly disagree” to 5 – “strongly agree”). Scores are calculated by summing the points obtained for answers to 33 questions. The respondent receives as many points as they marked – however, responses to questions no. 5, 28, and 33 are scored inversely, i.e., for marking the number 1, 5 points are awarded, for 2 – 4 points, for 4 – 2 points, and for 5 – 1 point (3 points are always awarded for marking 3). In all other questions, the respondent receives as many points as indicated using the scale. The minimum score in INTE is 33 points, and the maximum is 165. Then the raw scores should be converted into normalized scores, in this case, stens. Usually, the following categories of result interpretation are assumed: 1-4 sten is a low score, 5-6 sten – an average score, 7-10 sten – a high score.

Meanwhile, teachers’ openness to experiences was diagnosed using one of the scales of the NEO FFI Test by P.T. Costa and R.R. McCrae (Zawadzki, Strelau, Szczepanik, Śliwińska, 1998; Mazurek-Kucharska, 2006), which is used to diagnose personality traits. It includes five scales: neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness. In the studies, only the *openness to experience* scale was analysed, consisting of 12 statements.

In the analyses of the collected empirical material, elements of descriptive and correlational statistics were applied: Spearman’s rank test (R) and Mann-Whitney U test, as well as Pearson’s chi-square test. The study involved 206 teachers from general secondary schools in the Lublin region. The sample selection was purposive-random. The main criterion was the nature of the school and the accessibility of the research area. A total of 198 flawlessly completed questionnaires were qualified for analysis. The study involved 57.1% women and 42.9% men. In terms of age criterion, the groups of respondents were almost equal: aged up to 40 years – 37.4%, 41-50 – 31.8%, and over 50 years of age – 30.8%. The average age of the teachers surveyed was 46.5 years, and they had 21.2 years of experience in the teaching profession. Among the respondents, nearly 2/3 (62.6%) were certified teachers. More often than every fourth was an appointed teacher, and only a few (5.6% and 2.5%) were contract teachers or trainees. The teachers surveyed are experienced educators, with a long professional tenure and high competencies.

Analysis of research results

The emotional intelligence of the teachers surveyed, measured by the INTE, includes the ability to recognize emotions, as well as to use emotions to support thinking and acting. The higher the overall score, the higher the level of emotional intelligence of the educators surveyed. In addition to the overall result, two separate factor scores can be obtained: 1) reflecting the ability to use emotions to support thinking and acting, and 2) indicating the ability to recognize emotions. Based on the sten scale, the average intensity of the overall result of the intelligence of the individuals surveyed was determined, which is $M = 5.67$; *median* 6.0; standard deviation $SD = 2.23$. Thus, the overall result obtained places the intelligence of the studied pedagogues at only average levels. More detailed data is contained in Table 1.

Table 1. The level of emotional intelligence of the examined teachers

Level	Frequency	%
Low level (1-4 sten)	53	26.7
Average level (5-6 sten)	72	36.4
High level (7-10 sten)	73	36.9
Total	198	100.0

Source: Own research.

It should be emphasized that only every third surveyed pedagogue (36.9%) has a high level of emotional intelligence. These are individuals who fully can identify their own emotions and those of others, establish social relationships with students, their parents, and other educators in the school environment, inspire and influence others, work well in a team, and manage conflicts. A similar number of respondents (36.4%) have only an average level of emotional intelligence, which is an important resource for developing social competencies, involving the ability to manage one's emotions and display initiative, fulfil commitments, and adapt to changes. However, as many as one in four surveyed (26.7%) has a serious deficit in this area, having poorly mastered these skills – extremely important in social functioning and fulfilling the professional role of a teacher.

It turns out that women have a higher level of emotional intelligence than men ($p < 0.000$). It was also determined that teachers with greater seniority and

professional experience are better at recognizing and managing emotions in relationships with school youth than other teachers ($p < 0.001$).

Further analyses showed that the level of ability of the teachers surveyed to use emotions to support thinking and acting is characterized by an average of $M = 5.57$; *median* 6.00; standard deviation $SD = 2.09$. This result indicates an average level of the respondents' ability to use emotions to support thinking and acting (Table 2).

Table 2. The level of ability of the examined teachers to utilise emotions to facilitate thinking and action

Level	Frequency	%
Low level (1-4 sten)	73	36.9
Average level (4-6 sten)	55	27.7
High level (7-10 sten)	70	35.4
Total	198	100.0

Source: Own research.

As determined, two groups of respondents are similar in number (respectively: 35.5% and 36.9%), who either show significant gaps in using their own emotions to support thinking and acting, have a deficit of emotional competencies in this area, or are highly capable of using emotions, able to appropriately recognize their own and determine their potential impact on the way of thinking and forms of activity undertaken. Thus, they fully know their strengths and weaknesses, which allows them to believe in themselves and their abilities for effective social functioning. However, more often than every fourth pedagogue (27.7%) has mastered these skills to an average degree – very useful in social functioning, especially in fulfilling the role of an educator.

The level of ability to recognize emotions of the teachers surveyed (factor 2) is characterized by an average of $M = 5.43$; *median* 5.00; standard deviation $SD = 2.17$. The obtained data indicate an average level of competence of the surveyed teachers in recognizing emotions. Detailed data is contained in Table 3.

Table 3. The level of ability of the examined teachers to recognise their own emotions

Level	Frequency	%
Low level (1-4 sten)	68	34.4
Average level (5-6 sten)	67	33.8
High level (7-8 sten)	63	31.8
Total	198	100.0

Source: Own research.

It turns out that three equal-sized groups of surveyed teachers can be identified, characterized by different levels of recognizing their own emotions: 34.4% of respondents are very poor at recognizing their emotions; 33.8% have these skills to an average degree, and 31.8% of respondents have mastered these skills perfectly.

The next element of the analyses was the openness to new experiences of the teachers surveyed. This is one of the most important dimensions of personality. Teachers' openness is characterized on the sten scale by an average of $M = 6.4$; *median* 6.00, standard deviation $SD = 1.63$. These results indicate that openness is slightly above average on the sten scale. Detailed data is included in Table 4.

Table 4. The level of openness to experiences of the examined teachers

Level	Frequency	%
Low level (1-4 sten)	14	7.07
Average level (5-6 sten)	89	44.95
High level (7-10 sten)	95	48.00
Total	198	100.0

Source: Own research.

Every other surveyed teacher (48.0%) is distinguished by a high level of openness to new experiences. These individuals are curious about their inner selves and the external world, having a rich inner life. They willingly observe new ideals and unconventional values and experience emotions, both positive and negative, more intensely than closed individuals. The average level of openness characterizes 44.95% of the respondents. Only a few educators (7.07%) are conventional and conservative in their views; their emotional reactions are somewhat subdued.

From the statistical analyses conducted, it emerges that the gender of the respondents differentiates their openness to new experiences ($p < 0.021$). Women are more open to new experiences than men. With the increasing age of the teachers surveyed ($p < 0.009$) and longer length of service ($p < 0.000$), educators' openness to new experiences increases, they become more creative and decidedly less conservative. Further analyses show that the level of professional advancement of the teachers surveyed also differentiates their openness to new experiences ($p < 0.003$). Appointed educators are more open to new experiences than others.

After diagnosing the emotional intelligence of the surveyed teachers and their openness to new experiences, the next step in the research procedure is to determine the relationship between the variables studied and thus resolve the main research problem and verify the working hypothesis (Table 5).

Table 5. Correlations between the emotional intelligence of the examined individuals and their openness to new experiences

Emotional Intelligence of the Subjects	Openness to New Experiences			
	<i>N</i>	<i>R-Spearman</i>	<i>t(N-2)</i>	<i>p</i>
Overall Score of Emotional Intelligence	198	0.185	2.630	0.009
Factor 1	198	0.158	2.236	0.026
Factor 2	198	0.156	2.204	0.029

Source: Own research.

Based on the obtained data, it can be stated that there is a statistically significant positive correlation between the overall score of emotional intelligence of the surveyed teachers and their openness to new experiences ($p < 0.009$). As teachers' openness to new experiences increases, showing creative and innovative attitudes, their level of proper perception, assessment, and expression of emotions, as well as their control and regulation, increases. It was also found that there are statistically significant relationships between the analysed factors of teachers' emotional intelligence and their openness to new experiences. It turns out that the more teachers demonstrate their openness to new tasks, show initiative, and desire to enrich their experiences, showing sensitivity to beauty, both in art and nature, the greater their ability to perceive, assess, and expressively express their emotions ($p < 0.026$) and use them in thinking and acting ($p < 0.029$), becoming more effective in their educational and pedagogical activities.

Conclusions

The conducted research demonstrated significant relationships between the emotional intelligence of the surveyed teachers and their openness to new experiences. Thus, the working hypothesis was positively verified. As determined, only every third educator stands out with a high level of emotional intelligence, facilitating work with students, forming good social relationships, understanding students' emotions, providing the ability to direct the emotions of their charges – especially in crisis situations – and control them, as well as anticipate and properly assess the problematic situation of the pupil (cf. Przybylska, 2006). As the research showed, teachers are more capable of using emotions to support thinking and acting than recognizing their own emotions. These competencies are possessed to an average degree by a similar percentage of respondents. However, more often than every fourth pedagogue is unable to cope with their own emotions, inadequately reacts to difficult situations, showing great nervousness, lack of respect for the individuality of students, and manifests pessimism, unable to build relationships based on honesty and trust. It is possible to assert that a lack of emotional competencies, i.e., a lack of awareness of one's own and others' emotions, constitutes an obstacle to being a good teacher (cf. Grabowiec, 2013). It should be emphasized that every second educator shows a great openness to new experiences, is creative, and ready to take on new challenges and acquire further professional experiences. Creative individuals, who believe in their creative abilities, value such traits as innovativeness and have a higher tolerance for ambiguity. Openness also characterizes almost half of the respondents to an average degree. Only a few individuals maintain conservative attitudes, fear changes. Adhering to established procedures and schedules, they prefer a “tried and true” familiarity with tradition. They can be considered closed to experiences.

The analyses conducted showed that with the increase in educators' openness to new experiences, their creativity, nonconformism, and propensity to take risks and undertake new challenges, there is an accompanying increase in emotional intelligence, manifesting in coping with their own emotions – especially in difficult situations, evoking positive emotions and moods in students, stimulating independent action. Thus, teachers are better able to control the educational situation, build trust, and effectively support students in dealing with problems.

The presented research results indicate a significant deficit in the emotional competencies of the surveyed teachers and quite a high openness to new experiences. Therefore, it becomes appropriate to include elements of education in emotional and social competencies in the academic training programs of future teachers and to address this issue in the professional development of those already working in this profession in various training forms. The capital possessed by teachers – related to their openness to new experiences, creative and innovative attitudes – should favour the development of their emotional intelligence.

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