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Creative attitude and understanding of emotions by artistically-gifted students

Streszczenie:

Celem badań było określenie wzajemnych zależności pomiędzy postawą twórczą a rozumieniem emocji przez uczniów uzdolnionych plastycznie. W badaniach posłużono się Kwestionariuszem Twórczego Zachowania (KANH) S. Popka oraz Testem Rozumienia Emocji (TRE) A. Matczak, J. Piekarskiej. Badania empiryczne przeprowadzono w szkołach plastycznych na terenie Polski. Objęły one 271 osób (dziewcząt i chłopców) w wieku 15-18 lat. Na podstawie uzyskanych wyników badań stwierdzono, że istnieją zależności pomiędzy postawą twórczą a rozumieniem emocji w badanej grupie uczniów. Im wyższy poziom postawy twórczej oraz nonkonformizmu i zachowań heurystycznych, tym większa zdolność rozumienia emocji przez uczniów uzdolnionych plastycznie.

Słowa kluczowe:

postawa twórcza, postawa odtwórcza, rozumienie emocji, inteligencja emocjonalna

Abstract:

The aim of the study was to determine the relationship between creative attitude and the understanding of emotions by artistically-gifted students. The study used the Creative Behaviour Questionnaire (KANH) by S. Popek and the Emotion Understanding Test (EUT) by A. Matczak and J. Piekarska. The empirical research was conducted in art schools in Poland. It included 271 people (girls and boys) of 15-18 years of age. Based on the results that were obtained it was concluded that there are dependencies between creative attitude and the understanding of emotions in the group of students in the study. The higher the level of the creative attitude and non-conformist and heuristic behaviors, the greater the ability the artistically-gifted students had to understand emotions.

Keywords:

creative attitude, reconstructive attitude, understanding emotions, emotional intelligence

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Introduction

The subject of the research undertaken as part of this study was to determine the functioning of artistically-gifted students taking into account selected personality and emotional aspects.

Abilities are properties which manifest themselves in the activity of an individual and also decide about the achievement of the goals pursued by that individual (Popek, 1996; 2001; 2010; Sękowski, 2004). Traditional models of abilities narrow these properties down to the cognitive sphere. Spearman in the two-factor theory of abilities assumes that the effectiveness of an individual depends on the level of overall intellectual capacity and special abilities (Chruszczewski, 2009). Contemporary models of capabilities present them in a multidimensional way, taking into account the importance of personality and environment for their development (Limont, 2005; Sękowski, 2004). Abilities are complex properties and should be recognized systematically, in interaction with the social environment (Popek, 1996; 2003; 2010). There are models highlighting the importance of motivation for the development of abilities (Renzulli, 1978; Tokarz, 2005), specific abilities, and creative abilities (Piirto, 1999; Tannenbaum, 2003; Ziegler, Heller, 2000), emphasizing the role of socio-emotional factors (Popek, 2001 2010, 2015). Concepts of development treat abilities as predictors which, stimulated by environmental influences, may develop into talent (Gagnè, 2005; Ziegler, Heller, 2000). The literature also refers to actual abilities (Leontiew, 1971,Tiepłow, 1971 in: Limont, 2008) and abilities that manifest themselves in a particular field of activity (Ziegler, Heller, 2000). One can, therefore, speak of mathematical, literary, musical or artistic abilities (Chruszczewski, 2009, Limont, 2005; Popek, 1996).

Special talents and intellectual abilities are characterized by diverse development dynamics. Abilities, in contrast to overall intelligence, reveal themselves in the early stages of development and are characterized by an individual rhythm, without being subject to specific phases of development (Popek, 2001; Popek, Bernacka, 2008; Popek, 2010).

Artistic talents, which are the subject of analysis in this study, "are complex and multi-layered. These are very complex abilities conditioned not only by cognitive, but also emotional and motivational determinants of personality "(R.Popek, 1998, p.163). Artistic talents were referred to the intellectual sphere (Galton, 1969 Kerschensteiner, 1905, Manuel, 1919 ; Meumann 1907; Szuman 1927 in: R. Popek, 1998). R. Popek believes that they should not be narrowed down to only the intellectual dimension because, due to social and personal conditioning, they are case-specific (Popek, 2010).

According to contemporary researchers, the analysis of artistic talents should go beyond the intellectual realm and focus on emotionality, motivation and intuition (Chruszczewski, 2009; R. Popek, 1998). In addition to the intellectual sphere, the emotional sphere,

which is often characterized by a certain level of uniqueness and specificity, is also a component of artistic talents. According to Lombroso (1987), the works of famous artists manifest their emotionality. He claimed that works devoid of realism are a sign of insanity and disease. The critics of the theory say that the disorders of prominent people are of an apparent nature and can be combined with typical personality characteristics of gifted individuals, such as sensitivity, irritability and emotional instability, abstract thinking, spontaneity, and neuroticism (Babcock, 1985; Jacobson, 1912, 1926; Kretschmer 1938 in: R. Popek, 1998; Strzałecki, 1969). According to S. Popek, the structure of artistic talents consists of: perceptual sensitivity, visual imagination, artistic thinking or aesthetic intelligence associated with analysis, synthesis, processing and creation of new visual information, emotional sensitivity in the process of perception and emotional expression, and personality factors, which influence self-steering and creative activation, especially under unfavorable conditions (Popek, 2001, p. 146).

A creative individual can perceive differences between needs and the possibilities of satisfying them and can organize activity by making significant changes in the external environment as well as in their own behavior (Strzałecki, 1969).Contemporary research on the personality of individuals with a high level of creativity shows that they are characterized by the need for acceptance and a readiness for changes (Mróz, 2008).The non-mediocrity of a creative individual is not only associated with intellectual capacities, but includes the affective sphere, temperamental characteristics, motivation and relationships with other people (Nęcka, 2001; Popek, 2001). Creative skills, on the other hand, are the properties that allow the person to solve problems in a new, original and valuable way (Nęcka, 2001). Today, researchers lean towards the view that the level of creative ability depends on special abilities (Chruszczewski, 2009, Limont, 1994; Matczak, 1994; Popek, 2001).

Today, many authors use the term creative attitude. This term is used interchangeably with creative activity, inventiveness and personal creativity (Kielar, 1981 in: Turska, 1994). Nosal defines the "creative attitude as some kind of a personality "norm" expressing active and non-tendentious attitude to the divergence of information" (Nosal, 1992, p. 134). Creative attitude is also recognized as an active and engaged attitude towards oneself and the world (Trojanowska – Kaczmarska, 1971; Wojnar, 1976), the impact on other people and reality (Gołaszewska, 1977), and continuous readiness and openness to new experiences (Kaczyńska – Grzywak, 1988). Modern scholars also point out the need to distinguish between the notions of creative attitude and creation. Creative attitude is closer in meaning to the concept of individual creativity and signifies the potential to create now or in the future. Creativity refers to a person, whereas the element of creation is attributed to an individual as well as to their output (Karwowski, 2009).

Creativity is a personality trait; it is the attitude of a creative person. Creation, whether outstanding or ordinary in character, is the basis for creativity (Szmidt, 2015). "Creation is a concept which refers to a social phenomenon, creativity – an individual trait. Creation embraces the creating person together with their output and the social reception of the work. When it comes to creativity, it is rather the potential to create something in the future, a kind of a promise, which may, but doesn't have to be fulfilled" (Karwowski, 2009, p. 17).

According to Popek, creative attitude consists of the cognitive and characterological sphere, which allows the realization of the intellectual potential of an individual. "Effective implementation of cognitive abilities is only possible in cooperation with other personality traits" (Popek, 2000, p. 24).

The theoretical basis of the empirical research undertaken in this study is the Interactive Model of Development of Abilities by Stanislaw Popek (2001; 2010; 2015). Abilities are recognized holistically, and their individual elements are interwoven. Popek lists cognitive, emotional, volitional-motivational properties, creative activity and the role of environmental factors that play an important role in identifying, activating and developing capabilities (Popek, 2001). Various aspects of abilities manifest mutual dependencies while retaining their inherent values. The development of specific mental functions in individuals is case-specific. This is connected with the presence of specific and diverse configurations between elementary and complex properties (Popek, 2010). As the author writes: "Every individual has slightly different needs for stimulation, both regarding its strength and nature of incentives" (Popek, 2001, p. 118). The environment can stimulate or inhibit the development of an individual (Popek, 2001). In this model, specific components of the system are dynamic and multilaterally coupled.

The emotions of artistically talented people and their significance to creative activity

The analysis of personality characteristics with a particular emphasis on the emotional sphere of artistically talented people is an important issue, both from the perspective of education and upbringing. The analysis of personality and emotional aspects of artistically-gifted students can help channel their creative potential and development as well as optimizing their functioning in the society. Previous studies indicate that gifted individuals are emotionally sensitive, that they are characterized by an intensity of experiences and have an internal locus of control. These factors contribute to their inharmonious development, both in the physical and the emotional realm (Sękowski, 2001). Emotional processes are essential for the formation of experiences of an individual (cf. Pufal-Struzik, 1988). They can both help and hinder the achievement of those objectives (Aronson, Wieczorkowska, 2001). The basic aspects of emotions include the assessment of events

as important or unimportant, and inducing specific behavioral responses. Emotions play a regulatory function. An individual learns how to express and control emotions throughout their whole life (Hilgard, 1972). The awareness of one's own abilities and skills can help gifted students use their full potential (Gardner, 2002). Difficulties in controlling one's own emotional states, impatience, emotional lability and low levels of social skills can lower the achievements of students (Salovey, Sluyter, 1999; Seligman, 1993). Awareness of their own emotions and competences may not only facilitate the realization of plans, but also favorably affect the development of satisfactory interpersonal relationships and help overcome various difficulties (Przybylska, 2008). For this reason, the subject of the empirical research in this study is to determine the ability of artistically-gifted students to understand emotions.

The study is based on the concept put forward by Peter Salovey and John D. Mayer (Mayer and Salovey, 1997; Mayer, Salovey and Caruso, 2004; Salovey and Mayer, 1990). According to the authors, in this concept the ability to understand emotions is the component of emotional intelligence, understood as "a set of capabilities for processing emotional information (supplied by emotions or relating to emotions)" (in: Matczak, Piekarska, 2011, p.5). These capabilities are different from rational intelligence and allow the proper perception and evaluation of one's own and other people's emotions, expressing them adequately, effectively regulating them and determining the adaptability of an individual to the environment (Matczak, Piekarska, 2011). In the structure of emotional intelligence, the authors mention the following: ability to perceive, evaluate and express emotions, ability to use emotions in order to support the process of thinking, ability to understand and analyze emotions and use emotional knowledge and reflective emotion regulation.

The abilities from the third group are the subject of this study. These include, among others, the ability to label emotions. In the first place this refers to basic emotions, such as joy, fear and sadness. Then, thanks to the development of language skills, the ability comes to label related emotions. What comes next in this group is the ability to understand the situational context of emotions. An individual can determine the causes and consequences of specific emotions. Another ability is about understanding complex emotions. Thanks to this a person understands conflicting emotions. Another capability belonging to the group being discussed is the ability to understand and predict changes in emotions. As a result, an individual can combine excitement with a specific social situation and interpersonal relations (Matczak, Piekarska and 2011, Maruszewski, Ścigała, 1998; Mayer and Salovey, 1997). The ability to understand and analyze emotions, as well as to appropriately use emotional knowledge, are the basis for the development of the ability of reflective regulation of emotions. Thanks to the fact that an individual under-

stands emotions and can predict them, depending on the situation, they can control their own emotional states, induce them for a specific purpose, or weaken and ignore them. This applies both to the impact on their own and others people's emotions (Matczak, Piekarska, 2011). The basis of conscious regulation of emotions is knowledge about emotions. "Emotional knowledge is for emotional intelligence the material on which it operates" (Matczak, Piekarska, 2011, p. 9). The knowledge of emotions applies to the knowledge of labeling emotions, expressing one's own emotions and other people's emotions through gestures, facial expressions, pantomimics, intonation and thoughts, feelings, physiological states regarding the impact of emotions on the efficiency of actions, knowledge of social expectations related to the disclosure of emotions, knowledge of the causes of emotions and their dynamics. Determinants of the ability to understand emotions and emotional knowledge are emotional experiences whose sources lie in social and task-related relations, in contact with art. The more often an individual is involved in a variety of emotional situations, the easier it is for them to develop emotional intelligence. Another important factor for the development of the ability to understand emotions is self-reflection, which can be shaped in a child from an early age by their parents (Matczak, Piekarska, 2011). Undoubtedly, the ability to control their own emotional states, their awareness and ease of expression make it easier to establish satisfactory relationships with other people (Przybylska, 2008). Previous studies indicate that the higher the level of emotional intelligence, the greater the level of contentment and life satisfaction, while the smaller the problems with maintaining and improving relationships of a social nature (Mayer, Roberts, Barsade, 2008). It turns out that a high level of emotional intelligence correlates positively with agreeableness, extroversion, and openness to experience, but negatively with neuroticism (Sjöberg, Littorin, 2003) and Machiavellianism. In addition, emotional intelligence correlates positively with creative attitude, creative skills and divergent thinking (Sjöberg, 2001). In relation to the understanding of emotions, it turns out that they correlate positively with some temperamental traits, such as alertness and sensory sensitivity and declared satisfaction with life (Matczak, Piekarska, 2011).

The ability to properly manage one's own emotions may therefore be important in supporting the processes of thinking and the development of talents. A number of studies show that abilities and talents are not enough to ensure good results and overall success (Borzym, 1983; Dyrda, 2000; Ekiert-Grabowska, 1994; Rimm, 1994). What plays an important role here are socio-emotional factors, which is confirmed by the research conducted in this respect (Rimm, 1994; Seligman, 1993; Przybylska, 2008). In the literature, one can often read about the positive role of emotions in stimulating thinking and creative activity (Csikszentmihalyi, 1996). "Emotions not only affect the course of the creative process, but also form an important part of it" (Nęcka, 2003, p.77).

According to Teresa Amabile (1983, 1996), man's creative potential relies on three basic factors: specific talent, creative capacity and autonomous motivation, which is associated with the ability to take action merely for the satisfaction that results from the accomplishment of the task. The author assumes that creative achievement depends on the interaction of all the three components. According to Teresa Amabile, creative activity can be motivated by positive emotions, such as pleasure, an inclination to play or curiosity, and not by external rewards (Amabile, 1996). Emotions can, therefore, affect the course of the creative process and they are an inherent component of it (Nęcka, 2003).

Materials and Methods

The research goal of this study was to determine the direction and the strength of the relationship between creative attitude and the abilities of artistically-talented young people to understand emotions. The theoretical analyses presented above and the reports of the studies that were presented indicate the existence of such relationships.

With reference to theoretical considerations and in accordance with the presented research goal of this paper, the following research questions were formulated:

1. Are there correlations between creative attitude and reconstructive attitude and the abilities of artistically-gifted students to understand emotions?
2. Are there correlations between the dimensions of creative attitude and the ability of artistically-gifted students to understand emotions?

The following hypotheses were offered alongside the presented research questions:

Hypothesis 1. I suppose that there are correlations between creative and reactive attitude and abilities to understand emotions.

Hypothesis 2. I suppose that there are correlations between the dimensions of creative attitude and abilities to understand emotions.

The following research tools were used:

The Creative Behaviour Questionnaire KANH – I (S.Popek, 2000). This is an original tool. It is used to analyze creative behavior in the process of learning and actions, which the author describes as the creative attitude. It is used to study youth from 12,6 years of age and students. It can be used in both individual and group studies. KANH consists of 60 statements in the form of declarative sentences. It contains four subscales: Conformism (C), Non-conformism (N), Algorithmic behaviour (A), Heuristic behaviours (H). C + A measure reconstructive behaviours and N + H measure creative behaviours. The reliability for the scale of conformism – nonconformism amounts to 0.87 and in the

case of algorithmic-heuristic behaviours 0.83. The accuracy is within the range of 0.40-0.70 (Popek, 2000).

The Emotion Understanding Test (A. Matczak, J. Piekarska, 2011) is an original tool. It is used to measure the ability to understand emotions in accordance with the basic premise that knowledge about emotions is the basis and at the same time the result of the ability to understand emotions. The components of knowledge about emotions included in the EUT are: knowledge of the labels for emotions, knowledge about the relationship between emotions, knowledge of the changes taking place in the course of the intensification of emotions and knowledge about the sources of emotion. The Emotion Understanding Test consists of 30 tasks, which are grouped into five subtests. In each section there are six tasks. Each of them is a closed task. The coefficients of reliability of the test exceed the value of 0.80. The coefficients of absolute stability of the test are high and are in the range of 0.84-0.88. Factorial weights of individual parts of EUT fall within the range of 0.58-0.62.The results of the factor analyses confirmed that EUT measures one ability. It is reasonable in this case to calculate the overall result.

Procedure

The study included in its scope 271 students of middle and high art schools in Poland (Lublin, Rzeszow, Kielce, Zamosc, Krosno Czestochowa, Lodz, Nałęczów, Zduńska Wola) aged 15-18 years. The choice of the test group was deliberate. In the group of people in the study were 232 girls and 39 boys. The research was anonymous. Both students and parents agreed to taking part in the study.

Results

Based on the results obtained, the level of the creative attitude of individual dimensions of creative attitude and understanding of emotions in the group of artistically gifted students being studied was determined.

Table 1. The level of creative attitude in the group of artistically-gifted students (own work)

The level of creative attitude (N + H)	Students from art schools	
	N	%
low	74	27.31
average	106	39.11
high	91	33.58
Overall	271	100.00

In the group being studied, more than 33% of students achieved high scores and 39.11% had average results regarding the level of creative attitude. The smallest number (27.31%) show a low level of creative attitude.

Table 2. The level of reconstructive attitude (A + C) in the study group of artistically gifted students (own work)

The level of reconstructive attitude (A+C)	Students from art schools	
	N	%
low	77	28.41
average	123	45.39
high	71	26.20
Overall	271	100.00

In the analyzed group of students, over 45% achieved average results regarding reconstructive attitude, 28.41% achieved low results while 26.20% had high results.

Table 3. The level of non-conformism (N) in the study group of artistically-gifted students (own work)

The level of non-conformism (N)	Students from art schools	
	N	%
low	130	47.97
average	69	25.46
high	72	26.57
Overall	271	100.00

On a scale of non-conformism, artistically-gifted students achieved low results in more than 47% of cases and high results in 26.57% of cases . 25.46% of the students are characterized by an average level of non-conformism.

Table 4. The level of conformism (C) in the study group of artistically-gifted students (own work)

Level of conformism (C)	Students from art schools	
	N	%
low	48	17.71
average	135	49.82
high	88	32.47
Overall	271	100.00

In the group of students, almost half (49.82%) achieved average results on the conformism scale,32.47% had high results and 17.71% had low results.

Table 5. The level of algorithmic behaviors (A) in the study group of artistically-gifted students

The level of algorithmic behaviors (A)	Students from art schools	
	N	%
low	105	38.74
average	104	38.38
high	62	22.88
Overall	271	100.00

More than 38% of students are characterized by low and average level of algorithmic behaviors. In contrast, only 22. 88% have high results in terms of this property.

Table 6. The level of heuristic behaviors (H) in the study group of artistically gifted students (own work)

The level of heuristic behaviors (H)	Students from art schools	
	N	%
low	61	22.51
average	85	31.37
high	125	46.12
Overall	271	100.00

In the group of students, over 46.12% are characterized by high levels of heuristic behaviors, 31.37% were average, while low results were achieved by 22.51% of respondents.

Based on the results obtained, one can conclude that students of art schools are characterized by an average and high level of creative attitude and high and average levels of heuristic behaviors. They represent the level of reconstructive attitude and algorithmic behaviors to a lesser extent.

Table 7. The level of understanding of emotions (EUT) in the study group of artistically gifted students (own work)

The level of understanding of emotions	Students from art schools	
	N	%
low	63	23.25
average	104	38.38
high	104	38.38
Overall	271	100.00

The artistically-gifted students in the study group are characterized by 38.38% having a high or average level of understanding of emotions. In contrast, only 23.25% show a low level of ability to understand emotions.

The next part of the analysis verified whether there are correlations between creative and reconstructive attitude and abilities to understand emotions, as well as specific dimensions of creative and reconstructive attitudes which, according to Popek, include heuristic behaviors and non-conformism, and algorithmic behaviors and conformism and the ability to understand emotions in the group of people in the study. The results are shown in the following table.

Table 8. Correlations between the dimensions of creative attitude and the overall result of understanding emotions (EUT) by r-Pearson (own work)

Correlations	C (conformism)	N (non-conformism)	A (algorithmic behaviors)	H (heuristic behaviors)	creative attitude (N+H)	reproductive attitude (A+C)
EUT (understanding emotions)	-0.22***	0.18**	-0.16**	0.18**	0.20**	-0.22***

The level of significance: * $p < 0.05$; ** $p < 0.01$, *** $p < 0.001$

The results indicate the existence of mutual, if low, relationships between creative and reproductive attitude and the ability to understand emotions in the group of artistically-gifted students. It turns out that the ability to understand emotions increases with the increase in creative attitude (0.20 **). The higher the level of reconstructive attitude, the lower the ability to understand emotions (-0.22 ***).

There are also dependencies, although weak, between the ability to understand emotions and the various dimensions of creative attitude. The higher the level of understanding emotions, the higher the level of non-conformism (0.18 **). However, together with increasing conformism, the ability to understand emotions (-0.22 ***) in the study group of artistically-gifted students decreases. With regard to the cognitive sphere of creative attitude, it turns out that the higher the level of algorithmic behavior, the smaller the ability to understand emotions (-0.16 **). In contrast, together with increasing heuristic behaviors, the ability to understand emotions in the studied group of students increases (0.18 **).

Discussion

The assumption of the author about the existence of a relationship between creative and reproductive attitude and the ability of artistically-gifted students to understand emotions

as well as between character-related and cognitive dimensions of creative attitude and the ability to understand emotions was confirmed by the results obtained in the study. This is consistent with the existing results of research on the relationship of emotional intelligence with creativity (cf.. Sjöberg, 2001) and creative attitude (Przybylska, 2007). Emotions are important in the process of creative activity (Nęcka, 2003; Popek, 2001.2010, 2015). Emotions can stimulate creative activities (Turner, 1991). In addition, positive emotions facilitate entering into a higher level of abstract conceptual knowledge (Obuchowski, 2004) and contribute to increasing liquidity and flexibility as well as originality of thought. Studies also indicate that negative emotions can limit thought processes that require different levels of generalization (Obuchowski, 2004). However, other studies indicate that even negative emotions, if they are properly targeted and felt, can motivate and encourage creative activity (Ekman and Davidson, 1999). In addition, studies show that emotional intelligence correlates positively with optimism, openness to experience, and emotional involvement, which facilitates creative activities (Goleman, 1997; Salovey and Sluyter, 1999; Schutte et al, Selingman, 1993).The research results can be referred to the belief that the ability to control one's own emotional states and moods can help overcome the obstacles that interfere with creative processes (Przybylska, 2007).

The research results may indicate that creative attitude, which consists of heuristic behaviors and nonconformity and is manifested in cognitive openness, independence and flexibility of and unconventional ways of thinking, may also encourage the development of the ability to understand emotions. The ability to understand and analyze emotions and use emotional knowledge is a key aspect of cognitive emotional intelligence (Matczak, Piekarska, 2011). This fact is confirmed by a positive, although weak, correlation between heuristic bahaviors and the ability to understand the emotions in artistically-gifted students. Therefore, divergent thinking, creative imagination, a high level of reflectivity, independent observation and reconstructive learning, that is, the properties of heuristic behaviors, probably facilitate the formation of the ability to name simple and complex emotions, the perception of the causes and consequences of these emotions and understanding and predicting changes in the range of emotions and the perception of conflicting emotions.

The abilities to understand emotions in the concept by Salovey and Mayer (Mayer and Salovey, 1997; Mayer, Salovey and Caruso, 2004; Salovey and Mayer, 1990) are of a meta-cognitive nature and allow for the understanding of emotions at both the specific and the abstract level. Therefore, a positive correlation between heuristic behaviors and understanding emotions is in this case justified.

The results obtained also point to a positive, although weak, correlation between non-conformism and the ability to understand emotions. It can be assumed that due to the

fact that nonconformist people are characterized by independence, openness, a high level of self-criticism, flexibility, adaptation and lack of deference from others (Aronson, Wilson, Alert, 1997; Popek, 2001; Strzałecki, 1989) they will to a greater extent control their own emotional states, and effectively use them in action and in achieving goals. Non-comformism, perhaps as one of the aspects of creative attitude, helps modify behaviors and adaptability depending on the specific situation. On the other hand, conformism correlates negatively with the ability to understand emotions in the group of students. Thus, adaptive rigidity, dependence, a stereotypical nature, a low level of criticism and intolerance coincide with a low level of ability to understand emotions.

Probably conformist individuals, due to their submissiveness, dependence on others and susceptibility to social influence, often experience frustration, and a lack of criticism contributes to the fact that they less accurately evaluate and predict both their own emotions and the emotions of other people. Together with an increase in algorithmic behaviors, the ability to understand emotions in artistically-gifted students decreases. Therefore convergent thinking, reconstructive imagination and a low level of reflectivity lower the ability to understand emotions. The results obtained in studies confirm the relationship between general cognitive abilities and the ability to understand emotions (cf. Lam and Kirby, 2002).

Based on the results obtained, it can be stated that there are positive though weak correlations between creative attitude and the ability to understand emotions. Both nonconformism and heuristic behaviors accompany the ability to understand emotions in the group of artistically-gifted students. In contrast, reconstructive attitude, non-conformism and algorithmic behaviors co-occur with a low level of understanding of emotions. Przybylska (2007) obtained similar results in research on the relationship of creative attitude with emotional intelligence. Social skills, including the ability to operate in situations of social exposure and assertiveness, also positively correlate with creative attitude (cf. Kuśpit, 2004).

Effective functioning in social situations depends not only on intellectual potential, but also on the ability to understand emotions that are a component of emotional intelligence. The ability to understand emotions and emotional knowledge are the properties that you can nurture and develop in the process of development and education. If students come across situations in which they must respond appropriately in a variety of social situations, they can develop emotional intelligence, including the ability to understand emotions. This is particularly important among artistically-gifted students, due to their emotional sensitivity, irritability and emotional instability, abstract thinking, spontaneity, and neuroticism (Babcock, 1985; Jacobson, 1912, 1926; Kretschmer 1938 in: R. Popek, 1998; Strzałecki, 1969). One should also take into account the fact that creative activity

helps trigger emotions (Przybylska, 2008). Moreover, the research indicates that both social competences and emotional intelligence are predictors of styles of coping with stress in artistically-gifted students (cf.. Kuśpit, 2013). What is important in this case is empathy, tenacity of purpose, the ability to communicate and understand feelings and adaptation to change (Siekańska, 2004). Emotional and social characteristics contribute to the efficiency of learning and achieving success (Konopnicka, 1966; Rimm, 1994; Seligman, 1993). Creative attitudes together with emotional intelligence can decide about school achievement (Karwowski, 2005). Developing the capacity to deal with emotions may help to deal effectively both in interpersonal situations and in achieving personal goals.

Therefore, fostering a creative attitude in artistically gifted students is of paramount importance to the process of their education as it may help to improve their ability to understand emotions. The findings of many studies have shown that creative individuals are characterized by emotional hypersensitivity, tend to suffer from depression and melancholy, are shy and reserved in social relationships, and at the same time – resistant to stress (Popek, 2003). On the other hand, it is undeniable that emotions may enhance or inhibit the creative potential of an individual. Both negative and positive emotions may be conducive to the development of new ideas. However, frequent mood changes and problems with controlling one's emotional states may reduce the motivation to engage in creative activity (Nęcka, 2003). That is why, in the process of education, teachers should develop the ability to help their gifted students to control their emotions . The knowledge and awareness of this issue among parents and teachers may be of key importance to the optimization of the education of artistically talented individuals and may play a part in fostering a creative attitude and teaching them effective methods of handling problems which could stand in the way of their success.

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