The importance of empathy in the development of creativity by design thinking

Znaczenie empatii w rozwoju kreatywności metodą design thinking

Iryna Durkalevych[a]

[a] *Iryna Durkalevych PhD, https://orcid.org/0000-0001-8807-6402*
Basic Studies Centre, Carpathian State College in Krosno

Abstract: The article presents theoretical considerations on the role of empathy in the development of creativity. The analysis of the scientific literature on this topic allows us to conclude that empathy plays an important role in the development of creativity. The issues of learning empathy in early adulthood and methods of enhancing empathic abilities in relation to the process of education, among others, by the method of design thinking, are discussed.
Keywords: empathy, creativity, method, education, design thinking

Abstrakt: W artykule przedstawiono teoretyczne rozważania na temat roli empatii w rozwoju kreatywności. Analiza literatury naukowej z określonej problematyki pozwala wnioskować, że istotną rolę w rozwoju kreatywności odgrywa empatia. Poruszono kwestie uczenia się empatii we wczesnej dorosłości oraz metod pozwalających zwiększać zdolności empatyczne w odniesieniu do procesu edukacji, m. in. metodą design thinking.
Słowa kluczowe: empatia, kreatywność, metoda, edukacja, design thinking

Introduction

Among empathy researchers, such as Konrath, O'Brien and Hsing (2011, p. 180), there is a belief that people today are not as empathic as previous generations. To support this thesis, researchers Konrath, O'Brien, and Hsing (2011, p. 187) cite the results of their own study, which was conducted among American college students between 1979 and 2009, and found that empathy levels had decreased significantly from the 1980s and 1990s. Researchers, on the other hand, have noted an increase in narcissism among college students over the same time period as evidenced by a cross-sectional study conducted by a team of researchers Twenge et al. (2008, p. 875), the results of which showed that narcissism increased across generations in 85 samples of American college students between 1979 and 2006. "Since 1982, NPI scores have increased 0.33 standard deviation. Thus, almost two-thirds of recent college students are

above the mean 1979–1985 narcissism score, a 30% increase." (Twenge i in., 2008, p. 875). Findings cited in a report by the Pew Research Center (2007) showed that the most important goal of young adults ages 18-25 is to get rich. This in turn indicates that young adults are focused on their own interests.

A disturbing phenomenon is the decline of empathy in the workplace, as reported by psychology professors Goleman (2018) and Schwartz (2018) et al. Goleman (2018, p. 19) notes that: "the higher a person's position, the more his or her ability to maintain personal connections decreases." Similarly, Reiss (2019, p. 43) writes: "Research has shown that the level of empathy is inversely proportional to the amount of power held." The findings of Hogeveen, Inzlicht, and Obhi (2013) showed that power interferes with the ability to empathize. Schwartz (2018, p. 110), on the other hand, emphasizes that qualities such as empathy, caring, and concern for the well-being of others "are threatened today by a focus solely

on self-interest, encouraged by a workplace structure based on incentive bonuses." Baron-Cohen (2015, p. 163) speaks of the erosion of empathy worldwide, the cause of which is the health of communities both small (family) and large (nations). As Moscovici (1998, p.85) states: "Mentally ill people show excessive attention to themselves and are unable to take an interest in others and consider their point of view". In conclusion, the compilation of research findings on empathy and related problems is disturbing. It is worth noting that empathy is at the heart of building relationships in both the workplace and personal life. Researchers point out that:

> "Not only ability to emphathize with others essential for cousiling professionals, but empathic individuals fare better in a variety of interpersonal relationships, whether professional, familial, or friendship" (Guzetta, cited in Hatcher et al, 1994, p. 961).

The main purpose of this article is to attempt to draw attention to the need for the development of empathy and creativity in contemporary education, among others by using the method of design thinking.

1. Empathy - one of the components of emotional intelligence

The scientific literature emphasizes that empathy is one of the components of emotional intelligence (see: Brackett, Solovey, 2008; Mayer, Salovey, 1999; Goleman, 2012). In this paper, we refer to Goleman's (2012; 2018) model of emotional intelligence. According to Goleman (2012, p. 81), emotional intelligence consists of a set of special skills that include: the ability to motivate and persevere toward a goal despite setbacks, the ability to control urges and postpone their gratification, regulate mood and not succumb to worries that impair thinking ability, empathize with the moods of others, and view the future optimistically. Goleman (see: 2012; 2018)

treats empathy as both a trait and a skill. Contemporary researchers on the issue of empathy include scholars such as Baron-Cohen (2015), Goleman (2018), Keysers (2020), Reiss (2019), and others. It is worth noting that there is no clear-cut approach to understanding empathy in the scientific literature. According to Baron-Cohen (2015): "empathy is the ability to recognize the thoughts or feelings of another person and to respond to that person's thoughts and feelings with appropriate emotion". Baron-Cohen (2015, p. 32) emphasizes that there are at least two stages of empathy - recognition and response. Each of the mentioned stages, according to Baron-Cohen (2015), is important and if recognition is not followed by a reaction, we cannot talk about empathy. When discussing the problem of empathy, Baron-Cohen (2015) refers to Martin Buber's philosophical approach, according to which human relations can proceed on the level of "I-Thou" or "I-to". Treating human beings in terms of "I-Thou", according to Baron-Cohen (2015), demonstrates the exclusion of empathy. Treating a person objectively ("I-to"), can lead to a loss of the ability to empathize (Baron-Cohena (2015). In contrast, Goleman (2018, p. 16) speaks of three types of empathy:

1. cognitive empathy (the ability to understand the other person's point of view);
2. emotional empathy (the ability to feel what the other person is feeling);
3. empathic concern (the ability to sense what the other person needs from us).

A similar model is encountered by Reiss (2019), who also distinguishes a three-stage model of empathy that includes an emotional aspect (affective empathy), a cognitive aspect (mental empathy), and a motivational aspect of empathic response. Reiss (2019, p. 37) emphasizes that: "Empathy is triggered not only by how we perceive information, but also by how we understand it, how it moves us, and how that affects behavior." According to Reiss (2019), emotional empathy involves feeling what other people feel. Cognitive, on the other hand, includes the primary stage "the ability to become aware that other people think and feel something

different than we do" (2019, p. 38), which in turn leads to the "perspective taking" stage. Empathic concern belongs to the third aspect of empathy and refers to the intrinsic motivation to care about the well-being of another person. In other words, the mechanism of empathy according to Reiss (2019), involves empathy, understanding, and caring. The most convincing model that explains the mechanism of empathy, according to the author of the text, is that of Goleman (2018) and Reiss (2019).

2. The role of empathy in social life

Empathy plays a very important role in interpersonal relationships in both personal and professional lives. "The success of our relationships and careers continually depends on our ability to read other people's emotions and states" (Keysers, 2020, p. 18). According to Rys (2012), empathy determines the quality of interpersonal relationships: it increases cooperative tendencies, constructive ways of resolving conflicts, inhibits aggression, and conditions the emergence of altruistic behavior. Baron-Cohen (2015, p. 165) claims that with the help of empathy it is possible to solve any interpersonal problem such as marital conflict, international conflict, problem at work, misunderstanding between friends, political impasse, family dispute, or conflict with a neighbor. Maruszewski (2015) emphasizes that marital conflicts often arise from a lack of empathy, specifically from decentration in the psychological sense (the ability to look at the other person's needs and desires), when each spouse sees only their own needs and desires. In relation to work, it is important to emphasize that empathy is a necessary condition for professional success. Segal (1997, p. 171) states that: "Empathy arising within a team promotes increased work performance". And, "(...) If we arrive with people who appreciate and care about us, we feel our worth and want to work more, longer, and more creatively" (1997, p. 172). According to Alexander and Sandhal (2017, p. 127): "(...) empathy is one of the most important factors in the success of leaders, entrepreneurs, managers, businessmen.

It reduces abuses of power, enhances the ability to forgive, and greatly increases the sense of unity and social connectedness".

Among empathy researchers Ming Lam, Kolomitro and Alamparambil (2011, p. 162), among others, it is believed that: "Empathic ability is an asset professionally for individuals, such as teachers, physicians and social workers, who work with people." Great importance is attributed by psychologists (see: Reiss, 2019, Davis, 2001) to the role of empathy in teachers. As Tucholska (2009, pp. 91-92) writes: "The teaching profession is a social profession whose overarching goal is to work for the welfare of students through close interpersonal contacts marked by empathy and concern. This ability to empathize with students, according to Reiss (2019, p. 76), fosters a bond based on openness, trust, and respect. Educators who include empathy among the essential skills of educators also write similarly: "Among the skills that are invaluable and extremely desirable in the profession of a teacher (educator) are: assertive communication, defense against manipulation, empathic understanding, dealing with emotions, building a proper self-image, communicating with people, making decisions, achieving social goals, negotiation and persuasion, leading a group, resolving conflicts, dealing with stress, among others" (Michalowski, 2017, p. 509). Rogers (2014, pp. 347-348) emphasizes the role of empathy, including "warm concern for the client" and "empathic understanding of the client's world," as a necessary condition for learning that should be the starting point of the educational process.

3. Can empathy be learned?

Both genetic and social factors play an important role in the development of empathy (see: Baron-Cohen, 2015; Reiss, 2019). Riess (2019), based on an analysis of research findings, argues that genes are responsible for empathy only 10-35%, the rest being a combination of environmental factors and experiences. Numerous foreign researchers including Baron-Cohen (2015), Goleman (2012; 2018); Kohut (1984); Riess (2019), et al. emphasize, the important role of early experiences and parental

educational influences in the development of empathy in children. Baron-Cohen (2015), Kohut (1984), Reiss (2019) argue that the specificity of early childhood experiences is the basis for forming close relationships with others. According to Reiss (2019), empathic role models brought from home have a great impact on the development of empathy, which becomes evident later in a person's life. Matczak and Jaworska (2001) conclude that the upbringing conditions in the family and the support shown in the family influence empathy. Therapists, including Alexander, Sandhal (2017), write similarly, noting that parents have a responsibility to develop empathy because they are the first example of empathy. "Such families, in which children are exposed to physical violence, psychological violence, or sexual abuse, suppress the child's ability to feel empathy" (Alexander, Sandhal, 2017, p. 123). The development of empathy can also be disrupted by overprotective families in which children grow up to be potential narcissists (Alexander, Sandhal, 2017). Reiss (2019) points out that problems with empathy are noticeable during childhood, when children have difficulty interacting with other peers. In contrast, "Children with healthy empathic tendencies and a well-developed ability to take another's perspective tend to communicate better with peers, play more politely in groups, have fewer behavior problems, and are more successful in the future due to their high level of interpersonal skills" (Reiss, 2019, p. 93). Gulin (1994, p. 154) came to similar conclusions, stating that it was the family environment, compared to other variables such as age and gender, that was of primary importance in the course of empathy of the children and adolescents studied.

Can empathy be learned? While there is no clear answer to this question in the research literature, researchers emphasize the important role of training and coaching in increasing empathy (see: Brackett & Salovey, 2008; Ciarrochi, 2008; Ming Lam, Kolomitro, & Alamparambil, 2011, Reiss, 2019). Researcher Reiss (2019) notes the positive effects of empathy training and argues that empathy can be learned. A slightly different position is held by Brackett and Salovey (2008) and (Ming Lam, Kolomitro, and Alamparambil (2011). Ming Lam, Kolomitro, and

Alamparambil (2011), based on an analysis of 29 research papers draw the very cautious conclusion that empathy is trainable with some caveats. "The research findings that we reviewed seem to suggest that it is feasible to enhance one's knowledge about empathy and the skills to "act" empathically with a variety of training methods. Hence, technically, empathy is trainable. However, there is no sound evidence to support the conclusion that training can effectively change people's propensity to behave empathically after training, that is, transfer their learning and change their empathic behaviors in the natural environments." (Ming Lam, Kolomitro, & Alamparambil, 2011, p. 196). Similarly, Brackett and Salovey (2008, p. 133) argue that superficial training programs do not significantly increase emotional intelligence because emotional skills, according to the researchers, are acquired through years of learning. According to Brackett and Salovey (2008), educational programs focused on emotional skills will stimulate emotional intelligence.

Referring to the age of early adulthood, the literature provides examples of empirical work that demonstrates that empathy can be taught to young adults through a variety of activities (see: Hatcher et al., 1994). In modern empathy research, it is emphasized that contemporary education should move toward empathy. Many educators, including Robinson, Aronica (2015), emphasize that education should move toward teaching relationship building and maintenance, especially as it relates to nonverbal communication and empathy (Reiss, 2019). This aspect of teaching, is especially important in today's world because, according to Reiss (2019, p. 63): "increasingly, we are losing the ability to assess another person's emotional state conveyed through eye contact as we choose to interact via text messages, emails, and other forms of digital communication." Researchers (see: Reiss, 2019, p. 112) argue that: "traditional teaching methods based on the acquisition of facts deprive students of the opportunity to acquire the skills necessary to solve actual problems." Ming Lam, Kolomitro, and Alamparambil (2011) suggest that in developing/training empathy, special attention should be paid to the methods, because the wrong choice of methods does not achieve the

desired effects. Among the teaching methods that develop empathy, Reiss (2019) includes: discussion, projects, experiential learning (applicable to adults). An open question in learning according to Ming Lam, Kolomitro, and Alamparambil (2011, p. 197) is the following: "Do we need to focus on all three components (knowledge, affect, and behavior) in order to train people to become more empathetic?" According to the author of this text, the application of design thinking in education can contribute to both empathy (especially its three components: knowledge, affect, and behavior) and creativity.

4. Design thinking. Empathy in design thinking

The design thinking method has gained great interest among both students and academics (see: Durkalevych, 2020; 2021). According to researchers, including Çeviker-Çınar, Mura, and Demirbağ-Kaplan (2017, p. 977), design thinking is an innovative and valued approach in education. The method includes five stages of activities: empathy; problem definition; idea generation; prototyping; testing (see: Durkalevych, 2021). One of the most important stages is the empathy stage, because it is at this stage that an attempt is made to understand the problem from the user's perspective, which in turn influences the process of product creation. To create new and valuable products it is necessary to understand for whom we design/create. As Plattner (2012, p. 1) writes: "To design for your users, you must build empathy with who they are and what is important to them".

The design thinking methodology includes techniques (practical exercises) that foster the development of empathy, for example: "'Assume a beginner's mindset'; 'What? How? Why?'; 'User camera study'. "'Interview (for empathy)', 'Extreme users Analogous empathy'; 'Story share-and-capture'; 'Bodystorming' (see: Plattner, 2012; Waloszek, 2012). One of the best techniques, providing an opportunity to look at a user's problem holistically, is the "Empathy Map". As Plattner (2012, p. 15) writes: "An Empathy Map is one tool to help you synthesize your observations

and draw out unexpected insights." (Plattner, 2012, p. 15). The "Empathy Map" exercise (see: Ingle, 2015), fosters the development of empathy and creativity through an in-depth understanding of the client, their needs, experiences, and expectations. Ingle (2015) compares this process to walking in another person's shoes. "An empathy map is a metaphorical pair of shoes" (Ingle, 2015, p. 65). As an exercise, we symbolically draw in the center of a poster or whiteboard a client whose problem the entire team will be working on. At the top of the board, we write the topic. The rest of the poster/board is divided into sections that have names such as: "Thinking", "Hearing", "Speaking", "Doing", "Seeing", "Feeling". The next step involves each participant trying to "step into the client's shoes" so that they can write real feelings about the client's experience into the diagram (Ingle, 2015).

Table 1. Empathy map (modified from: Ingle, 2015, p. 66)

Hearing	Hello, my name is	Doing
Thinking	....	Feeling
Speaking		Seeing

Questions to answer, according to Plattner, are:

"SAY: What are some quotes and defining words your user said?
DO: What actions and behaviors did you notice?
THINK: What might your user be thinking? What does this tell you about his or her beliefs?
FEEL: What emotions might your subject be feeling?"
(see: Plattner, 2012, p. 15).

During the interview we try to understand what our user says, thinks, feels, does/how he/she behaves. This approach allows for a deeper understanding of the user and their needs. Referring to the above presented three-tiered model of empathy by Goleman (2018) and Reiss (2019), we can state that this

exercise influences the development of each of the aspects: emotional (affective empathy), cognitive (mental empathy) and motivating empathic response.

Above, considerations about empathy and methods to foster the development of empathy were presented. The remainder of this article will focus primarily on the question of the role of empathy in enhancing team creativity, among other things.

In the literature one can find studies that confirm the connection between empathy and creativity. Researchers such as Carlozzi, Bull, and Hurlburt (1995), based on their own research, conclude that empathy is positively related to creativity. As Kleinschmidt states: "Artists and other creative individuals often show an unusually intensive sensitivity to reality" (cited in Meusburger, 2009, p. 132). Similarly, Barron (in Carlozzi, Bull, Hurlburt, 1995, p. 366) argues that creative people are likely to be more sensitive to social stimuli than less creative people. Bull and Montgomery (in Carlozzi, Bull, Hurlburt, 1995, p. 366) point out that an important aspect of "the problem-solving process is social sensitivity, that is, the ability to consciously and correctly identify events in one's environment." In other words, creativity is linked to empathy because problem solving requires empathic abilities.

In researchers' reflections on the importance of intrinsic motivation in the creative process, there is no unambiguity in understanding these connections. Synthesizing selected works on the mentioned issue, Grant and Berry (2011, p. 73) claim that some studies show a relationship between intrinsic motivation and creativity, while others show weak or insignificant links. As Grant and Berry (2011) point out, creativity is not only about producing new ideas, but also valuable ideas. "(...) Creativity is the process of generating ideas that have value" (Robinson, Aronica, 2015, p. 155). Polish scholars write similarly (see: Nęcka, 2003; Szmidt, 2013), claiming that creativity is a person's ability to create products that are new and valuable on a global scale. A valuable product, as defined by Grant and Berry (2011), is one that is useful. Products are useful when they consider the perspective of others (Grant and Berry, 2011, p. 73). Mohrman, Gibson, and Mohrman (2001) take a similar view and have shown that taking the perspective

of others can increase the usefulness of ideas. Grant and Berry (2011) emphasize the connection between prosocial motivation, which involves taking the perspective of others, and intrinsic motivation toward producing ideas that become not only novel but also useful, thus achieving higher levels of creativity. "Prosocial motivation is the desire to expend effort based on a concern for helping or contributing to other people (Grant, 2007)." Grant and Berry (2011, p. 74) came to two important conclusions about the interaction of intrinsic and prosocial motivation on the development of creativity based on the results of their study:

> "First, we identify perspective taking as a key mechanism through which prosocial motivation strengthens the impact of intrinsic motivation on creativity (...). Second, in doing so, we introduce perspective taking as an important influence on creativity, showing how a focus on others can encourage employees to direct their intrinsic motivation toward the generation of creative ideas." (Grant, Berry, 2011, p. 74).

An example of such prosocial motivation is the work of classical music composers (Simonton, after Grant and Berry, 2011, p. 78), who, characterized by high intrinsic motivation to write music, create the most meaningful works. The relationship between empathy and creativity has been noted not only in the field of music (Cross, Laurence and Rabinowitch, 2012), but in the arts in general (Treadaway, 2009) as well as in psychotherapy (Yaniv, 2011). The role of environment, in the broad sense of the word, in the creative process was also pointed out by Csikszentmihalyi (2017), emphasizing that it is the environment that plays an important role in the process of creating something new and whether this new product will be accepted. Similarly, Goldberg (2018, p. 63) writes: "Contrary to popular opinion, the creative process is not a solitary act, even if the creative individual has a solitary temperament and a subjective sense that he or she is working in solitude. It is rooted in and driven by the cultural environment in which it occurs." In summary, the compilation of research

findings sheds light on the understanding of the role of empathy in the creative process, with an emphasis on the role of the social factor, prosocial motivation, among others.

Conclusions

This text synthesizes selected research findings and theories based on which an attempt has been made to explain the importance of empathy in the development of creativity using the method of design thinking. The mentioned method is a valued and widely recognized approach in education (see: Cohen and Mule, 2019; Luka, 2014; Owen, 2017), which, as Schrand (2016) claimed, fosters the achievement of educational goals while developing curiosity and confidence, improving contextual understanding; assumes a global approach to understanding the problem; develops empathy, collaboration, initiative and ethical reflection. The method of design thinking assumes that creating new products is not possible without empathy, i.e. deep understanding of the user's needs. In light of the outlined issues, empathy is considered an important element of cre-

ativity. Empathy, as well as creativity, are among the personal resources that are constantly in demand in the workplace (see: Keysers, 2020; Robinson, 2016; Schwartz, 2018). These resources should be considered not only from an interpersonal perspective, but also from an intrapersonal perspective. Self-awareness of one's resources can influence their development during education as well as result in enhanced career satisfaction.

Moreover, it was noted that despite the growing popularity of programs focused on the development of empathy, there is still an open question regarding effective methods of empathy development. In relation to the outlined problematic, an important task becomes the search for effective methods directed at the development of both empathy and creativity in relation to educational conditions. The design thinking method, which is oriented not only on achieving educational goals, but also on developing personal resources, including empathy and creativity, may play an invaluable role in this process. This article assumes that by incorporating the method of design thinking into the educational process, the development of empathy and creativity of young adults can be positively influenced.

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