



## Investigation of the Effect of Reading Illustrated Children's Books with and without Using the Visual on 60-72 Months Children's Creativity

Şeyda İNCE SEZER<sup>1</sup>, Fatma YÜCEL DİNÇ<sup>2</sup>, Nuri DOĞAN<sup>3</sup>

### Öz

Each child gains a place in society by being different from other individuals with his/her own characteristics. Individual differences, interpretations of situations, perspectives, ways of expressing themselves, problem solving strategies and learning styles vary from child to child and affect children's creativity. According to the National Advisory Committee Report (The UK National Advisory Committees), imagination and thinking power, a specific goal and achievement, and finally, originality that overlaps with the goal have been identified as the primary elements that shape creativity. It is very difficult to find storybooks for 5-6 year olds that do not contain images. Since these children have not yet received literacy education, the books are usually read to them by adults at school. In this study, it was investigated whether the visuals we use while reading storybooks to children, by observing and copying these pictures cause the creativity of children to be extinguished or limited, or whether the visuals strengthen children's visual thinking skills and support children's creativity more. The research was conducted with a total of 54 preschool children aged 60-72 months, using a total of 2 visually rich children's books. The study was an experimental study, and the participants of the study were divided into groups, 23 of which were control and 31 of which were experimental, and the children in two classes in a private kindergarten were formed by forming control and experimental groups. While the children were divided into groups, the "Torrance Creativity Test" was applied to the children and two groups were formed with the average of the creativity scores close to each other. It was aimed for the control group to read a book by a practitioner without using the visuals in the book, and for the experimental group to read the book by the same practitioner by using the visuals (illustrations) in the books. Both groups were asked to paint what they understood and thought from the book they listened to. The findings were evaluated by examining the pictures of both groups and considering the four main categories Lowenfeld created in the analysis of children's drawings. These categories are; color, form, space and expressiveness. Color types used by children, their tones and how they mastered colors were examined. The richness of the image in the form, the objects used, the expression of movement in the painting, and the detail were discussed. The spatial perception of the children in the space and their ability to place the objects they use in the space were examined. In expressiveness, all categories were scored with a 5-point Likert scale based on how well the child has mastered the subject in the book, his level of understanding of the subject, and the expression he used in the picture. According to the results of the t-test, there was no difference between the averages of the experimental and control groups of the 1st book. For the second book, a significant difference was found between the experimental and control groups. Children who drew without looking scored higher. The effect of the quality of the pictures used in the books on reading emerges.

### Anahtar Kelimeler

Creativity  
Early Childhood Education  
Illustrated Child Books  
Literacy

### Makale Hakkında

Received: 31.01.2021  
Accepted: 24.11.2021  
Online Published: 31.12.2021

<sup>1</sup> Assist. Prof. Dr., Harran Üniversitesi, Harran University, Faculty of Education, Türkiye, [seydagul34@gmail.com](mailto:seydagul34@gmail.com), <https://orcid.org/0000-0002-4475-677X>

<sup>2</sup> Student, Hacettepe University, Türkiye, [fatma.yucel.fy@gmail.com](mailto:fatma.yucel.fy@gmail.com), <https://orcid.org/0000-0003-4996-0646>

<sup>3</sup> Prof. Dr., Hacettepe University, Faculty of Education, Türkiye, [nuridogan2004@gmail.com](mailto:nuridogan2004@gmail.com), <https://orcid.org/0000-0001-6274-2016>

## Introduction

There are many definitions of creativity that are similar to each other. For example, Thurstone (1952) defines creativity as an individual's finding a solution that results suddenly and creates innovations. Thought should have artistic, mechanical, and theoretical features. According to Bartlett (1958), creativity is "to leave the main road, to break out of the patterns, to be open to experience and to allow one thing to guide and direct another thing" (as cited in Torrance, 1965).

According to Torrance (1965), artists use creativity. According to Torrance (1962), one should be delicate and sensitive to problems to define creativity. Feeling the lack of a situation and event and realizing what they are, making predictions about how to solve them, testing ideas, and changing them if needed, testing them again and revealing the result is necessary to define creativity. Creativity is the ability to wonder, explore, and invent something new by developing new or emerging abilities in the individual (Mott, 1973). According to Chambers (1969), creativity can manifest itself in different areas and its level can be more or less. For example, an individual's creativity in painting can be more, while creativity in dance is less. In a study on children's creative activities, it was observed that a child who could not draw a beautiful picture could make his friends happy and attract all the attention by including a friend with a disability into the game with a game he discovered (Bode et al., 1979). When artistic creativity is examined in the literature, more limited studies emerge. According to San (2004), there is no difference between scientific creativity and artistic creativity in terms of the stages of using the brain and the mind. While the left hemisphere of the brain works in scientific creativity, the right hemisphere of the brain is more active in artistic creativity. If the two hemispheres of the brain do not interact, then the desired creativity is not seen.

According to Yetişken (1998), three types of objects must be linked for the artist to be effective. These;

- Existing found object
- Object in the artist's mind
- Object that is in the form of an unfinished work

The artist can transform the existing object by adding his own individual feelings and thoughts (Yolcu, 2009).

According to the research of Lowenfeld and his colleagues, the basic features of creativity are as follows (Cited by Yavuzer, 1996).

- Flexibility
- Fluency
- Being sensitive to problems
- Originality
- Redefining and reorganizing

According to Yolcu (2009), the basic features of creativity are explained as follows;

**Flexibility:** In flexibility, the person adapts to his environment without being forced, could think in many ways and does not object to the fact that the things he thinks can be differentiated and changed. Creative individuals are flexible in their thinking, they do not have definite stereotypes. Creative individuals quickly adapt to changing situations.

**Fluency:** It is the ability to think quickly and come up with many ideas in a short time. For example, when a creative child gives a piece of paper, they soon generate more ideas about where to use the paper than a non-creative person.

**Being Sensitive to Problems:** Creative individuals show sensitivity above normal to people, events, what they hear and see. A creative and sensitive child identifies with the picture by focusing on that picture while drawing.

**Originality:** Here, the individual is unique. Creative children use different solutions to events, situations, or objects by using different perspectives from other people's perspectives.

**Redefining and Rearranging:** Creative individuals can use the given materials in different ways, change the order of use, and use the materials used outside of their functions. Redefining includes abstracting, going into details and differences, and using the imagination.

According to Yolcu (2009), creativity in children occurs with the power of imagination, being in the learning step and playing. Preschoolers have a very developed imagination. Thus, the child can be himself comfortably and create original works.

What can be done to develop creativity in children (Honig, 2001; as cited in Üstündağ, 2005):

- Asking open-ended questions that can make the child think. For example, 'What would happen if children never grew up?' etc. questions can be asked.
- To help children assimilate by combining different branches of art. For example, listening to music while children draw.
- Children's use of movements. For example, body percussion. While doing this, they use their body parts and can keep a rhythm.
- Using fields in different functions and doing different things than normal. For example, going on a picnic in the winter season.
- To make children think outside of the ordinary and to express what they think. For example, two friends went to a planet, and you don't have any communication tools with you, how would you communicate with your family? What would you feel?

### ***Children's Drawings***

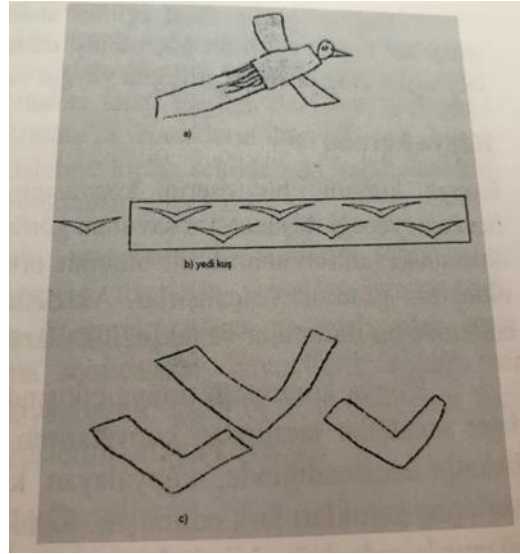
Children perceive drawing as a game. Just as children take care of their toys, they show the same sensitivity to the products they draw (Yavuzer, 1992). In short, the explanation of the theories about play in children will also explain the theories about the child's drawing. According to Tezcan (1994), the theories about children's play and including drawings are as follows;

- **Residual Energy Theory:** According to this theory, the child has excess energy. When excess energy accumulates and reaches at a certain point, it becomes unprotected.
- **The Theory of Preparation for Life:** It is a theory that is instinctive and includes experience. With the game, the child rehearses by experiencing the future life and is prepared for the future. The child enjoys the game.
- **Imitation Repetition Theory:** It can be said that the game depends on the transmission of desire, instinct, and abilities from the genes. Through play, the child imitates the things his ancestors did in the past, such as jumping, hopping, and bouncing..

Luquet (1927) identified the developmental stages of children that can be handled from their early ages through their pictures. They are pure scribbling, interpretive scribbling, unsuccessful realism, mental realism, and visual realism (Act., Yavuzer, 1992).

The "Children's Art" view, which radically changed the visual arts, emerged. When a comparison is made between the children's paintings of both the expressionist view and the surreal viewers, it has been revealed that the works of the children are almost artistic works (Yılmaz, 2010). One of the leading figures of this view is Australian art educator Viktor Lowenfeld. According to Lowenfeld (1974), instead of forcing the children to produce the same stereotypical products by forcing the children to imitate the examples available in them, they should guide the children in producing their own original products and the products made by the children should comply with their standards. The teacher should play a motivating role in children's creative thinking. Children should not be told that they always draw similar pictures. Instead, questions should be asked that will lead the child to think. According to Lowenfeld (1975), children should not be expected to perceive the world correctly with the eyes of adults and this is not important. The important thing is how the individual demonstrates originality. Intervention with the child destroys the originality and sincerity of the child. In this case, no rules should be set for the child while drawing a picture. The occurrence of this situation destroys the artistic features of children's works (Yılmaz, 2010).

Children develop their creativity when there is no negative influence from outside. It increases their self-confidence. This sense of confidence and creativity of children are better seen in secluded environments where picture books are not available (Lowenfeld, 1975). Lowenfeld (1975) revealed that neither the artistic direction nor the creativity of the child could make a positive progress with the cliché and coloring book type studies that are far from original ideas.



**Şekil 1.** Lowenfeld, (1947). Creative and Mental Growth. act; Taken from the 5th chapter of Yılmaz, 2010, Fine Arts, Special Teaching Methods in Education.

- a. Original bird drawing that the child created without seeing the coloring book
- b. Child sees and uses the coloring book
- c. Child is influenced by the coloring book and his creativity and self-confidence are destroyed

At the core of the naturalist view, it turns out that children's paintings do not contain cultural elements. On the contrary, they have the same characteristics regardless of any culture. It turns out that if the child tends to the patterns and patterns of the period, the naturalness of his development will deteriorate.

Although it seems that there is a dilemma between the studies reflecting the period and the stereotypes, it is thought that children's paintings do not contain cultural elements. Therefore, they do not take different sources as a reference, in fact, according to the Naturalist view, there is an answer to this situation. The child's development in the natural process is the main thing. If the child is influenced by stereotypes or popular works, the elements s/he reflects in the painting are far from naturalness and real feelings and do not reflect natural progress. It is natural that children do not have cultural elements in the pictures they draw, and that they make the same progress regardless of any culture. The important thing is that children should not be exposed to stereotypical and copy work in order not to affect the feelings and thoughts of children. The naturalist view made a lot of noise with the libertarian approach in the 20th century, but it caused misinterpretations that education is not very important and that children can make better progress on their own without the need for a teacher.

From the first half of the century to the 1980s, the Naturalist view prevailed as the single and most influential idea in art education, and continues to a large extent today (Yılmaz, 2010). The artistic progress of children becomes evident as their mental and physical development progresses. The signs and lines that make up his first drawings continue to gain an artistic dimension from early childhood to adolescence (Yavuzer, 1992).

The development process, which completes itself over time, matures with certain stages and experience. These stages both feed off the previous stage and form the basis for the next stage. Although there is no clear distinction, they are compatible with each other. It advances to the next stage by getting support from each other. (Yeşilyaprak, 2002).

Creativity skills are important for children's holistic development and future life, both academically and socially. Creativity should be developed from childhood to adulthood by being more supported rather than blunted. When we look at creative individuals, it is seen that they are more advantageous socially, artistically and academically than other people. Inaccuracies in education systems, school and classroom practices, and unqualified children's books not only prevent children's creativity, but also have negative effects on children's development. Due to the need arising from all these issues, the effect of using pictorial texts on children's creativity while reading a book was investigated. In this context, an answer to the following research question was sought.

**Research question:** What is the effect of using and not using pictures while reading to preschool children on the creativity levels of individuals?

### Method

In the research, the effect of reading picture and non-picture books to 5-6 year old students on the creativity of their pictures was investigated. For this purpose, two groups were studied, pictures (visuals) were used while reading the story in one of the groups, and not in the other. The reason for choosing this method in the study was that having children perform a pre-test application could increase the effect of variables other than the effect of reading a book (habit, familiarity, etc.), and because it was not possible to have children draw a picture as a pre-test, the pretest-posttest control group design could not be used. In the study, the group in which the visuals were used while reading the story was called the experiment, and the group that was not used was called the control group. In the study, the post-test quasi-experimental design with the control group was used when comparing the creativity scores given to the pictures made by the students in these two groups about the book (story) read. The research model can be shown as in Table 1.

**Table 1.**

Randomization	Groups	Experimental operations	Posttest
Random	Experimental (E)	looking at the visual image	Picture about the story
	Control (C)	without looking at the image	Picture about the story

The research is also relational research as it tries to reveal the effect of using visuals in reading on creativity.

#### *Research Group*

In the research, two groups of children between the ages of 5-6, in which images are used and not used while reading stories, were used. In the control group class of 23 people, the process was completed without allowing the children to look at the visuals while the story was being read, and in the experimental group class of 31 people, the process continued by allowing the children to look at the visuals while the story was being read. However, there were children who did not participate in both the experimental and control groups during the experimental procedure. As a result, for the 1st book, 16 in the experimental group and 13 in the control group; for the second book, there were 15 people in the experimental group and 10 people in the control group. The group that was read by looking at the images was called the experimental group because the effect of the visuals in the books on the creativity of individuals has been investigated. Therefore, the group that was read without looking at the visuals was considered as the control group. Before the assignment of the experimental and control groups, the Torrance Creativity Test was applied to the children, and the experimental and control groups were assigned so that their creativity score averages were close to each other. As a result, no significant difference was found between the Torrance Creativity Test scores of the experimental and control group children. However, the sample size of the experimental and control groups could not be balanced according to whether the children were at school that day or not.

#### *Data Collection Tool*

In the research, the pictures, made by the students about two story books read to them, were used as a data collection tool. Student pictures were scored in a 5-point Likert type in 4 categories. The 4 categories evaluated are color, form, space, and expressiveness. For each category, students got 1

point if they were very weak, 2 points if they were weak, 3 points if they were moderate, 4 points if they were good, and 5 points if they were very good. The students' pictures were scored by three expert raters to eliminate their scoring bias. Therefore, a student can score between 5 and 20 points from an official expert. The reason for using three experts in scoring the pictures is to control objectivity. The scores given by the experts for each child were accepted as continuous points ranging from 5 to 20. At the same time, it was examined whether the scores given by the experts provided a normal distribution. The skewness coefficients of the scores given by the experts to the students' drawings are between -0.928 and -0.009; The kurtosis coefficients were found to vary between -1.082 and -0.774. When the skewness and kurtosis coefficients change approximately between -1 and +1, they do not show a significant deviation from the normal distribution (Cokluk, Şekercioglu, & Büyüköztürk; 2010: p.16). While the reliability was calculated by ensuring the normality and continuous acceptance of the scores given by the experts for the student's drawings, the Pearson correlation was used for the pairwise agreement of the experts and the intraclass correlation coefficient for the triple agreement (Şencan, 2005). The correlations between the experts' scores and their significance levels are given in Table 2.

**Table 2.** Correlations between the scores that expert raters gave to students pictures

	Rater1	Rater2	Rater3
Rater1	1	,929**	,909**
Rater2	,929**	1	,909**
Rater3	,909**	,909**	1

\*\* p < 0,01

When Table 2 is examined, the correlations between the scores given by the experts to the children's drawings vary between 0.90 and 0.93. All correlations were significant at the 0.01 level. According to this result, it can be said that there is both a high and statistically significant agreement among the experts. The intra-class correlation coefficient, which was calculated to determine the coherence of three experts at the same time, was calculated as 0.970 (confidence interval 0.953 - 0.982) based on the two-way random effect model (Şencan, 2005: p. 275). The calculated intra-class correlation coefficient also shows that there is a high agreement among the experts, and it was found to be significant at the level of 0.01. Based on these results, it can be said that the scores given by the experts to the children's drawings are reliable. At the same time, when the in-class correlation coefficient was 0.70 as a minimum and 0.80 as an acceptable value, the minimum number of raters needed was calculated and it was found to be 1.7 (Şencan, 2005: p. 274). Based on this calculated value, it was deemed sufficient to score children's drawings by 3 experts in this study.

### *Data Collection Process*

Data were collected from children in a total of 2 weeks. Each week, one children's book containing content and illustrations suitable for age and developmental characteristics was read to the children in the control and experimental groups on the same day. One book was read to children once a week. As soon as the story was finished, the children in the experimental and control groups were asked to draw a picture about the book being read. While choosing the books, the books that the children have not encountered before and have not been read to them were chosen, and at the same time, care was taken to choose the books with more concrete pictures that would be easier for the children to draw. Book selections were made by three experts who evaluated and scored the children's pictures

### *Analysis of Data*

The average of the scores obtained from three experts was used as the painting score of the students in the experimental and control groups. Before the average scores were obtained, the scoring process was carried out by following the following process. First, the first expert scored all the students' pictures in the range of 1-5 for 4 categories, and the scores obtained from the 4 categories were summed to obtain the score the student got from the first expert. The same process was repeated for the second and third experts, and thus the scores the students got from the three experts were determined. After this stage, the scores of the students from the three experts were summed up and divided into three, and these average scores were accepted as the "painting creative score" of the students. The score comparisons of the students in the experimental and control groups were made based on these averages. Before comparing the experimental and control group mean scores, the data were pre-analyzed. In the

preliminary analysis, descriptive statistics were calculated. It was checked whether there were missing and extreme values, and whether the data were normally distributed. Descriptive statistics were conducted separately for both the book and the experimental and control groups. It was seen that the data did not show a significant deviation from the normal and did not contain any missing or extreme values. In order to determine the normality of the data, the skewness and kurtosis coefficients of the data belonging to the groups were examined and it was found that they were close to zero. On the other hand, Shapiro-Wilk test was performed, and it was concluded that the distribution was normal (Shapiro-Wilk statistics = 0.972 for the experimental group;  $p = 0.57$ ; Shapiro-Wilk statistics = 0.915,  $p = 0.052$  for the control group).

In order to find an answer to the research question, it was examined whether the difference between the mean scores of the students in the experimental and control groups was statistically significant. Since the data provided the assumptions of the independent groups t-test, which are normality, homogeneity of the variances of the groups, and continuity of the data, the analysis were made according to the independent groups t-test.

## Results

In order to answer the research question, the comparison tests were carried out for each book separately as well as for all data. As stated in the method section, the deviation from normal was not found to be significant in the analysis made for both the whole data and the books separately. On the other hand, Levene test results for homogeneity of the variances of the groups showed that the group variances were equal. Based on these results, independent groups t-test analysis was used for the scores obtained for each book and for all data.

### *Analysis Results for the First Book*

Table 3 shows the independent groups t-test results for the first book to determine whether there is a significant difference between the averages of the scores given to the students in the experimental and control groups by the field experts.

**Table 3.** For the first book, the results of the independent groups t-test conducted to determine whether there is a significant difference between the mean scores of the students in the experimental and control groups.

Groups	N	Mean	Std. Deviation	t	df	p
Looking (C)	13	14,872	4,009	0,921	27	0,365
Not Looking(E)	16	13.437	4.299			

The homogeneity of the variances of the groups was tested with Levene's test and the variances were found to be equal (Levene  $F = 0.021$ ;  $p > 0.05$ ). When Table 3 is examined, no significant difference was found between the averages of the scores given by the experts to the pictures of the students in the experimental and control groups for the group in which the first book was used. According to Table 3, the mean scores of the students in the control group are relatively higher than the mean scores of the students in the experimental group, but this difference was not found to be significant. Therefore, it can be said that the mean scores of the experimental and control groups are equal.

### *Analysis Results for the Second Book*

For the second book, the results of the independent groups t-test, which was conducted to determine whether there is a significant difference between the averages of the scores given by the field experts to the students in the experimental and control groups, are given in Table 4.

**Table 4.** For the second book, independent groups t-test results were used to determine whether there is a significant difference between the mean scores of the students in the experimental and control groups.

Groups	N	Mean	Std. Deviation	t	df	p
Looking (K)	10	16,801	2,895	2,455	23	0,022
Not Looking (D)	15	14,045	2,653			

The homogeneity of the variances of the groups was tested with Levene's test and the variances were found to be equal (Levene  $F= 0.328$ ;  $p > 0.05$ ). When Table 4 is examined, a significant difference was found between the averages of the scores given by the experts to the pictures of the students in the experimental and control groups for the group in which the second book was used. According to Table 4, the mean scores of the students in the control group are relatively higher than the mean scores of the students in the experimental group, and this difference was statistically significant. Therefore, the mean score of the control group is higher than the mean score of the experimental group. It can be said that this difference is too important to be explained by random errors.

### ***Analysis Results for the Whole Group***

Table 5 shows the independent groups t-test results for the whole group to determine whether there is a significant difference between the averages of the scores given to the students in the experimental and control groups by the field experts

**Table 5.** The results of the independent groups t-test conducted to determine whether there is a significant difference between the mean scores of the students in the experimental and control groups for the whole group

Groups	N	Mean	Std. Deviation	t	df	p
Looking (C)	23	15,711	3,626	2,007	52	0,050
Not Looking (E)	31	13,731	3,552			

The homogeneity of the variances of the groups was tested with Levene's test and the variances were found to be equal (Levene  $F= 0.262$ ;  $p > 0.05$ ). When Table 5 is examined, no significant difference was found between the averages of the scores given by the experts to the pictures of the students in the experimental and control groups for the whole group data. According to Table 5, the mean scores of the students in the control group are relatively higher than the mean scores of the students in the experimental group, but this difference was not found to be significant. Therefore, it can be said that the mean scores of the experimental and control groups are equal.

### **Discussion, Conclusion and Recommendations**

Fang (1996) argues that the pictures in children's picture books aim to instill a love of books, draw the attention and interest of the child to the book, teach concepts, strengthen the meaning of the story, and raise awareness in children. Jalongo (2004) argued that children's picture books develop children socially, personally, intellectually, culturally, and aesthetically. Thanks to children's picture books, while listening to the book, children also make the story concrete in their minds by looking at the pictures of the book. In this way, the child includes the story in his life (Bilgin, 2011). It can be understood from the pictures that the children have developed artistically and used their creativity. Picture books for children contribute to the development of children. Sever (2003) explained that children's creative painting abilities and desires are possible with artistically qualified illustration. The illustrations in the children's picture books should be in parallel with the perception levels of the children. According to Segun (1988), visuals and pictures rather than written texts have shown that children's imaginations are strengthened, and what is wanted to be conveyed in books is given to children in a better way through pictures.

Quality pictures of children supports their creative thinking, enables them to have knowledge about art and gain an aesthetic understanding (Georgio, 1969). The words and pictures used in picture books should complement each other (Salisbury, 2004). In this study, two books were used, and while there was no significant difference about the creativity of children in the first book, a significant difference was found in favor of the control group in the second book. When factors such as drawings and colors are considered, it has been revealed that children's picture books that do not have stereotypical picture features support their creativity and increase their creativity levels when read by showing their pictures, while unqualified picture books negatively affect children's creativity levels (İnce Sezer, Yücel Dinç & Doğan, 2018). In this study, it can be said that the reason for the results in favor of the control group in the second book is that the visuals in the selected books were not chosen to support creativity. In short, it was observed that the children who drew pictures without looking at the visual figures in the book got more points on a point basis than the children who drew pictures by seeing the visual figures. In this case, it can be said that the pictures of the book read do not have a positive



effect on children's creativity, and the visual extinguishes the child's creativity even more. When we look at the results of the first book analysis, it can be said that there is no significant difference between the experimental and control groups, and the book read does not add something to the creativity of the children visually.

As a result, as seen in this study, the results of the children in the control and experimental groups in the first book were generally close to each other and the difference was not significant. In the second book, the creativity levels of the children who drew without looking were higher. In order to fully understand whether children's creativity can be supported by using or not using the visuals of children's picture books, it is possible to carry out the necessary studies by choosing books with high and low visual qualities for children and reading them by showing or not showing the pictures of the books.

Suggestions for this study are given below;

This study could have been applied to a larger group with more books. The effects on children's creativity can be examined by selecting and categorizing according to the quality of the illustrations in the books to be read to children. Whether the illustrations in the books are abstract or concrete can be evaluated as a separate criterion, and accordingly, it can be evaluated whether it makes a difference on creativity.

### References

- Bilgin, H. (2011). 5-6 Yaş çocuklarına yönelik 1990-2010 yılları arasında basılan resimli kitapların çocuğa görelilik kavramına göre incelenmesi. Yayınlanmamış Yüksek Lisans Tezi. Marmara Üniversitesi Eğitim Bilimleri Enstitüsü, İstanbul.
- Bode, U., Kische, I.M. ve Otto, G. (1979). *Yaratıcılık Eğitimi*. (Çev. B. Can). Berlin: Duck Und Verlagshaus: Friedrich Verlag Velber.
- Chambers, J.A. (1969). Beginning a multidimensional theory of Creativity. *Psychological Reports*, 25 (3), 779-799.
- Çokluk, Ö., Şekercioğlu, G. ve Büyüköztürk, Ş. (2010). *Sosyal Bilimler İçin Çok Değişkenli İstatistik: SPSS ve LISREL uygulamaları*. Ankara: Pegem Akademi.
- Fang, Z. (1996). Illustrations, text, and the child reader: What are pictures in children's storybooks for?. *Reading Horizons*, 37, 130-142.
- Jalongo, M.R. (2004). *Young Children and Picture Books*. Washington, DC: National Association for the Education of Young Children.
- Georgio, C. (1969). *Children and their literature*. New Jersey: Prentice-Hall, Inc.
- İnce Sezer, Ş., Yücel Dinç, F. ve Doğan, N. (2018). The effects of reading not stereotyped illustrated 3-6 years children's books on the creativity of children by showing pictures or not. *International Conferences on New Horizons in Education (INTE)*, Paris, France. Proceedings Books Volume 2, ISSN 21467358.
- Lowenfeld, V. (1975). *Creative and mental growth*. London: Macmillan Publishing
- Lowenfeld, V. (1973). *Creativity and imagination*. Mankato, Minn.: Children's Press.
- Mott, J.A. (1973). *Creativity and imagination*. Mankato, Minn.: Children's Press.
- Salisbury, M. (2004). *Illustrating children's books*. Barron's Educational Series Inc.
- San, İ. (2004). *Sanat ve eğitim*. Ankara: Ütopya Yayınları.
- Segun, M. (1988). *The importance of illustrations in children's books*. In S. Mabel (Ed.), *Illustrating for Children: Report of the First Training Workshop for Illustrators of Children's Books* (p.25-27). Children's Literature Association of Nigeria, Ibadan: Nigeria.
- Sever, S. (2003). *Çocuk ve edebiyat*. (1. Basım). Ankara: Kök Yayıncılık.
- Şencan, H. (2005). *Sosyal ve davranışsal ölçümlerde güvenilirlik ve geçerlik*. Ankara: Seçkin yayınları.
- Tezcan, M. (1994). *Boş Zamanların Değerlendirilmesi Sosyolojisi*. Ankara: Atilla Kitabevi.
- The UK National Advisory Committees Report (DfEE), All our futures: Creativity, culture and

education, 1999.

Thurstone, L. (1952). *Creative talent*. In Thurstone, L. L. (Ed): *Applications of psychology*, New York: Harper & Row, 18-37.

Torrance, E. P. (1962). *Guiding creative talent*. NJ: Prentice-Hall, Inc.

Torrance, E. P. (1965). *Rewarding creative behavior: Experiments in classroom creativity*. Englewood Cliffs, N.J.: Prentice-Hall Inc.

Torrance, E.P. (1965). *Explorations in creative thinking in early school years: A progress report*. Englewood Cliffs, N.J.: Prentice-Hall Inc.

Taylor, C. W. ve Barron, F. (Eds.) (1996). *Scientific creativity: Its recognition and development: Selected papers*. New York: John Wiley and Sons Inc.

Üstündağ, T. (2005). *Yaratıcılığa yolculuk*, Ankara: Pegem Yayınları.

Yavuzer, H. (1992). *Resimleriyle Çocuk* (4. Baskı). İstanbul: Remzi Kitabevi.

Yavuzer, H. S. (1996). *Yaratıcılık* (3.Baskı). İstanbul: Boğaziçi Üniversitesi Yayınları.

Yeşilyaprak, B. (2002). *Gelişim ve öğrenme psikolojisi*. Ankara: Pegem Yayıncılık.

Yetişken, H. (1998). *Estetiğin Abc'si* (2. Baskı). İstanbul: Kabalcı Yayınevi.

Yılmaz, M. ve Artut, K. (Ed.). (2010). *Görsel Sanatlar Eğitiminde Özel Öğretim Yöntemleri* (2. Baskı). Ankara: Anı Yayınları.

Yolcu, E. (2009). *Sanat eğitimi kuramları ve yöntemleri* (2. Baskı). Ankara: Nobel Yayınları.

## Appendix

Picture 1, which was drawn by looking



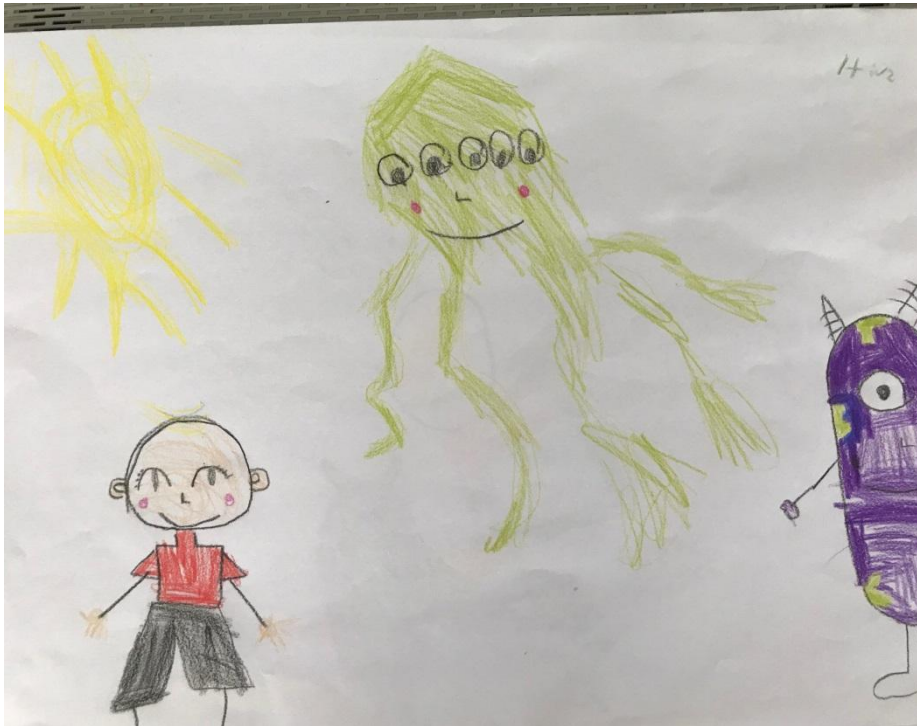
Picture 2, which was drawn by looking



**Picture 3, which was drawn by looking**



**Picture 4, which was drawn by looking**



**Picture 5, which was drawn by looking**



**Picture 6, which was drawn by looking**



**Picture 1, which was drawn without looking**



**Picture 2, which was drawn without looking**



**Picture 3, which was drawn without looking**



**Picture 4, which was drawn without looking**



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/)

