

## COLOUR PREFERENCES AND SELF-ACCEPTANCE – CASE STUDIES BASED ON THE ART THERAPY WORKSHOP

### PREFERINȚE DE CULOARE ȘI AUTOACCEPTARE – STUDII DE CAZ BAZATE PE ATELIERUL DE ART-TERAPIE

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*„Of all the judgements you make, none is as important as your own opinion about yourself” – this sentence served as the starting point for the workshop “Me – my portrait. How do you see yourself?” carried out as part of the art therapy elective course in the third year of medical studies at the University of Rzeszów (Poland). The article presents an analysis of the results obtained in the workshop on emotional and expressional creativity, i.e. verbal relations and colourful stories about oneself. Colours are a means of expression and symbolic representation in the visual arts. On the basis of colour preferences, a diagnosis of specific psychological states with regard to the participants’ self-acceptance was made.*

**Keywords:** colour preferences, self-acceptance, art therapy workshop, case study

*„Din toate judecățile pe care le faci, niciuna nu este la fel de importantă ca propria ta părere despre tine” – această axiomă a servit drept punct de plecare pentru atelierul „Eu – portretul meu. Cum te vezi?”, desfășurat ca parte a cursului opțional de terapie prin artă în al treilea an de studii medicale la Universitatea din Rzeszów (Polonia). Articolul prezintă o analiză a rezultatelor obținute în atelierul de creativitate emoțională și expresivă, adică: relații verbale și povești colorate despre sine. Culoarele sunt un mijloc de exprimare și reprezentare simbolică în artele vizuale. Pe baza preferințelor de culoare a fost pus un diagnostic al stărilor psihologice specifice în ceea ce privește acceptarea de sine a participanților.*

**Cuvinte-cheie:** preferințe de culoare, autoacceptare, atelier de art-terapie, studiu de caz

#### Introduction

Colours and their relationship to human functioning are the subject of scientific and non-scientific knowledge. This knowledge is extensive and multifaceted. Opinions related to this issue were presented already by Democritus as well as Euclid, but I. Newton [1] was the first scholar who developed a physical theory of light and colour vision in mathematical terms. On the other hand, Goethe’s considerations related to the mechanism of colour perception were of artistic and subjective nature as he wanted to “...explain the emotional and moral impact of colours” [2 p. 51]. He was the first to categorize the effects of different colour-related impressions on the psyche.

The theories of colour perception suggest that specific colours are perceived in an individual way affected by culture, as proposed e.g., by R. Arnheim [3] and M. Rzepińska [4].

The association between colours and emotions has been shown in studies performed using The Colour Pyramid Test developed by K. W. Schaie and R. Heiss [5], as well as the Colour Tests proposed by M. Lüscher [6]. These showed that colour stimuli may be seen as pleasant or irritating, i.e., in an individual and subjective way. Similarly the Colour Mirror Test and the Colour Perception Test developed by S. Popek apply the principle of preferences.

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### **Colour Perception Test – description of the research tool**

The Colour Perception Test (*Polish: Test Percepcji Kolorów* – TPK) is designed to assess the process of colour recognition (perception) and to determine colour preferences. TPK is based on the theory of colour vision. The test contains 18 colours, and the study participants are asked to rate them in the order of preference. Additionally, an Inventory of Emotions (IE) was developed for the study. As a result of ranking the values of various categories, IE ultimately comprised 62 terms – emotional states arranged in an alphabetic order (e.g. aggression, irritation, love, satisfaction), and the relationship between the colour and the emotional state was scored based on the rating of the colour-emotion correspondence, strong (3 points), moderate (2 points) or weak (1 point).

Based on a number of studies involving the use of TPK, originally carried out in 1995-1996, in a group of 410 individuals, additionally designed to employ IE, it is possible to draw a number of conclusions, e.g., that after 18 years of age there is an increase in the stability of colour-related preferences. Popek argues that colour related preferences to a degree are modified by gender but the differences are not highly statistically significant.

The research findings showed that definitely pleasant associations are evoked in the study participants by such colours as emerald green, (juicy) grass green, lemon yellow and, to some extent, blue, as well as white, navy blue, pink, carmine, yellow and cinnabar red.

There are also some colours that are strongly associated by the respondents with unpleasant emotional states. These include black, grey, ochre brown, dark brown, and to some extent ochre and orange, as well as light green and purple.

Research has shown that colour temperature (warm-cool) is not a determinant for the rating pleasant-unpleasant, as other colour properties such as brightness and saturation come into play here [7].

### **Methodology of the study**

Nearly 30 years after the TPK studies were conducted, I decided to return to this research tool, and to modify it slightly; i.e., the IE was applied only as an auxiliary tool and the study participants did not have to use it. In February 2024, the tool was applied in a pilot study to assess whether and in what way colour preferences had changed in the subsequent generation of Polish people. I decided to carry out the study in a group of third-year students of medicine at the College of Medical Sciences at the University of Rzeszów, who were attending an optional course taught by me in a form of a special subject seminar named Art Therapy. The course is intended as an introduction to art therapy and to selected techniques of working with other people and with oneself, i.e., methods helpful, for instance, in building relationships and in developing creativity. The classes introduce students to art therapy as an auxiliary tool in psychotherapy, e.g., in the form of projective drawings, and provide the opportunity to try out the tool in practice. The course was selected by 36 students and they constitute the study group.

In order to apply TPK, I used a workshop-type activity based on the method proposed by W. Karolak “Me – my portrait. How do you see yourself?” The starting point for the activity was provided by the sentence “of all the judgements you make, none is as important as your own opinion about yourself” [8 p. 126].

The introductory discussion with the students addressed issues expressed by the following sentences. Everyone wants to create a positive image of his person. Many people want to gain the approval of others at all costs. Do we not deceive ourselves while creating our image? Maybe we should sometimes think what our emotions really are. Do we suppress our emotions? What are my emotions/feelings about my body?

Each student received a schematic A4-sized silhouette of a human body, to be filled in with colours and described. The main instruction of the workshop was: Fill in the inside of the figure outline with your positive or negative emotions. These can be emotions that are regularly experienced or spontaneous (appearing now). Express in colour your emotions towards the different body parts.

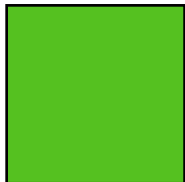
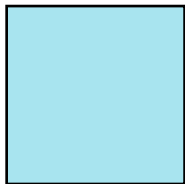
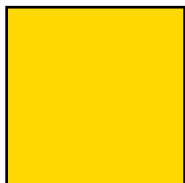
Create a colour legend, explaining what each colour means, what emotion. You can use the Emotion Inventory in identifying your emotions, but it is not mandatory.

### Results of the study

Many scientific sources emphasise that colour is mainly a symbol and not a direct indicator of emotion. Analysis of the silhouettes and explanations provided by the specific authors, future medical professionals, shows that 16 out of 36 individuals accept their bodies for the most part, 17 participants present a half-accepting and half-critical attitude, and the colour-related statements provided by three individuals convey a significantly negative attitude towards the condition of their body and negative emotions corresponding to this fact.

The following table illustrates the results for the colours (green, blue, yellow) which in the original study by S. Popek had evoked the most pleasant associations. It also includes the original statements provided by the study participants about their emotions associated with the colour.

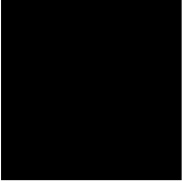
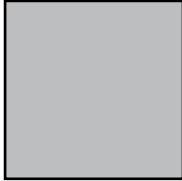



**Table 1.** Research results for green, blue and yellow colours

Colour	Positive emotions	Negative emotions	Neutral emotions
	22 I like it a lot (6), could be better/ nothing to be crazy about/ but I accept it (3), positive (2); 1 response each: happy, satisfied, uneasy, appreciate and like it a lot, respect, tranquillity and kindness, do my best to love, I like my hair but I'd prefer if it was straight; dark eyes, hair and legs are my favourite body parts;	4 I do not like it (2), 1 response each: not crazy about it; they (legs) should be longer; small hands and short fingers	3 ambivalent
	18 OK (4), I like (3), 2 responses each: pretty; happiness and tranquillity, 1 response each: breasts; very pleasing, my attribute (hair); hands, neck, calves, feet; not too bad but I would correct a lot; satisfactory but without exaggeration as I'm still struggling	1 I don't like, but I'm trying to work on those parts (1)	2
	10 Very positive (2), some improvements could be made / I accept but .... (2), 1 response each: I like; tenderness; openness and flexibility; good and it won't be better; I like it moderately	7 No (2), dissatisfaction and anger (2), 1 response each: it's irritating; (cheeks) too round; I don't accept my nose and eyelids, I'm going to have them corrected	1 Neutral, but there's no tragedy

Source: Elaborated by the author

As shown in **Table 1**, green was selected most frequently (29), in the majority of cases (22) as a colour evoking positive emotions such as 'joy'. This is consistent with the symbolism of this colour, which represents the need for self-confidence and assertiveness. It is also associated with human self-preservation instincts and the need for self-defence. The colour blue was selected 21 times, in 18 cases corresponding to positive qualities. This colour represents the need for satisfaction and affection. It symbolises tranquillity and relaxation. The colour yellow, a symbol of optimism and predictions for the future, was selected by 10 participants. Basically, a higher appreciation of this colour means the person is able to handle life situations more vigorously.


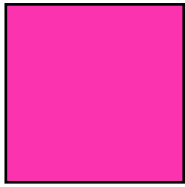

**Table 2.** Research results for the black, grey, brown, orange and purple colours

Colour					
<b>Positive emotions</b>	4 Elegance, aesthetics, happiness (2), 1 response each: strength; I like the hair and eyebrows a lot	1 Acceptance (1)	6	7 OK (2), 1 response each: frustration; uncertainty; OK but could be better; matches the standards; feet (I accept but only mine)	6 1 response each: I like; hair, lips and collar bones; I needed a lot of time to accept, but now I like it; satisfied; too short but the shape is OK (hands); hair, and the fact that its colour can be changed
<b>Negative emotions</b>	3	5 It's not OK (3), 1 response each: it's weaker after the fracture and feels like I don't have it (my hand); I don't like it much	3 1 response each: For fat on the belly, hips, thighs...; one ear because it is different and protruding	4 Negative (2), 1 response each: I like it moderately, too short and stocky (legs); I hate it! (belly and thighs)	5 Negative (2), 1 response each: frustration; eyes are too small; it's hard to accept and love
<b>Neutral emotions</b>	0	1	3 Indifference / neutral (3)	0	2

Source: Elaborated by the author

As regards the colours linked to unpleasant emotions by the previous TPK studies, the present findings did not explicitly confirm such association, as shown in **Table 2**. The colours black, brown, purple and orange were selected with similar frequency, by future doctors, to represent positive and negative qualities. The motivation for selecting a given colour was varied, e.g., a participant painted one ear brown, a colour with negative associations, because this ear is protruding and hard to accept. In the case of the colour orange, the comments related to emotions classified by the respondents as positive, in fact, include such terms as 'frustration' and 'uncertainty', whereas the negative emotions include the strong term 'I hate'. Only the colour grey, linked to neutral emotion and indifference, was used five times to reflect negativity, e.g. in a description of a hand which had been broken and now causes a major discomfort for the student.

**Table 3.** Research results for burgundy, pink and dark blue colours

Colour	Positive emotions	Negative emotions	Neutral emotions
	13 I like it (3), 2 responses each: It's fine; acceptable but could be better; satisfaction (I wouldn't change a thing), 1 response each: shoulders and chest; I like my "pianist's" hands, happiness and joy; energy	8 1 response each: terrible, frustration; uncertainty; the least positive; I don't like it very much; feet! I dislike it; I hate it!; I don't like it	1 Depending on my emotional state
	10 2 responses each: OK; I like it a lot; admiration /I love it; I like it / positive; 1 response each: joy; I like it but I'd like to change it	4 1 response each: poorly; belly because I have gained weight; I don't like it very much but I try to accept it as I cannot change it; it isn't good, but there's no tragedy	0
	4 1 response each: relax; delight; very fine; satisfying body parts	3 1 response each: no; I'm not crazy about it; sadness and anger	0

Source: Elaborated by the author

The current study took into account three other colours, shown in **Table 3**, in addition to the colours investigated by S. Popek. Of special interest for me was the perception of the colour red, because the meaning of this colour is not clear-cut. According to some researchers, red symbolises: happiness (Hevner), love, aggression and hatred (Alschuler), hostility and aggression (Bricks), while Kouwer links it with activity [9]. Indeed, the study by S. Popek and the present findings also reflect the ambivalence of emotions associated with this colour, ranging from acceptance to hatred. Similarly, mixed impressions are evoked by the dark blue colour. In the case of the colour pink, it was selected 10 times to express positive emotions, including the phrase 'I love it'.

### Conclusions

The article presents the analysis of the results of a workshop focusing on creative expression of emotions, i.e., verbal accounts and colourful stories about themselves produced by future doctors. It is not easy to teach a group of 36 medical students because they are distrustful. The students are proud, self-assured, convinced of their mission and the superiority and importance of their future profession. They are also reluctant to cross barriers, to step out of their comfort zone, afraid of being 'ridiculous', which was evident during virtually every workshop.

Colours provide a means of expression and symbolic representation in the visual arts. Based on their colour preferences, the participants assessed their own self-acceptance, and that showed how many, varied emotions reflected by a given colour are in them.

Below, I would like to highlight some descriptions for the selected colours that have been included in the legends on the cards with a schematic human silhouette.

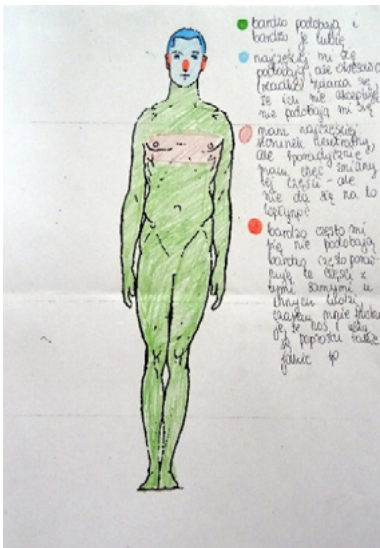
Sample descriptions:

Card 6 – (red) “I don’t like them very often, I tend to compare these parts with the same parts in others, sometimes I’m frustrated by the fact that the nose and ears are just the way they are” (**Picture 1.**)

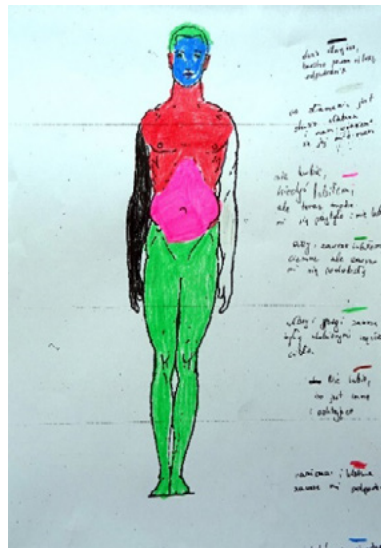
Card 22 – (black) “strong and good” (about one hand), (grey) “weaker after the fracture and it feels like I don’t have it”, (pink) “I used to like it, now I’ve put on some weight so I don’t like it” (**Picture 2.**)

Card 26 – (yellow) “I don’t accept my nose; I am waiting for rhinoplasty to change its shape; I don’t like my eyelids, and I’m planning to have a surgery as well” (**Picture 3.**)

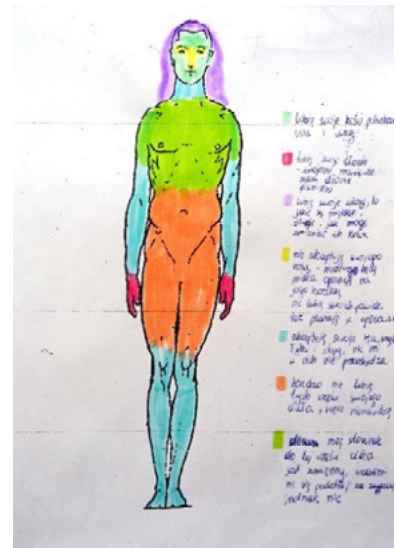
**Picture 1.** Card 6



**Picture 2.** Card 22



**Picture 3.** Card 26

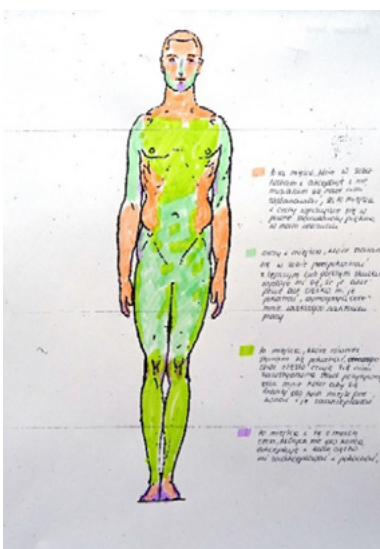


Source: Elaborated by the card authors

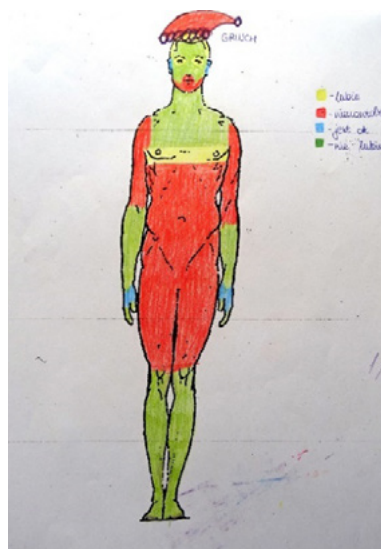
Card 27 – (dark green) “these are places I try to love in myself with better or worse results (...), they require more effort from me” (**Picture 4.**)

There was also one card which showed the author’s lack of acceptance for about 95% of his body, as reflected by the description – Card 31 – (red) ‘I hate’, (green) ‘I dislike’, (yellow) ‘I like’, (blue) ‘it is OK’ (**Picture 5.**)

**Picture 4.** Card 27



**Picture 5.** Card 31



Source: Elaborated by the card authors

Creative visualisation, according to W. Karolak, makes it possible for us to discover the source of inhibitions, fears, and barriers that prevent our development [8]. The effects of this process of bringing to the surface the suppressed, hidden beliefs and replacing them with positive feelings seem amazing, even magical, once we understand and accept ourselves.

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