



EMOTIONAL AND COGNITIVE INDICATORS IN DRAWINGS OF CHILDREN WITH SPECIAL NEEDS: A PICTURE ANALYSIS STUDY

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Abstract:

Pictures contain important clues about how children perceive their own world, their environment and the events they experience, how they position themselves and how they externalize. This externalization event is used as a tool to express sadness, fear, anxiety, worry or the opposite feelings such as peace, happiness, joy, love, belonging, etc., especially in individuals with special needs who cannot or do not want to express themselves verbally. Pictures of individuals with special needs are also considered as an expression of the feelings of individuals with special needs and contain important details about personality development. These pictures written by students with special needs also provide important clues about the mental development and competence of students with special needs. This study was conducted with a total of 25 children with special needs who attend a special education school and whose age range varies between 4 and 12 years. The application with children with special needs, 10 of whom are girls and 15 of whom are boys, and included in this study, covered a period of 20 weeks, and the pictures collected from children with special needs were evaluated with the semiotic analysis method.

Keywords: special education, special needs child, picture analysis

1. Introduction

Paintings are a branch of art that allows children to express their inner worlds. Children, especially, try to convey their feelings (fear, happiness, surprise, sadness, hopelessness, pessimism, enthusiasm, etc.), thoughts, events they have experienced or want to experience, situations they enjoy or do not enjoy through painting. Each line, figure, diagram and color in the painting tells us about the inner world they are trying to reflect. This narration is sometimes transferred to the painting willingly, sometimes unwillingly. This helps to overcome the communication difficulties between the child and the adult.

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Painting also keeps the child's talent dynamic and gives them the opportunity to express themselves. Children between the ages of 4-12 have a wide imagination and are in a process of discovery aimed at understanding life and what is happening around them. During this discovery period, children who are introduced to painting gradually transfer events and facts that they begin to make sense of to paintings. Sometimes, imagination and sometimes realism are included in these paintings. As children grow older, they start to transfer more realistic things to paintings. They draw objects in detail and concretely and include regular and meaningful drawings in their drawings. Some features that we call picture features stand out in the pictures drawn by children. These features are leveling, completion, height hierarchy, transparency, realism, repetition and symmetry, proportion, humor and drawing pictures in accordance with the rules (Yavuzer, 2007). When children succeed in pronouncing a word, they repeat that word 10-20 times. It is seen that the same is true in the picture (Çiçekler & Koruklu, 2013). Based on this, it can be observed that children transfer the figures they first learned or managed to draw in the picture to the picture in the early stages of drawing. The lines, shapes and colors drawn are a preliminary tool for the thoughts and feelings that are tried to be expressed. The stances of the human figures in the pictures, the way their organs are drawn (arms, legs, eyes, feet, fingers, ears, etc.), the degree of closeness of the individuals to each other, the order in which they are drawn and the places where they stand give us detailed information about what is being tried to be told. While pictures explain children's feelings and thoughts, they are also a fun and play-centered branch of art that broadens and develops their horizons. Most children can use humorous narratives in their pictures; they do this to give a playful atmosphere to their pictures (Çiçekli & Koruklu, 2013). The pictures drawn in this research were analyzed and interpreted by taking into account color, scheme, subject, material, age and experienced situations. Answers were sought to the following questions in the research (Işık, 2023);

- What is the attempt to convey in the figures drawn?
- Is there a relationship between the bigness, smallness, shortness, length, straightness and curvature of the lines, diagrams and figures drawn and the facts and events described?
- Do the colors used in the pictures have a meaningful relationship with the feelings and thoughts expressed?

2. Literature Review

2.1 History of Studying Children's Drawings

The starting point of the analysis of children's drawings dates back to 1885. In an article published by Cooke in 1885, the analysis of children's drawings was mentioned. In his research, Cooke explained the periods of pictorial development with his observations and argued that art education in schools should be made more suitable for children's interests and mental structures (Öveç, 2012). Kerschensteiner (1905) divided the drawings into three basic categories in his research on children's drawings in Germany.

These are: schematic drawings, drawings drawn according to visual appearance, and drawings representing three-dimensional space (Yavuzer, 2016).

2.2 Psychological Interpretations of Colors in Children's Drawings

After the age of 4, the pictures children use in their drawings become connected to reality. Before this age, they use the colors they want and like. These are usually colorings that are far from the perception of reality. There is a connection between the colors children use in their drawings and their feelings and thoughts. In a study conducted by Burkitt et al. (2005), one of the researchers who conducted research in this field, it was stated that children use their favorite colors in pleasant and beautiful figures, while they use darker colors in negative and evil characters (Özlü, 2015). Children who do not use colors in their drawings may suffer from emotional deprivation and have a tendency towards inferiority (Filiz, Cancan & Çelik, 2018). While children imitate nature in the use of colors, they also follow their subconscious. During the child's development process, color selection changes from cold colors to warm colors (Filiz, Cancan & Çelik, 2018).

2.3 Linear Developmental Stages of Children Between the Ages of 4-12

Just as certain stages follow each other in the physical and cognitive development of children, the same applies to their artistic development. The developments experienced between these stages of development in children differ from each other. These stages are (Dilmaç & Dilmaç, 2023);

A. Pre-Schema Stage (Ages 4-7)

The scribble drawings seen in the previous stages begin to be replaced by more meaningful pictures. While simple human figures are included in the early stages, detailed human bodies begin to be included in the later periods. A certain subject begins to be covered in the drawings as of the age of 5 (Sağlam, 2023). Drawing pictures of themselves and their parents is the thing they enjoy doing the most (Malchiodi, 1998). When the drawings of children in this period are analyzed, it can be observed that they are very brave in terms of color. Since their motor skills have not reached the required level, they may have difficulties in using brush and paint. When coloring objects in the pictures they draw, they use the colors they want and like rather than using their own colors. Experts have determined that this period is the “golden age” of children in painting, that children are very productive during this period, and that the pictures they draw resemble the artistic works of contemporary painters (Malchiodi, 1998). As children get older, they begin to recognize and discover their own physical structures. Accordingly, they begin to reflect these characteristics in their pictures. When girls draw themselves, they draw their bodies round; They make men's shoes in a square shape (Çankırılı, 2012).

B. Schematic stage (7-9 years old)

In this period, defined as “visual reality” by Lequet, children begin to have realistic thoughts about their surroundings (Yavuzer, 1992). As a result of the bond they establish with the individuals they communicate within their environment, their observed behaviors are depicted in their pictures. In this stage, their perception of reality opens up and they begin to search for truths in pictures. In this stage, children place themselves at the center of the place they live in (Yavuzer, 2001). The objects children include in their pictures are related to each other (Sağlam, 2023).

C. Reality period (7-9-12 years old)

During this period, children who develop start to adapt to society, understand that they are a part of society and start to reflect this situation in their pictures. They start to go into detail in their pictures and draw more conscious pictures. They do not share the pictures they draw with their families and their surroundings. In the pictures drawn during this period, they clearly separate the gender of the human figures and draw accordingly. Their perception of the earth and the sky develops, and they clearly show the lines of both in their pictures. Although they start drawing pictures based on realism and concreteness, their pictures do not yet reach the professionalism they should have. They do not fully master the technical rules that should be in drawing pictures. The pictures they draw now have a story (Aydın, 2006).

2.4 Developmental Stages of Children Between the Ages of 4-12

a. 4 Years Stage:

- They speak clearly in a way that everyone can understand.
- Even though he knows the answers to some questions, he tries to improve his speaking skills by constantly asking questions.
- They become able to draw straight lines on paper.
- They may not be able to control their emotions and may have nervous breakdowns such as jealousy or anger attacks.
- Their sexual identities have become clear.
- They become familiar with concepts such as big, small, heavy, and light.
- They start drawing primitive humans with arms and legs coming out of their heads.
- They can create imaginary friends (Ogelman & Özyürek, 2021).

b. 5 Years Old Stage:

- They can tell short stories or events they experienced during the day.
- They can wear their own clothes.
- They can draw a simple stick figure.
- They begin to master the concepts of color.
- They know at least five colors.
- They may have difficulty distinguishing between right and wrong (Sürmen, 2021).

c. 6 Years Old Stage:

- He/she has learned and is beginning to understand a few colors.
- He tries to please others.
- They can cut paper with craft scissors (Çankırılı, 2011).

d. 7 Years Old Stage:

- They can dress themselves without parental assistance.
- They can draw a stickman in detail.
- They reach the ability to identify objects.
- Sharing characteristics develop.
- They spend more time with friends of their own gender (Güven, 2009).

e. 8-9 Years Old Stage:

- They love games that involve competition.
- They also start playing games with children of the opposite sex.
- In girls, breast development begins (Bağçeli, 2008).

f. 12-13-14 Years (Adolescence) Stage:

- They begin to grow rapidly in length.
- Their hormonal development begins to show itself.
- Interest in the opposite sex increases.
- Friendship relationships become important.
- They love communicating with others (Topçuoğlu, 2023).

3. Material and Methods

3.1 Research Model

This research is a study conducted by examining the drawings of children with special needs between the ages of 4-12 who attend a special education institution, considering concrete and abstract concepts. The perception of objects that are sensory and provide an opportunity for experience explains the existence of a concrete concept. Abstraction is evaluated a little differently; it reveals the main essence with a conscious approach from the structure that represents integrity (Ergun, 2017). The research was conducted based on the developmental characteristics of the children, their age range, family status and the education they receive. In the detailed examination and evaluation process of the research topic whose boundaries were determined, the necessary research methods were used to investigate and interpret the events and facts in the drawings presented outside the intervention of the researcher. In this research, the anxiety, fear, hope, emotions and thoughts that children with special needs between the ages of 4-12 who attend a special education institution tried to express in the drawings were analyzed. During these analyses, the use of color, line sizes, symbol positions and each schematic line drawn was interpreted, and the explanation of the symbols and concepts used in the drawings was

also included. The model used in the analysis of the pictures in this research is the phenomenological pattern model in the qualitative model (Doğanç, Hasanoglu, Özaslan, Mahsereci, Binici, Hamoğlu & Hıdıroğlu, 2024).

3.2 Working Group

The research was conducted in two private educational institutions within the borders of Istanbul, and 25 children, 10 girls and 15 boys, between the ages of 4 and 12, were included in the study. This sample group, which included children of both genders, made their drawings on the subject of the research without being subjected to any guidance and away from pressure and stress.

3.3 Data Collection Tools

In this study, children's ages, developmental characteristics, age ranges, genders and relationships within the family or social environment were used as data collection tools. The interpretation of feelings and thoughts about colors, lines, figures and schemes used was collected in the light of information collected from literature.

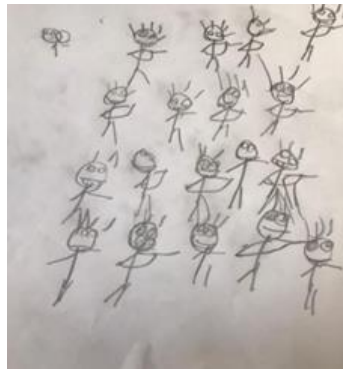
3.4 Data Collection and Data Analysis

The research used pictures drawn by children with special needs between the ages of 4-12. The implementation process of the research lasted 20 weeks in five months, October-November-December 2021 and January-February 2022. The pictures were drawn without giving the children any instructions, without the researcher's guidance, away from pressure and stress; without interfering with their own wishes, feelings and thoughts. No time restriction was given, they were expected to draw the pictures, and no subject restrictions were set. When analyzing the pictures, the children's normal developmental characteristics or unusual developmental characteristics, age range and gender were taken into consideration. In this research, the phenomenological design model was used in the qualitative model in the analysis of the pictures.

4. Findings and Discussion

The findings of the research consist of the analysis of colors, schemes, concepts, lines, patterns and figures in the pictures drawn by children receiving special education services based on their own imaginations.

5. Image Analysis



Picture 1: Friendship pictures

There is more than one human figure in Picture 1. The first thing that draws attention in the picture is a human figure standing alone behind a mass majority. Although different facial expressions are depicted where the majority is, all of them are drawn as individuals who show physical normality. It is seen that one hand and both feet of the individual who is outside the majority are not drawn. This can be considered as an indication that what is intended to be explained in the picture used as an example in the research is that the individual who sees himself as physically inadequate is excluded by society, isolates himself from them, and exhibits a lonely attitude.

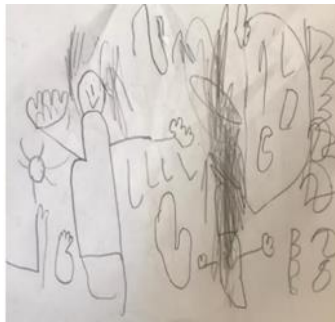
The sad facial expression of the lonely human figure is a method of conveying the expression on his face of the feelings of loneliness and exclusion he experiences. The fact that the individual who is left out draws himself small stems from the instinct to see himself as worthless. The fact that there is no color in the picture can also be interpreted as the gloom and darkness inside him being reflected. It was learned as a result of the research that the student who drew the picture had a moderate level of mental disability and a mild level of visual impairment in one eye. This also proves the accuracy of the ideas put forward.



Picture 2: Family pictures

In Picture 2, almost all of the paper has been used. It is seen that small dots and hearts are included in the picture. In the picture where there are 3 human figures, the figures used are assumed to be “mother, father and child”. One of the striking features is that there is a visible distance between the human figures drawn. This is the way the bond between the mother-father and child is transferred to the picture. When the

drawing is examined in detail, the meaning that emerges is that if the stars are perceived as the pointers of the sky, the child who longs for his mother-father in his dream world is intended to express the emotional distance between them by the distance he puts between the human figures he draws. The fact that an individual who perceives his dream world as the sky draws stars instead of the sun indicates that he thinks about this emotional distance at night and dreams differently.



Picture 3: General picture

When Picture 3 is examined, it is noticeable that there are scribbles and meaningless random figures that will fill the page. Children with attention deficit and hyperactivity disorder use the drawing area in an irregular, chaotic and meaningless way (Kar & Toros, 2015). A human figure is included in the drawing. When the human figure is examined, it is noticeable that he draws his fingers much larger than they should be and that he draws his feet separately from his body. We can consider this as an indication that the child has a disability in his physical characteristics or that he has features that he does not like. The presence of multiple chaos in the picture is an indication that the individual also experiences chaos and indecision in his daily life.



Picture 4: Outdoor pictures

Children generally reflect the figures they experience or want to experience in their inner worlds in the picture. In Picture 4, it is seen that the sun is in the upper right corner and the clouds are right next to it. The fact that the inside of the sun is painted blue may indicate that the child is not stuck in one direction but is also dealing with beings in a different way. The fact that the clouds are also painted blue is an example of this. When we go down to the lower right corner, we see a house, a child and trees are depicted next

to it. The house is a reflection of security, family sincerity and the guarantee of life (Yavuzer, 1992). Drawing fruit on the tree is also an indicator of excessive devotion to parents (Yavuzer, 1992). When color analysis is done in the picture, it is seen that the child uses more than 5 colors. This shows that the individual is well-concentrated.



Picture 5: School drawings

In Picture 5, the sun is included in the upper right corner. In the picture drawn, the school the child goes to is depicted, and the bond he establishes with the school is tried to be explained. He usually includes places where he spends time with the child, such as home or school, in his pictures. This can be attributed to the fact that he likes to draw places where he feels safe or establishes a bond in his pictures. The school is considered as an indoor space where children learn new things and make different friends. In this picture, the inclusion of the school and the child figures in front of the school shows, as a result of the research conducted, that the child establishes a bond with his school and friends which makes him feel good. Another striking element in the picture is the use of warm colors. Children who use warm colors are mostly affectionate, harmonious and cooperation-oriented individuals (Yavuzer, 1992).



Picture 6: Human drawing

The first thing that stands out in Picture 6 is the uncontrolled use of the page. It is seen that the child, who included a human figure in his drawing, used large lines to fill the page. Large pictures that cover the entire page are often drawn by aggressive children with weak internal control (Yavuzer, 1992). It is seen that the head of the human figure is large, the arms are drawn with random lines, the legs are short and small circles, the mouth is drawn with a thin line expressing an unhappy face, and the eyes are two circles

and without pupils. The other organs drawn randomly tell that the child sees himself as inadequate and deficient in many areas. In addition, not drawing the pupil while drawing the eyes indicates that the perspective is meaningless, empty or has a problem with vision (Yavuzer, 1992). In this context, drawing a large head can be considered a situation seen in children who see themselves as mentally inadequate. It has also been observed as a result of the research conducted that children express the aspects of their inner world that they feel are deficient or defective by drawing them.



Picture 7: Character drawings

In Picture 7, the middle parts of the page were used, and the other parts were left blank. A human figure, meaningless shapes and letters were included. The human figure was depicted with weak, small lines. Small lines are the product of fearful and introverted children (Yavuzer, 1992). In addition, the fact that the face of the human figure was not drawn can be considered as an indicator of introversion, and the fact that the eyes and pupils were not drawn can be considered as an indicator of a meaningless and empty view of life. The use of letters from the alphabet in the picture is another striking detail. Children transfer the things they have experienced or want to experience to the picture. The use of letters in the picture can be considered as an indicator that the child has difficulty learning letters and is trying to learn. As a result of the research, it was learned that the child has a learning disability.



Picture 8: Animal pictures

In the studies, it has been learned that children, while drawing pictures, also transfer the situations they like and dislike, which take place in their imaginary and mortal worlds, to the picture. In Picture 8, it is seen that a bird picture is drawn covering the entire page. It is known that children transfer the things they like or give them

pleasure to the picture. The fact that the child uses the bird figure while drawing pictures can be thought that he has an animal that he feeds or that he is interested in them. The fact that the bird is drawn in detail down to its wing structure while drawing can lead us to the conclusion that the child is a focused and good observer.



Picture 9: Animal love

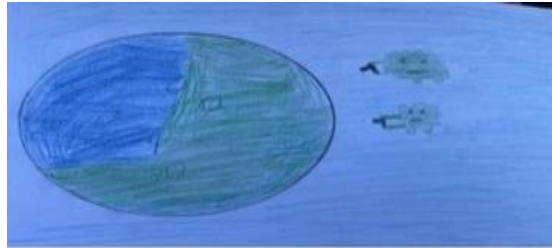
In Picture 9, two clouds and a sun behind them are drawn in the upper right corner. When you go to the upper middle part, you see a rainbow. If you think that a rainbow appears after rain, the rainbow drawn here can be considered a symbol of happiness coming after great sadness. Butterflies and flowers are included in the picture. It can be understood from what the child draws in the picture that there are often positive and visually beautiful things in the child's imagination. Studies have suggested that introverted children who do not have self-confidence cannot use the earth and skyline (Yavuzer, 1992). Based on this, it is concluded that the child is self-confident when the earth and skyline are separated correctly. In the picture, there is a door with a heart figure on it and children with dogs and cats in their hands go to the door. It is understood that the love of animals is at the center of the picture. It is tried to be explained that the love of animals leads people to happiness by the fact that the children with animals in their hands go to the heart-shaped door. It is seen that a girl is behind the children with animals in their hands. The child is seen following them. Here, it can be thought that the child without an animal wants to adopt an animal.



Picture 10: Landscape pictures

Picture 10 shows the Maiden's Tower, one of the symbols of Istanbul. The ground and sky lines are separated correctly, and the details are drawn as they are. The striking detail in the picture is that the Maiden's Tower is inside a bell jar. From here, it can be

thought that the child drew this picture based on his instinct to protect historical places, or it can be thought that what is meant by the bell jar is that he believes that the Maiden's Tower should be protected in this way because it has a special importance or meaning.



Picture 11: General picture

Picture 11 shows the transfer of Covid-19, which the whole world has been struggling with in the last 2 years, to the picture. On the left side of the picture, there is a drawing of the world as viewed from space in normal dimensions and a microbe with a gun in its hand sending the microbe to the world. It is understood from this picture that children interpret and interpret most of the events encountered in daily life in their brains and transfer them to the picture.



Picture 12: Class pictures

In Picture 12, the child has transferred the classroom environment to the picture. The picture includes many details, with the classroom drawn in detail. The fact that the teacher has a mask on her mouth can be considered an indication that Covid-19 precautions are being taken in the classroom.



Picture 13: General picture

In Picture 13, the colors are indicated in the upper right corner. The sequential listing of colors by the child in the learning process shows his attempts at the learning stage. It is seen that a red sun is placed right next to the colors. Another striking detail is

that the sun is drawn in a different color than its own color. It can be argued that drawing the sun in red does not limit the child to certain patterns and associates the pictures with his imaginary world. When considered from another perspective, red is a color that symbolizes warm colors. Considering that the sun also radiates heat, it can be thought that the warmth of the red color connects the warmth of the sun. When we go down to the middle parts of the picture, we see that a human figure is included. The human figure is drawn differently than normal people. The child who drew the picture is also a child with special needs. At the bottom, there is a daisy with colorful leaves. Here, we can also conclude that the child has a wide imagination.



Picture 14: General picture

In Picture 14, there are two normal height buildings. In the middle, a tree, a child and a teacher are drawn. The child draws his teacher and reflects their relationship and dynamic bond with him through the picture (Yavuzer, 1995). At the same time, tall buildings are a reflection of longing and tension (Kar & Toros, 2015). Using more than five colors in the picture is an indication that the child is relaxed and concentrated (Yavuzer, 1992).



Picture 15: Fruit pictures

In Picture 15, there are 3 cherries that cover almost the entire page. The inside of the cherries is not painted, the remaining parts are scribbled. It has been analyzed that the sizes of the drawn cherries are different from each other. It is noticeable that the child cannot control himself while drawing the picture and that he uses random scribbles. The pictures that cover the entire page are often drawn by aggressive children with weak internal control. In addition, it is among the information obtained as a result of the research that children who draw fruits are excessively attached to their parents (Yavuzer, 1992).



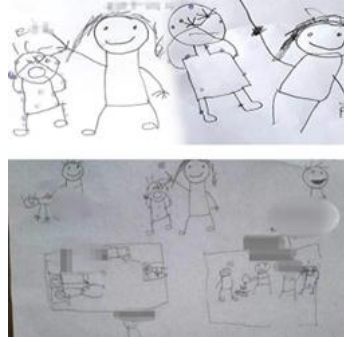
Picture 16: School pictures

In Picture 16, the child has included the school environment in the picture. He has included clouds in the upper part and depicted rain. There are drawings of cars, trees and children in front of the school. The fact that the children have a happy expression in the children's drawings can be taken to mean that the child who drew the picture loves school. While children transfer their likes or dislikes to the drawing, we can interpret them by inferring meaning from the way they draw. Based on this, the fact that the children's facial expressions are drawn happy even though it is raining can lead us to believe that the child loves school. It is seen that the child uses 2-5 colors in the picture. Individuals who use 2-5 colors are relaxed, concentrated individuals (Kızıldaş, Halmatov & Ertör 2018).



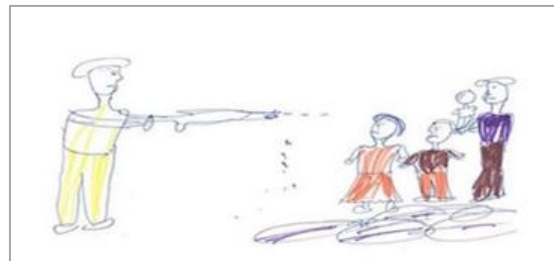
Picture 17: General picture

In Picture 17, the child has scribbled in a way that covers the entire page. When the picture is examined in detail, it is understood that there is no meaningful detail. Children with attention deficit and hyperactivity disorder fill the drawing area with irregular and meaningless ideas (Kar & Toros, 2015). Rarely, shy and timid children use wide figures due to their weak self-concept (Yavuzer, 1992). While no color is used in the frame part of the picture, it is seen that the child uses colors in the middle parts. From here, it can be thought that, contrary to the boring and sad state he reflects to the outside world, there is a desire to be happy at the core of his inner world.



Picture 18: Pictures of abuse

Picture 18 shows the effect that the mother and father of the two siblings who allowed others to abuse them in exchange for money had on their subconscious. In both of the pictures given as examples, it is conveyed that the children's sexual organs were subjected to intervention, violence and torture by touching them with their hands. The fact that children's pictures include sexual organs can be considered as evidence of aggression and the parents' condition and situation at home. In the picture above, a woman is depicted using a stick to abuse the children, while in the picture below, the children are depicted as being sexually abused in a group. It can be assumed that the mother holding the stick used violence on the children when they did not accept the abuse and resisted. Later, when the pictures were reported to the authorities, the statements given by the children strengthened this opinion.



Picture 19: War pictures

In Picture 19, on the left side, a man wearing yellow clothes and holding a gun is drawn. On the right side of the page, there is a child in the front, another child a little younger than him behind him and a baby in his arms. There is a man in the picture. The family member that the children draw first is the person the child feels the most affection for (Eren, 2016). After himself, the child draws his two siblings and then his father. The fact that the child in the front is drawn a little older than the other children may indicate that he is in the position of an older brother. The fact that the child in the front is painted red can be thought of as a symbol of the color of blood. If it is assumed that the people pointing guns at him in the picture are a family, the fact that the mother is not drawn is one of the striking details. While it is thought that the mother may have lost her life during the war, another reason for not including her in the picture may be related to love for the mother.



Picture 20: Outdoor pictures

In Picture 20, there is a park and people in it drawn as stick figures and the toys of the park. It is understood from the names next to the stick figures that family members are drawn. In the upper left corner of the picture, the father, brother; in the upper right corner, the mother, little sister and in the upper middle, the big sister on the swing are depicted. In the lower left part, he has given place to five children (his nephews); and in the lower right part, he has given place to himself. When children draw their pictures, the places where the human figures they include are drawn and the distance between them can tell us about their degree of closeness. Drawing himself away from everyone and playing alone can be considered as the place where he positions himself within the family. Similarly, drawing other family members and drawing the people he positions them and has a bond with closely can be considered as the child's way of transferring family relationships to the picture.



Picture 21: General picture

In Picture 21, a large head is drawn with long lines in front of it. Very large heads are drawn by children who see themselves as mentally inadequate (Yavuzer, 1992). The facial expression of the head figure drawn in the picture is seen to be unhappy and sad. In addition, the lines drawn in front of the head can be thought of as bars or windows. The meaning that the child is trapped in his feelings or is not happy with the situation he is in can be deduced from the expressions used in the picture.



Picture 22: Family pictures

In Picture 22, the sun is on the upper left, and the rainbow is on the upper right. There are 3 human figures in the picture, and they are drawn as mother, father and child. One of the striking details in the picture is that the family is depicted holding hands and going towards the sun, high above the ground. The mother is seen in the front, followed by the father and then the child. The fact that the family is holding hands can be considered as an indication that there is a strong bond between them or that the child needs love. The drawing of birds and a rainbow in the picture can also be considered as a way of expressing the feeling of expecting a beautiful day and wanting a colorful and happy life. In addition, since the family going towards the sun represents heat, it can be considered as a way of conveying the feeling of being close or wanting to be close to the family.

5. Results and Discussion

- The children who participated in the study were introverted and lacked self-confidence,
- Individuals who portray themselves as inferior do so because they see themselves as worthless.
- Children have a closer relationship with the people they draw in their pictures,
- Children with attention deficit and hyperactivity disorder use the drawing area in an irregular, confusing and meaningless way,
- If a child draws himself/herself drawing some parts of himself/herself that are larger or smaller than they actually are, it is an indication that he/she has a physical disability or that he/she has features that he/she does not like.
- Not drawing the pupil while drawing the eyes indicates that the perspective is meaningless, empty, or there is a problem with vision.
- Small lines are the product of fearful and introverted children (Yavuzer, 1992).
- Children draw what they experience or want to experience,
- Tall buildings reflect longing and tension,
- Children use it as an official means to tell about sexual harassment or violence they experience from their families or their surroundings,

- It depicts the aspects of children's inner worlds where they feel they are lacking or defective,
- The family member that children draw first is the person that the child feels the most emotion towards,
- It has been concluded that the very large head was drawn by children who considered themselves mentally inadequate.

6. Recommendations

The children in this study are at risk, have socialization problems, and have difficulty expressing themselves. For this reason, art plays a very important role in children with special needs expressing themselves, conveying their feelings and thoughts, and conveying emotional states such as fear, anxiety, sadness, distress, physical and mental abuse, and violence. For this reason, the state should provide support for the provision of painting tools and materials, especially for children with special needs who are excluded from educational and cultural activities or have limited opportunities to participate, and families should be supported economically.

Children with special needs should be provided with environments where they can discover their own talents through painting.

Children with special needs should be provided with environments and opportunities where they can express themselves freely through painting, show creative elements that will positively support their self-development, get to know themselves, develop their self-confidence and self-discipline, and create a positive self-perception towards themselves.

Although the analysis of drawings of a limited number of children with special needs was carried out in this study, the results obtained are extremely important since the number of studies aiming to determine the feelings and thoughts that students with special needs try to convey through the drawings they draw is very limited. It is recommended that similar studies be repeated with children with special needs in different age ranges and in different samples, and the results be compared.

Conflict of Interest Statement

The author declares no conflicts of interest.

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References

- Akkapulu, F, 2010. İnsan Çizimlerinin Projektif Bir Yöntemle Değerlendirilmesi. *Yansıtma Psikopatoloji ve Projektif Testler Dergisi*, 14, 21-30.
- Aydın, D, 2006. 7-12 yaş grubu çocukların resimlerinde kullandıkları benzer biçimler. Master's thesis, Anadolu Üniversitesi.
- Bağçeli, P, 2008. Köyde ve kentte yaşayan 7-8 yaş arası çocukların cinsiyet kalıp yargıları ve cinsiyetlerine bağlı oynadıkları oyun ve oyuncaklar. Master's thesis, Bursa Uludağ Üniversitesi.
- Batı, D, 2012. 4-12 yaş: Çocuk resimleri ve onların iç dünyalarının resimlerine yansması. Master's thesis, Dokuz Eylül Üniversitesi.
- Burkitt, E, Barret, M, Davis, A, 2005. Drawings of Emotionally Characterised Figures by Children From Different Educational Backgrounds. *International Journal of Art & Design Education*, 24(1), 71-83. <https://doi.org/10.1111/j.1476-8070.2005.00424.x>
- Büyükkarabacak, O, 2008. Çocuk resimlerinde imgelerin yeri. Master's thesis, Marmara Üniversitesi.
- Chen, L, T, 1998. Culturally Accommodated Imagination: Discovering Children's Fantasy Worlds in Drawings.
- Collado F, Y, 1999. The role of spontaneous drawing in the development of children in the early childhood settings. <http://files.eric.ed.gov/fulltext/ED438898.pdf?accno>. Accessed on 10.06.2024.
- Çankırılı, A, 2011. Çocuk Resimlerinin Dili. İstanbul, Zafer Yayınları, Türkiye
- Çankırılı, A, 2012. Çocuk Resimlerinin Dili. (4. Baskı). İstanbul: Zafer Yayınları, Türkiye
- Çiçekler, C, Y, Koruklu, N, Ö, 2013. 4-6 Yaş Arasındaki Çocukların Serbest Resim Çalışmalarındaki Resim Özellikleri. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 28(28-2), 551-563.
- Dilmaç, S, Dilmaç, O, 2023. Çocuk Resimleri ve Ayna Teorisi. *Art Vision*, 29(51), 224-239.
- Doğanç, F, B, Hasanoglu, S, Özaslan, H, Mahsereci, İ, Binici, E, S, Hamoğlu, C, Hıdıroğlu, S, 2024. Ebeveynlerde Çocukluk Çağı Otizmi Farkındalığının ve Eğitim Süreçlerinde Yaşadıkları Sorunların Değerlendirilmesi: Niteliksel Bir Araştırma. *Turkish Journal of Special Education Research and Practice*, 6(1), 1-21.
- Eren, N, 2016. Psikodinamik Sanat Psikoterapisi: Aktarım ve Karşı Aktarım. *Türkiye Klinikleri Journal of Psychiatric Nursing Special Topics*, 2(3), 46-53.
- Ergun, D, 2019. Soyut, Soyutlama, Soyut Sanat. *The Journal of Academic Social Science*, 55(55), 233-241.
- Filiz, S, B, Cancan, D, A, Çelik, F, K, 2018. Suriyeli Çocukların Suriye'ye Bakış Açıklarına İlişkin Resimlerinin Analizi. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi*, 19(1), 519-536.
- Gürtuna, S, 2004. Çocuk ve Sanat Eğitimi. İstanbul: Morpa Kültür Yayınları, Türkiye
- Güven, G, 2009. Okul öncesi çocuklarının insan ve aile resmi çizimlerinin değerlendirilmesi PhD Thesis, Marmara Üniversitesi.

- Işık, N, A, 2023. Duygudurum Bozuklukları. Çocuk Resimlerinin Analizi-2, 163-181, İstanbul: Efeakademi Yayınları, Türkiye
İstanbul Üniversitesi. Çocuk Resimlerinin Analizi. [https://ebs.istanbul.edu.tr/home/izlence/?id=6970.9.0&bid=15370&birim=cocuk_gelisimi_onlisans_programi_\(acikogretim\)](https://ebs.istanbul.edu.tr/home/izlence/?id=6970.9.0&bid=15370&birim=cocuk_gelisimi_onlisans_programi_(acikogretim)). Accessed 10.03.2024.
- Kar, Ö, Toros, F, 2015. Aile İçi Şiddet ve Çocuk İstismarı Olgularında Sanat Terapisi. Hacettepe University Faculty of Health Sciences Journal.
- Kerschensteiner, G, 1905. Die Entwicklung Der Zeichnerischen Begabung. Ripol Classic, Carl Gerber. München, doi:10.11588/diglit.27816.x
- Keskin, S, 2010. Çöp Çocuk, Çocuk Çizgilerindeki Giz. Boyut Matbaacılık, Türkiye.
- Kırıçoğlu, O, T, 2002. Sanatta Eğitim. Pegem A Yayıncılık, Türkiye.
- Kızıldaş, E, Halmatov, S, Ertör, E, 2018. 6 Yaş Çocukların Kendileri İçin Uygun Gördükleri Hayvan Metaforlarının İncelenmesi. Bayburt Eğitim Fakültesi Dergisi, 12(23), 399-414.
- Koppitz, E, M, 1968. Psychological Evaluation of Children's Human Figure Drawings. Grune & Stratton.
- Kutluer, G, 2015. Gelişim Süreçlerinde Çocuk Resminin Yeri. Ekev Akademi Dergisi, (63), 403-410.
- Level Time Türkiye. Çocuk Resmi Deyip Geçmeyin. <https://kocaeli-psikolojikdestek.blogspot.com/2018/07/cocuk-resmi-deyip-gecmeyin.html>. Accessed on 05.03.2023.
- Malchiodi, C, A, 1998. Çocukların Resimlerini Anlamak (T. Yurtbay, Çev.) İstanbul: Epsilon Yayıncılık. Türkiye.
- Ogelman, H, G, & Özyürek, A, 2021. Anne-Baba Tutum Ölçekleri (4-12 yaş): Geliştirilmesi, Geçerlik Ve Güvenirlik Çalışması. Uluslararası Eğitim Bilim ve Teknoloji Dergisi, 7(1), 1-16.
- Öveç, Ö, 2012. Okul öncesi eğitim alan 6 yaş çocuklarının bazı duyguları (sevgi, korku, mutluluk, üzüntü) resmetmelerinin incelenmesi. Master's thesis, Marmara Üniversitesi.
- Özlu, A, K, 2015. Çocukların hastaneye yatmaya bağlı gelişen kaygı düzeyinin resim çizme yöntemiyle incelenmesi. Master's thesis, Hacettepe Üniversitesi.
- Sağlam, S, 2023. Çocuk sessiz kitaplarında karakter tasarımlarının tasarım ilkelerine göre incelenmesi. Master's thesis, Necmettin Erbakan University.
- Starkibriz.net. Suriyeli Çocukların Yürek Burkan Çizimleri. <http://www.starkibris.net/index.asp?haberID=212509>. Accessed on 05.03.2023.
- Sürmen, S, 2021. Okul öncesi öğretmenlerinin din ve değerler eğitimi hakkındaki görüşleri üzerine nitel bir araştırma. Master's thesis, Bursa Uludağ University.
- Topçuoğlu, S, 2023. Ergenlerde Duygu Regülasyonu. İnteraktif Bilim: Disiplinlerarası Araştırma ve İncelemeler Dergisi, (2), 10-49.
- Wing, L, Gould, J, 1979. Severe Impairments of Social Interaction and Associated Abnormalities in Children: Epidemiology and Classification. Journal of Autism and Developmental Disorders, 9(1), 11-29.

- Yaşar, M, C, Aral, N, 2009. Sanat Ürünü Olarak Çocuk Resimleri. Çağdaş Eğitim Dergisi, (365).
- Yavuzer, H, 1992. Resimleriyle Çocuğu Tanıma, Resimleriyle Çocuk. İstanbul: Remzi. Türkiye.
- Yavuzer, H, 1997. Resimleriyle Çocuğu Tanıma. İstanbul: Remzi. Türkiye.
- Yavuzer, H, 2007b. Resimleriyle Çocuk. İstanbul: Remzi Kitabevi. Türkiye.
- Yavuzer, H, 2012. Anne, Baba ve Çocuk: Ailede Çocuk Eğitimi. İstanbul: Remzi. Türkiye.

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