A Study of the Color Preferences of Pre-School Children Used in Their Facial Expression Drawings

Okul Öncesi Dönem Çocuklarının Duygusal Yüz İfadelerini Yansıtan İnsan Figürü Çizimlerinde Kullandıkları Renklerin İncelenmesi

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Abstract

The aim of this study is to examine the facial expressions and color preferences used by orphaned children, children who have experienced an earthquake and children living with their parents.The sample of the study included 85 children, 27 of whom had experienced the great earthquakes in Bolu and Gölcük in 1999, 21 orphans living in Keçiören Atatürk Child Care Center and 37 children living with their families. Regular A4 white paper and coloring pens were used as data collecting tools, and children were asked to draw human figures with happy, scared, surprised, sad and aggravated facial expressions, respectively. Children were told that they were allowed to use whichever colors they wanted.. The children's drawings, each reflecting different facial expressions, were examined to ascertain which, and how many, colors had been used. The results of the study revealed that the majority of the children who had experienced an earthquake and the orphaned children used only one or two colors, while the majority of the children living with their families used at least two or more different colors. It was found that the children who had experienced an earthquake particularly chose black as the color to reflect all of the facial expressions. It was seen that the colors used by orphans and by the children living with their families showed differences according to the facial expressions illustrated.

Keywords: Children's drawings, facial expressions, color preference, children who had experienced an earthquake, orphans

Öz

Bu araştırmanın amacı, korunmaya muhtaç çocukların, depremi yaşayan çocukların ve ailesi ile yaşayan çocukların duygularını dışa vurmalarında, yüz ifadeleri ve renk tercihlerini incelemektir. Çalışmanın örneklemini, Bolu ve Gölcük depremini yaşamış 27 çocuk ile Ankara ilinde Keçiören Atatürk Çocuk Yuvası'nda kalan 21 korunmaya muhtaç çocuk ve ailesi yanında yaşayan 37 çocuk olmak üzere toplam 85 çocuk oluşturmuştur. Veri toplama aracı olarak A4 boyutunda beyaz kağıtlar ve renkli boya kalemleri çocuklara dağıtılmış ve çocuklardan sırasıyla mutlu, korkmuş, şaşırmış, üzgün ve öfkeli bir insan figürü çizmeleri istenmiştir. Çocukların renk tercihlerinde serbest oldukları belirtilmiştir. Çocukların yaptığı her biri farklı bir yüz ifadesini yansıtan resimler, kullanılan renk sayısına ve kullanılan renklere göre incelenmiştir. Araştırma sonuçları, korunmaya muhtaç ve depremi yaşayan çocukların çoğunluğunun tek veya iki renk kullandığını, aileleri ile yaşayan çocukların çoğunluğunun ise en az iki ya da daha fazla renk kullandığını ortaya koymaktadır. Özellikle depremi yaşamış çocukların tüm yüz ifadelerini yansıtan insan figürü çizimlerinde siyah rengi tercih ettikleri bulunmuştur. Korunmaya muhtaç çocukların ve ailesi ile yaşayan çocukların en yüksek oranda kullandıkları renklerin yüz ifadelerine göre değişiklik gösterdiği belirlenmiştir. Her iki grup incelendiğinde; ailesi ile yaşayan çocukların kullandıkları renklerin kullanım yüzdelerinin, korunmaya muhtaç çocukların kullanım yüzdelerine göre daha yüksek olduğu da ulaşılan önemli bulgulardandır.

Anahtar Sözcükler: Çocuk resmi, yüz ifadeleri, renk tercihi, depremi yaşayan çocuklar, korunmaya muhtaç çocuklar

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Introduction

Painting has a crucial role in children's worlds. All children, especially young children, enjoy painting, drawing, cutting and pasting, and playing with plasticine. All of these activities give us clues about the children's cognitive, physical, and social development

whilst bringing forth interesting products (Buyurgan, 2002).

The content of children's paintings and drawings generally reflects an experience they have had.

Their drawings, whether of a human figure or a free painting, generally reflect a traumatic experience that they are unable to express (Koppitz, 1984; Cox, 1986; Samurçay, 1975; Harris, 1963).

Facial expressions are a non-verbal means of expressing feelings. Facial expressions help children understand other people's feelings and thus react accordingly.

Children develop the skill of recognizing facial expressions in their early childhood period. Moreover, children begin to learn facial expressions by using learning strategies and gaining experience in feelings (Denham, 1998).

The skill of differentiating between facial expressions and emotional states and making connections between them begins at the age of 2-3. According to Camras-Alison (1985) and Sijler-Fox (1986), facial expressions reflecting happiness are recognized first and they are followed by expressions of sadness and rage. Facial expressions reflecting fear, bewilderment, and revulsion are generally recognized at the age of four and develop in the years following. In their late childhood, children feel less confused about these expressions (Bayhan & Yükselen, 2001; Skophammer, 1997; Akt. Gross & Bollif, 1991).

The colors used by pre-school children in their paintings affect them emotionally. Some researchers believe that children's color preferences are a learned behaviour. However, some others believe that the colors used reflect the children's natural and emotional reactions and in the color preferences of children their personality traits play an important role (Linderman, 1997).

Another means that can give clues about children's emotions is the colors they use in their paintings. It is thought that the low or high pulsating energies that colors emit have different psychological effects on people. Some colors have gloomy and depressing effects whereas others have relaxing effects (Quoted from Sarıkaya & Sütütemiz, 2004).

People try to reflect their emotional states with the colors they choose. They, unconsciously, express their inner worlds and their feelings regarding the present by the colors they choose (Berk, 1990). Children can also have some color preferences in their paintings. However, these color preferences may vary depending on the age group. Children use all colors without differentiation until the ages of 4-5. When they are 4-5 years old they begin to recognize and use more colors. In the following years they begin to use the original colors of locations and things. Children's color preferences generally involve deep psychological meanings. Since these are individual meanings, it becomes more difficult to understand these preferences (Quoted from Yavuzer, 2001). However, some colors are believed to have similar effects.

The colors in used in children's paintings and drawings are different from those used by adults. Interest and exhilaration towards colors is one of the enjoyments of children. However, their interest towards colors may vary. Very young children like bold, engaging colors such as red, yellow, or blue. They use all these colors together. They do not like colors such as black, brown or gray. They use, not what they see but what they know. For example, painting in red is very common in young children's paintings. Children at the age of 4-5 generally paint without any color discrimination. They learn primary and intermediate colors at the age of 4-5. In their happy paintings they use yellow and in their sad paintings they use brown. It is a known fact that children use the colors they like. If the dominant color is red in a child's painting, the child is thought to be assertive and aggressive. If a child chooses warm colors such as pink, yellow, and orange he/she is thought to be kind, gentle, and co-operative. Children who prefer cold colors like black, blue, green, or brown generally represent assertive, timid, difficult to control, inadaptable personality traits and they generally suppress their feelings (Parramqn, 1999, Gambrich, 1997).

When the colors that children frequently use are examined, it is seen that the color blue represents positive and correct thinking and creativity whereas the color yellow represents a high level of neatness, optimism and activity. The color green represents nature, tranquility, a balmy atmosphere, optimism and self-confidence (Coşkuner, 1995).

Researchers who have specialized in colors state that children whose preferences are warm colors (red, yellow and orange) are generally kind, cooperative and sympathetic whereas children whose preferences are cold colors are generally assertive, timid, difficult to control, and unadaptable. Nursery school children who persistently prefer cold colors generally tend to hide their feelings and are suppressed by their parents (Quoted from Yavuzer, 2001).

As children are not mature enough to deal with problems, they also have serious difficulties in dealing with unexpected disasters. Sometimes, even adults may need professional help when they experience such a disaster. During natural disasters like earthquakes, floods, and storms the need for help increases. According to Janis (1982) unexpected stresses are difficult to deal with (Quoted from Erol & Öner, 1999). Therefore, the destructiveness of an unexpected disaster is not limited to buildings. It also destroys the lives of human beings.

Children who are obliged to leave their parents because of divorce, the death of a parent or economic problems and who are under the responsibility and care of the government live in institutions where their physical development is supported but their psychological development may be ignored. Due to an insufficient number of personnel, children may not receive enough individual attention and thus may have to deal with their problems themselves. Being separated from parents, who are essential for the socialization and development of children, may cause children to lose their self-confidence and they may experience adaptation and behavioral problems (Pala & Baran, 2000).

Children cannot express their worries, panic, dread, insecurities, despair and desperation because expressing their feelings may hurt them. Their word power may also be insufficient for them to express themselves. They may feel uneasy about not being heard. They may be confused and not know how to explain their feelings and thoughts. They may need time and confidence in order to express themselves. If oral communication is not possible due to the above-mentioned factors, "playing" and "painting" can be used to healing these children. Moreover, facial expressions and the colors used to painting these expressions may help children express themselves through painting. To use painting to express something allows children to express themselves in a secure environment, to organize the incident, to hold on to the world and others by making a connection between freedom and discipline, and to be hopeful again (Yalın, 1999).

There are many research findings regarding the relationship between emotions and color preferences (Zentner, 2001; Hemphill, 1996; Lang, 1993). According to Parsons (1987), the color preferences in children's paintings reflect their aesthetic feelings and their emotional state at the time (Quoted from Honigman,1998).

The aim of this study is to examine the facial expressions and color preferences of children who are orphans, children who live with their parents and children who have experienced an earthquake. The technical examination of facial expressions in children's paintings and the way they recognize, define and narrate those expressions has been the subject of another study (Akman, Karaaslan, Öncü & Güler, 2003). This study deals with the color preferences of children.

Method

The sample of the study included 85 children, 27 of whom had experienced the great earthquakes in Bolu and Gölcük in 1999, 21 orphans living in Keçiören Atatürk Child Care Center and 37 children living with their families. All of these children were aged 6 and attending a pre-school institution at the time of the study.

Regular A4 white paper and coloring pens were used as data collecting tools, and the children were asked to draw human figures with happy, scared, surprised, sad and aggravated facial expressions, respectively. The human drawings were collected from each child by the researcher; and the implementation was carried out individually with each child.. All the facial expressions were drawn on separate pieces of paper. The children were told that they were allowed to use any colors they wished. The children's drawings, each reflecting different single facial expressions, were examined as for the colors and the number of colors used and the obtained findings were presented according to numbers and percentages.

Table 1.
Distribution of sex of children (n=85)

Sex / Groups	Girls		Boys		Total	
	Number	%	Number	%	Number	%
Orphans	8	38.1	13	61.9	21	100.0
Children who had experienced an earthquake	15	55.6	12	44.4	27	100.0
Children living with their parents	16	43.2	21	56.8	37	100.0
Total	39	45.9	46	54.1	85	100.0

Table 1 indicates that 38.1% of the orphans, 55.6% of the children who had experienced an earthquake, and 43.2% of the children living with their parents were girls. The percentage of boys is as follows: 61.9% of the children in need of protection, 44.4% of the children who had experienced an earthquake, and 56.8% of the children living with their parents.

Findings

The findings of the study regarding the facial expressions and color preferences of six year old, pre-school children who are in need of protection, who live with their parents, and who have experienced an earthquake have been presented in tables.

The distribution of the groups of children regarding their human figure drawings with happy, scared, surprised, sad and aggravated facial expressions has been presented in Table 2. The distribution of the number of colors used by those children has been presented in Table 3 and the distribution of those colors has been presented in Table 4, 5, 6, 7, and 8.

Table 2 indicates that happy and surprised facial expressions were used at the highest level (100%)by children living with their parents, whereas scared, sad and enraged facial expressions were used more by children who had

experienced an earthquake (100%, 92.6% and 96.3% respectively). It can be seen that orphans draw all of the facial expressions less than the other two groups.

When Table 3 is examined, it can be seen that children living with their parents mostly preferred "more than 2 colors" in their drawings of facial expressions. However, orphans and children who had experienced an earthquake preferred to use "one or two colors" in their drawings.

The rates of preference of children in using "one or two colors" in their facial expressions are as follows: Orphans 100% in their scared and sad face expressions; children who had experienced an earthquake 84.6% in their happy face expressions, 88.5% in their surprised expressions, 100.0% in their sad expressions and 92.3% in their enraged facial expressions.

Table 2.
The distribution of groups of children regarding their human figure drawings with facial expressions

Groups / Facial Expressions	Orphans n:21		Children who experienced the earthquake n:27		Children living with their parents n:37	
	Number	%	Number	%	Number	%
Happy	16	76.2	26	96.3	37	100.0
Scared	14	66.7	27	100.0	36	97.3
Surprised	14	66.7	26	96.3	37	100.0
Sad	14	66.7	25	92.6	34	91.9
Enraged	16	76.2	26	96.3	35	94.6

Table 3

Distribution of the number of colors that children used in their human figure drawings with facial expressions

Groups / Facial Expressions	Number of Colors Used	Orphans			Children who had experienced the earthquake			Children living with their parents		
		n	Number	%	N	Number	%	n	Number	%
Happy	1 / 2 Colors	16	13	81.3	26	22	84.6	37	10	27.0
	More than 2 colors		3	18.7		4	15.4		27	73.0
Scared	1 / 2 Colors	14	14	100.0	27	24	88.9	36	18	50.0
	More than 2 colors		-	0.0		3	11.1		18	50.0
Surprised	1 / 2 Colors	14	11	78.6	26	23	88.5	37	11	29.7
	More than 2 colors		3	21.4		3	11.5		26	70.3
Sad	1 / 2 Colors	14	14	100.0	25	25	100.0	34	11	32.3
	More than 2 colors		-	0.0		-	0.0		23	67.7
Enraged	1 / 2 Colors	16	14	87.5	26	24	92.3	35	15	42.8
	More than 2 colors		2	12.5		2	7.7		20	57.2

Table 4

The distribution of colors used in the facial expression reflecting <u>happiness</u>

Colors used in the facial expression reflecting happiness	Orphans n=16		Children who had experienced the earthquake n=26		Children living with their parents n=37	
	Number	%	Number	%	Number	%
Red	4	25.0	6	23.1	29	78.4
Blue	7	43.7	4	15.4	29	78.4
Green	4	25.0	7	26.9	30	81.1
Yellow	3	18.7	6	23.1	29	78.4
Black	5	31.2	13	50.0	28	75.7
Brown	4	25.0	6	23.1	28	75.7
Gray	3	18.7	4	15.4	27	73.0
Orange	3	18.7	5	19.2	28	75.7
Purple	4	25.0	4	15.4	27	73.0
Pink	4	25.0	7	26.9	27	73.0

Table 4 presents the distribution of colors used in the facial expressions reflecting happiness in the children's drawings. The rates of colors used by children in their own groups indicate that the color blue was preferred by 43.7% of the orphans, the color black was preferred by 50.0% of the children who had experienced an earthquake, and the color green was preferred by 81.1% of children living their parents.

Table 5 presents the distribution of the colors used in the facial expressions reflecting fear in the children's drawings. The rates of colors used by children in their own groups indicate that the colors red and blue were preferred by 21.4% of the orphans, the color black was preferred by 48.1% of the children who had experienced an earthquake, and the color yellow was preferred by 66.7% of the children living their parents.

Table 6 presents the distribution of the colors used in the facial expressions reflecting surprise in the children's drawings. The rates of colors used by children in their own groups indicate that the color blue was preferred by 42.8% of the orphans, the color black was preferred by 38.5% of the children who had experienced an earthquake, and the colors blue and orange were preferred by 78.4% of the children living their parents.

Table 5.
The distribution of colors used in the facial expression reflecting fear

Colors used in the facial expression reflecting fear	Orphans n=14		Children who had experienced the earthquake N=27		Children living with their parents n=36	
	Number	%	Number	%	Number	%
Red	3	21.4	4	14.8	19	52.8
Blue	3	21.4	6	22.2	22	61.1
Green	-	0.0	8	29.6	19	52.8
Yellow	-	0.0	5	18.5	24	66.7
Black	2	14.3	13	48.1	20	55.5
Brown	1	7.1	6	22.2	23	63.9
Gray	-	0.0	3	11.1	19	52.8
Orange	-	0.0	3	11.1	22	61.1
Purple	2	14.3	3	11.1	18	50.0
Pink	1	7.1	3	11.1	19	52.8

Table 6.
The distribution of the colors used in the facial expression reflecting surprise

Colors used in the facial expression reflecting surprise	Orphans n=14		Children who had experienced the earthquake n=26		Children living with their parents n=37	
	Number	%	Number	%	Number	%
Red	5	35.7	4	15.4	26	70.3
Blue	6	42.8	7	26.9	29	78.4
Green	4	28.6	5	19.2	28	75.7
Yellow	3	21.4	4	15.4	27	73.0
Black	5	35.7	10	38.5	27	73.0
Brown	4	28.6	8	30.8	26	70.3
Gray	3	21.4	3	11.5	27	73.0
Orange	3	21.4	6	23.0	29	78.4
Purple	4	28.6	3	11.5	28	75.7
Pink	3	21.4	3	11.5	26	70.3

Table 7 presents the distribution of the colors used in the facial expressions reflecting sadness in the children's drawings. The rates of colors used by children in their own groups indicate that the color yellow was preferred by 21.4% of the orphans, the color black was preferred by 36.0% of the children who had experienced an earthquake, and the color blue was preferred by 79.4% of the children living with their parents.

Table 8 presents the distribution of the colors used in the facial expressions reflecting rage in the children's drawings. The rates of colors used by children in their own groups indicate that the color red was preferred by 31.2% of the orphans, the color black was preferred by 42.3% of the children who had experienced an earthquake, and the colors blue and red were preferred by 65.7% of the children living their parents.

Table 7.
The distribution of the colors used in the facial expression reflecting sadness

Colors used in the facial expression reflecting sadness	Orphans n=14		Children who had experienced the earthquake n=25		Children living with their parents n=34	
	Number	%	Number	%	Number	%
Red	2	14.3	2	8.0	23	67.6
Blue	2	14.3	4	16.0	27	79.4
Green	-	0.0	4	16.0	24	70.6
Yellow	3	21.4	-	0.0	26	76.5
Black	2	14.3	9	36.0	24	70.6
Brown	1	7.1	4	16.0	23	67.6
Gray	-	0.0	-	0.0	23	67.6
Orange	2	14.3	3	12.0	25	73.5
Purple	1	7.1	1	4.0	23	67.6
Pink	-	0.0	1	4.0	24	70.6

Table 8.
The distribution of the colors used in the facial expression reflecting rage

Colors used in the facial expression reflecting rage	Orphans n=16		Children who had experienced the earthquake n=26		Children living with their parents n=35	
	Number	%	Number	%	Number	%
Red	5	31.2	6	23.1	23	65.7
Blue	3	18.7	7	26.9	23	65.7
Green	2	12.5	4	15.4	22	62.8
Yellow	3	18.7	2	7.7	22	62.8
Black	4	25.0	11	42.3	22	62.8
Brown	3	18.7	3	11.5	21	60.0
Gray	2	12.5	2	7.7	21	60.0
Orange	4	25.0	3	11.5	22	62.8
Purple	4	25.0	5	19.2	20	57.1
Pink	2	12.5	2	7.7	21	60.0

Discussion

As seen from Table 2, in which the distribution of groups of children regarding their human figure drawings with facial expressions is presented, happy and surprised facial expressions were drawn the most often by children living with their parents (100%). However, it is striking that scared, sad and enraged facial expressions were drawn the most often by children who had xperienced an earthquake (100%, 92.6% and 96.3%

respectively). It is thought that the children who experienced the earthquake disaster reflect their feelings by drawing scared, sad, and enraged facial expressions. As seen from the Table children in need of protection drew less facial expressions when compared to the other groups. The reason may be that these children rarely take part in this kind of activity.

Table 3, in which the distribution of the number of colors that children used in their human figure drawings with facial expressions is presented, indicates that

children living their parents have the highest rate of using "more than two colors" in their drawings. However, children who had experienced an earthquake and orphans prefer to use "one or two colors" in their drawings.

Baykoç-Dönmez and Karaaslan (2002), in their research on 91 children from different age groups who were hospitalized, asked children to draw pictures according to their directions. The children were asked "to draw themselves", "to draw what they do in the hospital", and "to draw something they want to draw". Each drawing was evaluated according to the colors and number of colors that had been used by the children.. The results of the research indicated that children used more colors in their free drawings. As for the choice of the colors themselves, it was observed that children preferred to use blue, yellow, green, and orange in their hospital drawings, and preferred green, blue, yellow and brown in their free drawings. Even though the percentage was not over 50%, they preferred to use red, yellow, and brown when they drew themselves. It was also observed that the colors blue, yellow and green were highly used both in their hospital and free drawings with the percentage of the use of these colors being higher in their free drawings than in their hospital ones.

As seen in Tables 4, 5, 6, 7, and 8, the orphans prefer to use the colors blue, red, and yellow more often in their human figure drawings. Children who had experienced an earthquake preferred black in all their drawings. Children living their parents preferred to use the colors blue, yellow and red. They also chose green and orange. In addition to the above-mentioned colors, the use of white, beige and dark blue was also examined. However, since the preference percentage was very low, these colors were not included in the tables.

The most dynamic and vibrant color is red. The color red represents activity, initiation, leadership, and strength. However, in addition to those positive qualities, the color red also represents opposing impressions such as love and hate (Quoted from Sarıkaya and Sütütemiz, 2004; Davey, 1998; Saito, 1996; Terwogt & Hoeksma, 1995). According to Linderman (1977) the color blue represents control. Thus, it might be concluded that children in need of protection prefer blue in addition to red in their facial expression drawings reflecting fear.

It can be seen that children living with their parents prefer the color yellow in their facial expressions reflecting fear. Orphans also prefer the color yellow, but they chose this color in their facial expressions reflecting sadness.

Although some researchers state that the color yellow represents liveliness and optimism, it has also been pointed out that the color yellow symbolizes temporariness and death. It has also been determined that children cry more and adults feel more irritated in yellow painted rooms (Quoted from Sarıkaya and Sütütemiz, 2004).

If the individual's level of anxiety is high, generally warm colors such as red and yellow are preferred. However, if the individual looks for silence and serenity, and wants to be alone, he/she prefers colors like green or light blue (Kwallek, Lewis, & Robbins, 1988; Mahnke F.H. & Mahnke R.H, 1993).

Orange is a mixture of yellow and red and it has the characteristics of both colors. It is believed that the color orange symbolises friendship, geniality, and illusive feelings. People who prefer to wear orange are believed to be courageous and adventurous (Linderman, 1997; Berk, 1990).

According to the results of many studies, the color black, which was preferred by the children who had experienced an earthquake, represents death, traumatic incidents, and night. Therefore, there is a connection between the color black and negative feelings such as anger, sadness, or fear (Ainsworth, Simpson & Cassell, 1993; Kwallek, Lewis, Lin-Hsiao & Woodson, 1996). It is also stated that this color indicates the density of reactions such as fear and excitement and its frequent use might be related to unhappiness and deep depression (Linderman, 1997; Lewis & Grene, 1983).

In a study carried out with 87 children at the age of 10-12 to examine which color represents their perception of life, it was observed that 51% of the children had positive feelings towards life. It was seen that they preferred pink, blue, white and green in their answers. However, 37% of the children used mostly black, brown, and red and showed pessimistic attitudes. 12% of the children were undecided (Gürtuna, 2004).

Ballast (2002) defines colors as warm and cold colors and states that cold colors such as green and purple have

relaxing effects whereas warm colors such as red, yellow, and orange have stimulating effects.

According to the results of a study carried out by Kaya and Epps (2004) on high school students, there is a relation between the color preference and current emotional state of individuals. The results showed that students who were happy, peaceful, and hopeful preferred green; students who were happy and excited preferred yellow; students who were sad, alone and depressive preferred blue; students who were warmhearted and happy but in need of care preferred red; and students who felt fainthearted, feeble, and alone preferred to use purple.

Conclusion

The results of this study show that the preference of color use of children in the sampling group are as follows: Children who are orphans and children who had experienced an earthquake preferred to use one or two colors in their paintings whereas children living with their parents preferred to use more than two colors. As for the distribution of the most co0mmonly used colors, it has been observed that children who had experienced an earthquake preferred the color black in all facial expressions. It has also been observed that the color preferences of children who are in need of protection, and those of children living with their parents vary depending on the facial expression. In the comparison of two groups, it has been found out that the rate of the use of colors in the group of children living with their parents is higher than in the group of children who are orphans.

Suggestions

- Children should be given the opportunity to express themselves through painting and other activities. They should be asked to narrate their stories related to their paintings and their interpretations should be analyzed and evaluated in order to give support to those children. To this aim, teachers and educators should be given supportive educational backgrounds to enable them to interpret children's paintings.

- Since only one painting of a child may be misleading, other paintings and other related variables should also be taken into consideration.
- The child should be given the opportunity to gain experience with colors; he/she should not be criticized for the colors he/she chooses.
- The individual differences in the color preferences of children should be taken into consideration and the obtained findings should be evaluated within this context. In order to make a generalization the sampling group should be larger.

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