

Perception of disabled persons held by children and adolescents based on their artwork

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ABSTRACT

Purpose: To evaluate perceptions of disabled persons held by children and adolescents aged 4 to 15 years based on their artwork.

Materials and methods: 192 children's drawings were analyzed. These were submitted from all of Poland, from hospital recreation centers, schools, art studios, sick children, children with special needs, and healthy children in the "My disabled friend" contest.

Results: Most artworks were from children aged from 8 to 10 years old (40.6%), 4 to 7 (33.9%) and 11 to 14 (17.2%). The remaining artwork was completed by adolescents from 15 to 20 years old - 16 (8.3%) persons (including the oldest with

intellectual disabilities). The artworks were divided into four age groups: 4-7, 8-10, 11-14, and over 15. Various techniques were used: torn paper collage, collage, wax scratch, coloring pages, painting using poster paints and watercolors.

Conclusions: The children's drawings show their positive attitude towards people with disabilities. Children are aware of the need to help and support people with disabilities. In the imagination of children, a disabled person can fully participate in society.

Key words: drawings, children, disability

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INTRODUCTION

An increase in the number of disabled persons, which has been observed in recent years in Poland, rises in rank among other social problems and forces us to reflect on how society relates to people with disabilities.

The way of interaction with people with physical and intellectual disabilities has evolved over the centuries, from attitudes of discrimination and extermination, through isolation and segregation to integration; and the position of disabled persons in different societies has depended on the general culture and their quality of life. Social attitudes toward disabled persons are very diverse and are expressed through the following components: cognitive (knowledge and beliefs about people with disabilities), emotional (emotional and evaluative), and behavioral [1]. The literature often refers to two opposing attitudes toward disabled persons: positive (acceptance) or negative (rejection). Larkowa [2] adds a third kind of attitude - ambivalent, regarded by some authors as negative.

Pollowey et al. [3], while analyzing the historical background of the perception of the disabled, had distinguished four paradigms. The first - the Facility-based Paradigm - is characteristic for the first half of the twentieth century, the period in which people with disabilities were placed in institutions and special schools. The second - the Service-based Paradigm - manifested itself in the 1950s as a result of several processes, and the catalyst for change in the approach towards disabled persons was the situation in overcrowded institutions after World War II. The third, the Supports-based Paradigm, assumed that adequate programming could encourage integration, and support had a technical, natural or purely human nature. The fourth paradigm is based on the empowerment and appropriate self-determination of disabled persons [3].

In the contemporary world, the perception of the disabled child takes on special meaning. It should be remembered that the world of people without disabilities is the natural environment in which sooner or later a disabled child needs to find their place. Therefore, it is important nowadays to raise and educate society based on tolerance and integration and not forget that parents and teachers of healthy children have a substantial impact on the success of adapting a disabled child into a peer group. Children imitate the attitudes of their parents, peers and teachers to express their relationship to the environment.

The aim of this study was to evaluate perceptions of disabled persons held by children and adolescents aged 4 to 15 years based on their artwork.

MATERIALS AND METHODS

One hundred ninety-two children's drawings were analyzed. These were submitted from all over Poland, from hospital recreation centers, schools, art studios, sick children, children with special needs, and healthy children for a contest titled: "My disabled friend."

The artworks were made using various techniques: torn paper collage, collage, batik, wax scratch, coloring pages, painting using poster paints and watercolors.

The Ethics Committee at the Medical University of Białystok, Poland, approved the study. Informed consent was obtained from the participants' parents.

RESULTS

Most artworks were from children aged from 8 to 10 years old (40.6%), 4 to 7 (65 - 33.9%) and 11 to 14 (33 - 17.2%). The remaining artwork was completed by adolescents from 15 to 20 years old - 16 (8.3%) persons (including the oldest with intellectual disabilities).

The artworks were divided into four age groups: 4-7, 8-10, 11-14, and over 15. In the 4-7 year-old age group, the most (41) drawings illustrated a disabled friend in a wheelchair, with a cane (16), walking on crutches (9), blind or amblyopic (6). There were seven drawings where two or more disabled friends were depicted. In most cases, the drawings presented the outdoors, a park or a meadow, people were surrounded by flowers, butterflies (17 artworks), birds (5, including a stork), animals (dogs -9, cat, hen - one artwork each), with a smiling sun (18) or a rainbow (1). Disabled and healthy children participated in sports (1 drawing), played football (5) or played at the playground (3). An angel watched over a child in one illustration. Five drawings presented scenes of guiding disabled children in wheelchairs across the street, and five in hospital in the presence of a doctor and nurses.



Drawing 1. Age group 4-7 years



Drawing 2. Age group 4-7 years



Drawing 3. Age group 4-7 years



Drawing 4. Age group 4-7 years

In the 8-10 year-old age group, the most dominating attribute of disability was also a wheelchair (58 artworks), and then crutches (10), a cane (5), a sling (4), and a walking frame (1 artwork). Ten drawings showed a blind or amblyopic person, and five a disabled child holding hands with a healthy person. Nine artworks illustrated disabled persons being assisted while boarding a bus, crossing the road, and entering a store. The disabled protagonists of ten drawings were accompanied by animals, usually dogs (including one weeping); the others included horses, cats, butterflies, birds, and a squirrel. Five drawings had a smiling sun, a rainbow was in three of them, and two had angels watching over the children. The action of most of the drawings took place outdoors, in a park, on a meadow, at a playground, and in a backyard. Children in six artworks played football, and in individual ones they swam, swung on swings, roasted sausages on an open fire, flied kites or participated in

hippotherapy and sporting events. In three drawings, the action took place in hospital, including one where a child lay ill in a bed and a doctor stood beside him. In another one, a child had an IV drip attached, and a third artwork illustrated a room with several beds with children lying in them. Several drawings depicted children playing at home, including by a Christmas tree, and three presented school, where one of them included disabled and healthy children sitting together.



Drawing 5. Age group 8-10 years



Drawing 6. Age group 8-10 years



Drawing 7. Age group 8-10 years

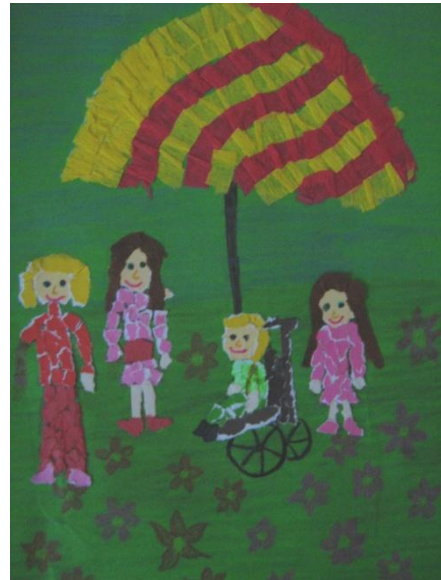


Drawing 8. Age group 8-10 years

In the 11-14 year-old age group, as in the previous two groups, a disabled friend in most cases (24 artworks) moved about in a wheelchair, with the help of a cane or crutches (6 artworks each), and in 6 artworks more than one attribute of disability was illustrated. In seven pieces, there were blind or amblyopic friends, in two - with an arm or leg in a cast, and in individual drawings disabled persons with a stiffened spine or a headscarf showing the issue of cancer. The most common setting of the drawings was a park or meadow. Children often depicted the sun, a rainbow, flowers and animals, especially dogs, and in some cases angels. Healthy children with disabled friends played soccer (5 artworks), table tennis, participated in competitions, in getting gifts from under the Christmas tree or in a carnival festival, or consumed sweets (individual artworks). In two drawings, the disabled persons were portrayed as mountain peak climbers, and in another two drawings they received assistance crossing the road. Six artworks related to the stay of a disabled child in hospital, in the presence of nurses or being administered IV.



Drawing 9. Age group 11-14 years



Drawing 10. Age group 11-14 years



Drawing 11. Age group 11-14 years



Drawing 12. Age group 11-14 years

In the 15 and over 15 year-old age group, the attribute of disability that was portrayed the most often (13 pictures) was the wheelchair. In three drawings blind friends were shown, and in

one a friend with no arms. In four, healthy persons held hands with disabled persons. In one of the drawings a handicapped child was sitting on a horse, and in another a child was accompanied by a dog. Eight drawings were dedicated to mutual play, mostly football. Only single drawings presented a disabled person canoeing or lying in bed. In other pieces, the protagonists were in a park, in the woods, on a meadow, at the school playground, or at home.



Drawing 13. Age group 15 and > 15 years



Drawing 14. Age group 15 and > 15 years



Drawing 15. Age group 15 and > 15 years



Drawing 16. Age group 15 and > 15 years

All the artwork revealed the rich imagination and art sensitivity of the children. All artworks were colorful and the disabled children were always depicted as smiling.

DISCUSSION

Children's artwork is of interest to many researchers who are convinced that through art children manifest their feelings, express joy, delight, sadness, resentment, fear, despair, their expectations, and how they see themselves and the world around them. [4,5].

A factor stimulating the development of artistic creativity in children is primarily the external environment, which causes them to accumulate so much stimuli and experiences they need to transfer their emotions e.g. into a form such as drawing [4-6].

Children's drawings may also be useful in assessing the child's emotional state, for example a timid child uncertain of her/his abilities draws thin, barely marked lines with numerous interruptions, and a child with egocentric characteristics uses a thick, precise, clear and continuous line [4].

A child's drawing is also a reflection of his/her mindset and the relationship to the environment revealed through colors [4,5]. Sometimes we get the impression that the colors of the drawings are random because they have nothing to do with what we see around us. But it is not so, because a child, when drawing, may use only his/her favorite colors and for example paint a blue mouth and green hair [4]. Objects and characters that he/she doesn't like can be drawn in dark, sad, unclear or very intense colors, covering the entire page [4].

It should also be emphasized that for a child it is sometimes much easier to draw something than to talk about it, especially if it is something painful. Art enables children to look at the world from a safe perspective, develop a visual vocabulary for organizing their experiences, explore alternative solutions, and to better express themselves [7].

In our case, we used the media of drawing as an expression of an existing or imagined attitude of children towards disabled persons. Children had to paint their disabled friend that they already have or could possibly have.

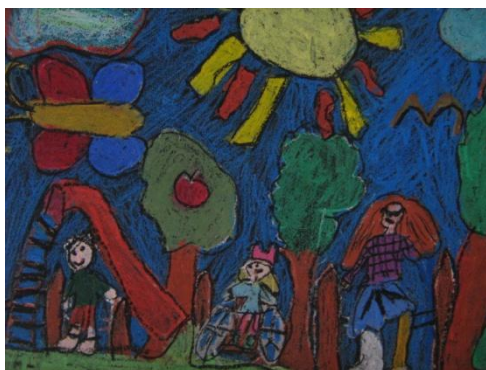
As children grow and develop, their drawings change. Lowenfeld and Brittain in the book "*Creative and mental growth*" distinguish six phases of children's artistic development [6].

The first phase is the *beginnings of self-expression* (2-4 years of age). During this period, the author distinguishes three stages: chaotic scribble when the first signs are randomly put down by a child, controlled scribble, and named scribble in which the child begins to name what he/she has drawn [6,8]. The second phase is defined as *the first depicting attempts – the pre-schematic stage* (4-7 years of age). This is a time of creating conscious shapes, which are connected with the surrounding world. They allow one to read what is important for the child and what is his/her relationship with the environment. Usually, the first symbol created by a child in this period is the "cephalopod" man. During this phase, children often and willingly draw animals and birds, using rich, saturated color spots [6].

In our case, the drawings in this group were colorful, and the smiling faces of the children with disabilities and their healthy friends made the artworks cheerful. Movement also appeared - most frequently children playing ball or playing at the playground.



Drawing 16. Age group 4-7 years



Drawing 17. Age group 4-7 years



Drawing 18. Age group 4-7 years

The third phase is the *mastering shape – the schematic stage* (7-9 years of age). A child at this stage of creative development exaggerates important elements, reduces or omits those parts that are not important or those that he/she does not understand, and changes the symbolism. The child begins to create still lives, fantastic compositions inspired by life in space, the undersea world as well as historical elements [6]. The fourth phase covers *the beginnings of realism – the period of peer groups* (9-12 years of age). During this period, the child begins to take into account the characteristics of gender: for example, girls are drawn in a dress, boys in trousers. Small artists discover natural beauty. They differentiate the blue of the sky from the blue of a lake, the green of a tree from the green of the grass. They play with colors, perfectly discerning their differences and similarities. At this stage, we see a variety of decorations in the drawings [6, 8].



Drawing 19. Age group 8-10 years

In our case, the drawings in this group reflect all these characteristics. In one of the drawings, the clouds were shaped like smiling blue flowers. A clear element of assisting the disabled appeared in the drawings illustrated by getting on a bus, crossing a road, going into a shop. Children with disabilities in these drawings not only play football but also swim, play on swings, roast sausages on an open fire, fly kites, or participate in sporting events. The artworks also show school motifs, including healthy and disabled children sitting together.



Drawing 20. Age group 8-10 years



Drawing 21. Age group 8-10 years

The fifth phase is the so-called *the age of reasoning - the pseudo-naturalistic stage* (12-14 years of age). This is a period of showing an interest in drawing the human figure. Children change hues depending on the presence of light and shadow. They take into account changes in distance and the movement of figures. They have a clearer awareness of details and strive to take into account clothing, hairstyle, facial features, and depth. Their personality is reflected in their artwork. Also, they realize that space is three-dimensional [6,9-11].

An analysis of drawings in this group led to the conclusion that the problem of disability is not only the need to move in a wheelchair, on a cane or crutches, as seen in the younger age groups, but also problems with the spine, fractures or cancer. In these drawings, people with disabilities are mountain climbers; and in hospital settings, medical personnel appear.



Drawing 22. Age group 11-14 years



Drawing 23. Age group 11-14 years



Drawing 24. Age group 11-14 years

The last phase is *the decision stage – art during puberty* (14-17 years of age). At this stage, there is intentional learning to draw and paint. Children use shapes and proportions in a realistic manner. There is a return to a multi-layered and multi-element composition in the works of art with realistic and abstract colors [6, 8- 10].

In our case, the drawings in this group were enriched with disabled persons without

hands, with elements of support such as holding the hand. There were also abstracted drawings, where the protagonists looked like dolls.



Drawing 25. Age group 15 and > 15 years

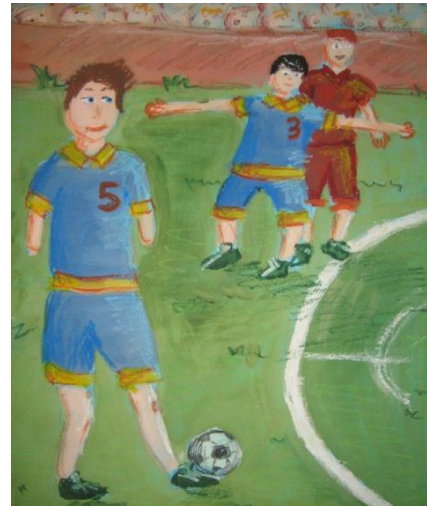


Drawing 26. Age group 15 and > 15 years

Analysis of the drawings led us to conclude that most children see persons with disabilities positively. The children see them as smiling, actively participating in games and sports.

They notice the various attributes of disability, from the loss of hands, through wheelchairs, canes, crutches, walkers, to cervical collars for stiffening the spine and cancer problems.

It is also important that they see the need to not only play with people with disabilities but also to assist them, from pushing a wheelchair, holding their hand, helping to board a bus, crossing a road, to reading books and the ordinary accompaniment by the hospital bed. They also do not see obstacles for disabled persons to participate in sporting events or climbing mountains.



Drawing 27. Age group 15 and > 15 years

All these observations are important because they illustrate the perception of partner contacts between disabled and healthy children, motivating a child to accept his/her own limitations, learning to trust oneself and the world, desensitizing the child to others staring. Children with disabilities, imitating healthy children during play, make faster progress in development, allowing them to find their place in a group as well as cope with emerging difficulties and obstacles. On the other hand, they teach healthy children sensitivity to others.



Drawing 28. Age group 8-10 years



Drawing 29. Age group 8-10 years



Drawing 30. Age group 8-10 years

So it may be worthwhile to more deeply analyze children's art created in the hospital recreation center or hospital room, and treat these artworks as a source of information for the preparation of educational programs.

CONCLUSIONS

The children's drawings show their positive attitude towards people with disabilities. Children are aware of the need to help and support people with disabilities. In the imagination of children, a disabled person can fully participate in society.

Conflicts of interest

None of the authors have any conflicts of interest.

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