

## The Effect of Drama on the Creative Imagination of Children in Different Age Groups\*

### Dramanın Farklı Yaş Gruplarındaki Çocukların Yaratıcı Hayal Güçleri Üzerindeki Etkisi

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**ABSTRACT:** Imagination is necessary for creative ideas to emerge. The creative imagination can be developed by suitable education programs especially by drama programs with suitable activities. This article presents findings on whether the effect of drama on the creative imagination of children in different age groups differentiate or not.

The experiment group of this research is comprised of 60 children (30 from the age group of 10, 30 from the age group of 13) from a regular primary school and the control group is comprised of 60 children (30 from the age group of 10, 30 from the age group of 13) from another primary school both with the equal socio-economic background in order to avoid children effect each other. The drama program was implemented to the experiment group of both age groups separately as 48 hours in a week. However, this program was not implemented to the control group. The Kujawski Creative Imagination Test was used as the measurement instrument. For analysis of the data, the independent samples t test and paired samples t test were utilized. From the results of the creative imagination test applied before and after the drama, it was shown that a drama program has a positive effect on development of the creative imagination of children. When the effects of drama in different age groups is examined, the prepared drama program is more effective on 10 year old children than 13 year old children.

**Keywords:** Creative Imagination, Drama, Different Age Groups

**ÖZ:** Hayal gücü, yaratıcı fikirlerin ortaya çıkması için gereklidir. Uygun eğitim programları, özellikle de uygun etkinliklerin yer aldığı drama programları aracılığıyla yaratıcı hayal gücü geliştirilebilir. Bu makale, farklı yaş gruplarındaki çocukların yaratıcı hayal güçleri üzerinde dramanın etkisinin farklılaşp farklılaşmadığını ortaya koymaktadır.

Bu araştırmanın deney grubunu bir ilköğretim okulundan 60 çocuk (10 yaş grubundan 30, 13 yaş grubundan 30) oluştururken, kontrol grubunu çocukların birbirinden etkilenmemeleri için sosyo-ekonomik olarak eş düşünülen başka bir ilköğretim okulundan 60 çocuk (10 yaş grubundan 30, 13 yaş grubundan 30) oluşturmaktadır. Drama programı, her iki yaş grubundaki deney grubuna ayrı ayrı haftada dört saat toplam 48 saat uygulanmış, kontrol grubuna uygulanmamıştır. Ölçme aracı olarak Kujawski Yaratıcı Hayal Gücü Testi kullanılmıştır. Verilerin analizinde bağımsız örneklemler t testi ve eşleştirilmiş gruplar için t testi kullanılmıştır. Drama öncesi ve sonrası uygulanan yaratıcı hayal gücü test sonuçlarına göre, drama programının çocukların yaratıcı hayal güçlerinin gelişiminde olumlu bir etkisi vardır. Dramanın farklı yaş gruplarına göre etkisi incelendiğinde, hazırlanan drama programı 13 yaş çocuklarına göre 10 yaş çocuklarında daha fazla etkilidir.

**Anahtar Sözcükler:** Yaratıcı Hayal Gücü, Drama, Farklı Yaş Grupları

## 1.INTRODUCTION

Imagination is a natural asset and one which is necessary to develop. The creative process is comprised of divergent thinking and imagination (Hu, 2002). Divergent thinking involves production of variability (Cromptley, 2001) and requires us to make imaginative connections (Beetlestone, 1998). In the general sense, imagination is identified as the faculty of forming intellectual images and phantasms regarding the objects that are perceived or objects that does not exist at that time being or does not exist at all (Budak, 2000).

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Basically, the activity of an individual can be divided into two kinds: Reproductive and creative (Vygotsky, 2004). Vygotsky (2004) states that nothing new is created in the reproductive state, the already existing something is repeated accurately; whereas in creativity, a new, creative something that belongs to the individual, itself is produced by combining elements from the past experience in new ways. McKellar (1957) states that the unconscious plagiarism concept provides the suggestive link between thought products called as reproductive and creative and when unconscious plagiarism occurs, the individual appropriates another's idea(s) without realizing they are doing so; McKellar (1957) adds that originality may surface by connecting the perceptions, re-arranging and unifying them. While Munro (1956) identifies the reproductive imagination as the remembrance of images of objects that have been sensed before, he also asserts that the productive, constructive or creative imagination begins with mental imaging of suggested but never experienced things therefore it expands to fantastic representation or fancy and after that to an intellectual creation idea and poetic idealization. Munro (1956) indicates that the mistake of the distinction between reproductive imagination and creative imagination is the inclination towards separating the two concepts sharply. While Munro (1956) suggests that the imagination in its pure reproductive state is very rare, and even the process of remembering and imaging, and sense perceiving itself, contains very little creation, at the same time, he also accepts that some of the imaginative process tends towards to the previous sense experiences. Coleridge (2007) separates the imagination into two kinds; primary imagination and secondary imagination. While he identifies the primary imagination as the first agent of human perception and the vitality, as well as a repetition of the infinite creation activity of one's mind, he presents the secondary imagination as an echo of primary imagination, existing with the desire of the conscious. Coleridge (2007) also points out that secondary imagination is the same as primary imagination in the kind of agency. According to him, they differentiate only in operation and degree. Rugg (1963) states that discovery and verification are indispensable to productive thought and identifies creative imagination as the instrument of the act of discovery.

The creative imagination is the power of problem solving and synthesis of the human mind by the recombining of past life experiences in the creation of new images and image patterns (Wilner, 1975).

The creative imagination is dramatic in its character. It is the skill of seeing the imaginative possibilities, understanding the relations between two concepts and seeing the dynamic force between them (Courtney, 1968). The dramatic process is one of the most important things for people. According to Courtney (1968), a lack of it, means lacking human characteristics and being made up of mere motor reflexes alone.

Drama is a combined form of art in which the participants reflect the human situations, imagine, recreate, transform (Pinciotti, 1993, Taylor, 2000). Drama is a transformation where a child plays the mother, the father, a sailor etc. A transformation is a dynamic that enables the learning. In order to understand something new, one thing should be transformed into something that has been known before (Courtney, 1990). For Courtney (1990), drama creates meaning in a dual process as a cognitive whole, one is reality and the other is fiction.

Drama is a highly effective method that enables children to improve their social, emotional, physical, mental, creative and imaginative development. In drama, participants impersonate another person and use their imagination to look at the situations from that person's point of view and thereby solve a given problematic situation.

It is widely known that drama is used for many different objectives like improving learning, motivating students and the fight against the violence in schools (Anderson&Donelan, 2009). However, it is also clear that very little attention is given to the development of the imagination in drama education especially in light of the fact that imagination improves during

drama activities. Cremin (1998) indicates that imagination in drama education is not really researched hence little is known about this area. Gallas (2003) points out that the utilization of imagination in education is not new but is considered a superficial subject for educators and researchers and adds that educators do know the significance of the imagination intuitively, but it is hard to define how, when and why imagination is important. Despite this Pincotti (1993) states that drama is a branch of art where the unseen is rendered visible and where personal imagination is shared, therefore he emphasizes the importance and the place of the imagination in drama.

The aim of this research is to show whether the influence of drama on the creative imagination of children from different age groups differentiate or not. For this purpose, the answers to indicated questions were sought: a) Does drama have an effect on the creative imagination? b) Does the effect of drama on the creative imagination show a difference according to the age of children? c) Does the effect of drama on the creative imagination show a difference according to the gender of children?

## 2. METHOD

The research was based on a pre-test and post-test design with an experiment and a control group.

### 2.1. Participants

The experiment group in this research was comprised of 60 children (30 from the age group of 10 and 30 from the age group of 13) from a certain primary school. The control group was comprised of 60 children (30 from the age group of 10 and 30 from the age group of 13) from another primary school with an equal socio-economic background in order to avoid children effect each other.

### 2.2. Instrument

In this research, the creative imagination test, developed by Janusz Kujawski, was used. The validity and reliability of the creative imagination test was carried out by Gündoğan (2011) in Turkey and the reliability co-efficient, calculated by variance analysis, was found to be 0.76.

The test of creative imagination is a paper-pen test that can be administered to children age 6 and above. The participants are required to do schematic drawings that do not exist. The duration of the test is 30 minutes. The Test of Creative Imagination is comprised up of 3 sub-scales: Fluency, Originality, Elaboration and Transformativeness.

### 2.3. Procedure

As a result of data obtained from school management, children and teachers, it was determined that the past experiences of the groups regarding drama were equivalent. According to the results of the creative imagination pre-test, there was no significant difference between the experiment and control groups ( $p>0.05$ ).

The pre-test was administered to the experiment and control groups at the same time. The control groups (children aged of 10 and 13) were not exposed to any thing else after the pre-test. The drama program was administered to children who made up the two experiment groups (ages of 10 and 13) separately by the researcher for 4 hours a week and a total sum of 48 hours in 3 months. Each activity was comprised of 24 activities of 2 hours each. The drama program was

prepared with consideration of the aims of the primary school programs and by reviewing the literature regarding imagination development. After taking expert opinions from professionals who work in the field of drama, and making the required modifications, the drama program was finalized. As Karwowski and Soszynski (2008) suggested, activities that were administered to the children were prepared with the aim of promoting the fluency of creating ideas in children. Each drama session was comprised of warm-up, improvisation and evaluation phases. The improvisation phase of the drama sessions also includes different drama techniques like role-playing, improvisation and pantomime.

The drama sessions were conducted in an empty room with pillows on the floor for the participants to sit on. During the drama sessions, equipment such as music, costumes, paper sheets and pencils were used.

## 2.4. Statistical Analyses

The normality test was applied to the data and thus it was revealed that the data was suitable for the normal distribution and based on this, the t test, which is a parametric test, was utilized to examine the data. In order to present the difference between the pre-test and post-test of the experiment group for creative imagination and the pre-test and post-test of the control group for creative imagination, the paired samples t test, and in order to present the results of the post-test of creative imagination for the experiment and control groups after the drama exercise, the independent samples t test were both utilized. The effect of drama on the creative imagination, differing according to age and gender, was assessed by the independent samples t test. The t test is used to determine whether there is a difference in terms of the averages between two sampling groups (Küçükşille, 2009).

## 3. RESULTS

The results were presented in three separate sections, that being the effect of the drama on the creative imagination, the effect of drama on creative imagination based on age and the effect of drama on creative imagination based on gender.

### 3.1. Results Regarding the Effect of Drama on Creative Imagination

**Table 1: T Test Results of the Experiment Group from the Age Group of 10, conducted according to Pre-test and Post-test scores.**

	Sub-tests	Mean	Standard Deviation	df	t	p
Pre-test	Fluency	2.07	1.17	29	-4.49	0.00*
Post-test	Fluency	3.70	2.22			
Pre-test	Elaboration and Transformativeness	13.55	5.34	29	-2.00	0.06
Post-test	Elaboration and Transformativeness	15.48	3.37			
Pre-test	Originality	1.32	0.38	29	-3.38	0.00*
Post-test	Originality	1.62	0.20			

Note. \*p<0.05

According to the Table 1, a significant difference in the Fluency and Originality sub-scales of the creative imagination test were found between the pre-test and post-test results of the

experiment group aged 10 ( $p < 0.05$ ). In the elaboration and transformativeness sub-scale, no statistically significant difference was found between the pre-test and post-test results of the experiment group of children aged 10.

**Table 2: T Test Results of the Experiment Group from the Age Group of 13, conducted according to Pre-test and Post-test scores.**

	Sub-tests	Mean	Standard Deviation	df	t	p
Pre-test	Fluency	1.80	1.42	29	-5.51	0.00*
Post-test	Fluency	3.63	2.75			
Pre-test	Elaboration and Transformativeness	15.11	5.32	29	1.27	0.22
Post-test	Elaboration and Transformativeness	13.79	2.92			
Pre-test	Originality	1.30	0.43	29	-2.12	0.04*
Post-test	Originality	1.50	0.25			

Note. \* $p < 0.05$

According to the Table 2, a significant difference in the Fluency and Originality sub-scales of the creative imagination test was found between the pre-test and post-test results of the experiment group of children aged 13 ( $p < 0.05$ ). In the Elaboration and Transformativeness sub-scale, no statistically significant difference was found between the pre-test and post-test results of the experiment group aged 13.

**Table 3: T Test Results of the Control Group from the Age Group of 10, conducted according to Pre-test and Post-test scores.**

	Sub-tests	Mean	Standard Deviation	df	t	p
Pre-test	Fluency	1.87	1.11	29	-0.35	0.73
Post-test	Fluency	1.93	1.01			
Pre-test	Elaboration and Transformativeness	12.62	6.18	29	-0.59	0.56
Post-test	Elaboration and Transformativeness	13.27	5.38			
Pre-test	Originality	1.30	0.51	29	-0.80	0.43
Post-test	Originality	1.38	0.42			

Note. \* $p < 0.05$

According to the Table 3, no significant difference was found between the pre-test and post-test results of the control group aged 10 ( $p > 0.05$ ).

**Table 4: T Test Results of the Control Group from the Age Group of 13, conducted according to Pre-test and Post-test scores.**

	Sub-tests	Mean	Standard Deviation	df	t	p
Pre-test	Fluency	1.70	0.99	29	-0.97	0.34
Post-test	Fluency	1.97	1.22			
Pre-test	Elaboration and Transformativeness	15.17	5.75	29	1.30	0.21
Post-test	Elaboration and Transformativeness	13.44	4.07			
Pre-test	Originality	1.31	0.49	29	-0.23	0.82
Post-test	Originality	1.33	0.25			

Note. \* $p < 0.05$

According to the Table 4, no significant difference was found between pre-test and post-test results of the control group aged 13 ( $p > 0.05$ ).

**Table 5: T Test Results of the Experiment and the Control Groups from the Age Group of 10, conducted according to Post-test scores.**

	Sub-tests	Mean	Standard Deviation	df	t	p
Pre-test	Fluency	3.70	2.22	58	3.97	0.00*
Post-test	Fluency	1.93	1.01			
Pre-test	Elaboration and Transformativeness	15.48	3.37	58	1.91	0.06
Post-test	Elaboration and Transformativeness	13.27	5.38			
Pre-test	Originality	1.62	0.20	58	2.82	0.01*
Post-test	Originality	1.38	0.42			

Note. \* $p < 0.05$

According to the Table 5, a significant difference in the Fluency and Originality sub-scales of the creative imagination test was found between the post-test results of the experiment and the control groups aged 10 ( $p < 0.05$ ). In the elaboration and transformativeness sub-scale, no statistically significant difference was found between post-test results of the experiment and the control groups aged 10.

**Table 6: T Test Results of the Experiment and the Control Groups from the Age Group of 13, conducted according to Post-test scores.**

	Sub-tests	Mean	Standard Deviation	df	t	p
Pre-test	Fluency	3.63	2.75	58	3.04	0.00*
Post-test	Fluency	1.97	1.22			
Pre-test	Elaboration and Transformativeness	13.79	2.92	58	0.38	0.70
Post-test	Elaboration and Transformativeness	13.44	4.07			
Pre-test	Originality	1.50	0.25	58	2.80	0.01*
Post-test	Originality	1.33	0.25			

Note. \* $p < 0.05$

According to the Table 6, a significant difference in Fluency and Originality sub-scales of the creative imagination test was found between post-test results of the experiment and the control groups aged 13 ( $p < 0.05$ ). In the Elaboration and Transformativeness sub-scale, no statistically significant difference was found between post-test results of the experiment and the control groups aged 13.

### 3.2. Results Regarding the Effect of Drama on Creative Imagination According to Age

**Table 7: T Test Results of the Experiment Group, conducted according to Age.**

Sub-tests	Age	n	Mean	Standard Deviation	df	t	p
Fluency	10	30	3.70	2.22	58	0.10	0.92
Fluency	13	30	3.63	2.75			
Elaboration and Transformativeness	10	30	15.48	3.37	58	2.08	0.04*
Elaboration and Transformativeness	13	30	13.79	2.92			
Originality	10	30	1.62	0.20	58	2.06	0.04*
Originality	13	30	1.50	0.25			

Note. \* $p < 0.05$

According to the Table 7, in Elaboration (Transformativeness) and the Originality sub-scales of the creative imagination test, a significant difference was found between the age groups of 10 and 13 ( $p < 0.05$ ). In the Fluency sub-scale, no such significant difference was found between the children from the age groups of 10 and 13.

### 3.3. Results Regarding the Effect of Drama on Creative Imagination According to Gender

**Table 8: T Test Results of the Experiment Group, conducted according to Gender.**

Sub-tests	Gender	n	Mean	Standard Deviation	df	t	p
Fluency	girl	30	4.33	2.76	58	2.15	0.04*
Fluency	boy	30	3.00	1.98			
Elaboration and Transformativeness	girl	30	14.94	3.31	58	0.73	0.47
Elaboration and Transformativeness	boy	30	14.33	3.19			
Originality	girl	30	1.60	0.22	58	1.13	0.27
Originality	boy	30	1.53	0.25			

Note. \* $p < 0.05$

According to the Table 8, in the Fluency sub-scale of the creative imagination test, a significant difference was found between girls and boys ( $p < 0.05$ ). In the Elaboration (Transformativeness) and Originality sub-scales, no such significant difference was found between girls and boys.

## 4. DISCUSSION

### 4.1. The Effect of Drama on Creative Imagination

When the findings regarding the effect of drama on the creative imagination are examined, it is noted that both experiment groups of ages 10 and 13 generated more original ideas, as well as a great number of ideas after the drama sessions.

In terms of the scope of the numbers of the figures that were used, no statistically significant differentiation was found between the experiment and the control groups from the 10 and 13 age groups after the drama sessions. The fact that there is no statistically significant differentiation may be due to the fact that the activities used in drama sessions had been prepared towards generating original ideas.

From looking at the findings, it can be said that a drama program, offered to experiment groups aged 10 and 13 is effective for developing the creative imagination of children.

In this research, no significant difference was found between pre-test and post-test results of the age groups of 10 and 13 of the control groups. This result shows that in control groups comprised of children aged 10 and 13, the traditional method is insufficient for developing the creative imagination.

In a study, conducted by Karwowski and Soszynski (2008) regarding the efficiency of role playing in creativity, the measurements of the pre-test and post-test revealed an increase in the average number of created ideas and in the level of originality of the creations. In terms of this, a slight decline in the number of figures was noted. In addition, it was found that participants produced more ideas in the training lasting 4 weeks compared to the training lasting a day.

In this research, drama sessions lasted for 12 weeks in total, comprised of two class hours a day and four class hours in a week. It was found that children from age groups 10 and 13 produced more original ideas as well as a great number of ideas. The study, conducted by

Karwowski and Soszynski (2008) support the results of this research. It is safe to say that the delivery of the given training, in the long run, increased the number of creative ideas by individuals.

Karakelle (2009) suggested that the creative drama improves the two important sides of divergent thinking; fluency and flexibility. Hui and Lau (2006) in their study regarding the effect of drama on the creativity and communication-expressive ability of children, point out that after the application of drama, the children in the experiment group produced more fluent creative responses, made more elaborative and unusual drawings, produced more creative and interesting stories. Lin (2010) as the result of reading the diaries and answer sheets of the children (after applying a drama program lasting for 10 weeks on 67 children between the ages of 11-12), found that the children exhibited development of risk-taking, playing, innovation and imagination through drama.

All these findings are consistent with the result of this research. The aim of drama is forming the dramatic imagination in a social context and developing the skills of children regarding unifying imagination and action (Pinciotti, 1993). Drama develops the imagination by encouraging the use of mental imagery (Mages, 2006). The imaginations of participants can be strengthened and developed for the benefit of society and the participants themselves (Brown&Pleydell, 1999; McCaslin, 2006).

#### **4.2. The Effect of Drama on Creative Imagination According to Age**

When the findings regarding the effect of drama on the creative imagination in relation to age were examined, it was shown that children from age group 10 presented more detailed drawings and more original ideas, compared to the children from the age group 13. This finding shows that a drama program is more effective on age group 10 in improving their creative imagination, than on children from the age group of 13.

However, in this research, the children from the age group of 13 had a difficult time in participating in the drama program compared to the children from the age group of 10 even if both groups had the same level of drama experience. It was noted that children from the age group of 10 of the experiment group contributed much to the drama activities in the beginning, and liked it much more. In Turkey, examinations are conducted in order to enroll at the high schools and children do tests even in music and drawing classes in order to prepare. For children, life revolves around preparing for the upcoming tests, enrolling at a good high school and working towards getting a job with a good salary in the future. However, the group aged 10 does not yet grasp the importance of tests in their lives. The outlook of the children may have caused such a result to emerge. Parents, educators, the education system and society are the primal determinants of the development of creativity in children. Maker et al. (2008) indicate that there are inconsistent findings regarding the development of creativity, and link the reason for those findings to the educational environment, i.e whether the educators encourage the creative behaviors of children or not.

In this research, the children from the age group of 13 who drew the same ideas as the children of the age 10 group scored less due to the richness of their experience. The fact that children from the age 13 group exhibited less than the age 10 group regarding the originality of their ideas, may have happened because of the scoring.

It is possible to allow the imagination to emerge in different forms in the work of different individuals depending on tastes, abilities and inclinations (Chodorow, 2000). Vygotsky (2004) notes that the interest in drawing declines in puberty and instead, verbal or literary creation starts to be observed; Barnes sets this turning point at the age of 13-14. The test of creative imagination is a drawing test. Regarding this point, it is safe to say that children may unfold their creative imagination at different ages in different ways.

The development of creativity in children shows a curvilinear graph of progress with peaks and slumps (Sak&Maker, 2006). This demonstrates that creativity does not only contain mental processes but also is made up of social and emotional factors and personal factors like family and educational matters (Feldman, 1999). However, Urban (2005) in his norm study, conducted on 2500 German children between the ages of 4-16, suggested that no significant change occurs beyond the age of 11 in the normal school group. Likewise, Smith and Carlsson (1985), argue that creativity is at its peak between the ages of 10-11, and an important decline in strong creativity skills is observed at the age of 12; around the ages of 14-15 the development of the creativity is slow and after the age of 16, a more significant development is observed.

Gardner (1982) indicates that children frequently possess imagination, creativity and artistic sensitivity in the middle period between infancy and puberty and adds that older children would typically lose such skills. According to Beetlestone (1998) creativity is perceived as more acceptable at a younger age, because it is partly associated with play. Beetlestone (1998) stresses that if children think divergently and creatively, it is highly possible for them to make imaginative connections, (which may seem odd as conformist thinkers). Viola (1936) points out that Franz Cizek, who is known as the father of child art, argues that the influence of the adult on the child from the age of 3 to the ages of 9 or 10 is minimal, therefore children at this age should be encouraged to do what they feel good enough to do (as cited in Sutton-Smith, 1988).

Having an imaginary companion is one of the most salient features of the fantasy lives of young children (FERNYHOUGH et al., 2007). Hoff (2005) points out that there is a correlation between having an imaginary companion and creativity, and the more variation and elaboration in imaginary play is also related to the level of creativity. Gleason et al. (2003) found that participants who reported having an imaginary companion during childhood scored higher on measures of imagination than participants who reported no such companion.

Cohen&MacKeith (1991) also report that imaginary worlds peak around the age of 9 and fade by the late teenage years. Imagination seems to be something that starts at an early age but as children grow, they develop more complicated worlds, either by elaborating their first creation, or sometimes by scrapping one fantasy and starting a new, more mature one because they find the previous one very childish.

These findings support the results of this research. Activities conducted in order to improve imagination, give better results when started from an early age. Pinciotti (1993) and Isbell and Raines (2003) suggest that the connection between imagination and action starts at an early age, and when activities are conducted in the early ages, such connections can be rendered more flexible and fluent.

#### **4.3. The Effect of Drama on Creative Imagination According to Gender**

When the findings regarding the effect of drama on the creative imagination in relation to gender are examined, it was revealed that girls produce more ideas than boys.

In the researches, conducted by Torrance (1967), Milgram et al. (1978), Kershner and Ledger (1985), Wolfradt and Pretz (2001), Stephens et al. (2001), DeMoss et al. (1993) and Maccoby and Jacklin (1974), they show that girls score higher than boys in the creativity tests.

It has also been suggested that there is a connection between having an imaginary companion and creativity and imagination (Gleason et al., 2003; Hoff, 2005; Root-Bernstein&Root-Bernstein, 2006). Pearson et al. (2001) and Taylor et al. (2004) put forth that girls have more imaginary companions than boys.

On the other hand, Naderi et al. (2009), Wu (2010), Rudowicz et al. (1995), Urban (2005) indicated that there is no gender difference in creativity.

Baer and Kaufman (2008) in their study where they evaluate the results of conducted tests in order to measure creativity in terms of gender difference, argue that there is no evidence that clearly supports gender difference in the results of the creativity tests. On the other hand, they suggest that, when compared to studies where men score higher than women, the studies where women score higher than men are higher in number.

## 5. CONCLUSION

In this research, it has been revealed that a drama program is effective on developing the creative imagination of children. The findings regarding the effect of a prepared drama program on both groups of children aged 10 and 13, suggest that children from age group 10 produced more original ideas and did more elaborate drawings than children from age group 13. Thus it can be said that a drama program is more effective on younger age groups. In light of this, drama programs should be given a place in education programs to develop creative imagination from early ages as early as possible. Additionally, it has been observed that creative ideas by girls are higher in number than that of boys. It is important to feature creative imagination-based practise for teacher education during their vocational training. The pre-school progression of the influence of drama on creative imagination could also be examined.

### **Appendix:** Drama Activity Example

Shadows

Material: Flashlights

Duration: 40 minutes+40 minutes (two class hours)

Age Group: 10-13

**Warm-up / Preparation:** The leader asks all participants to pair up. He/she explains how shadow play is played. According to shadow play, one of the participants goes behind the other participant, becoming his/her shadow and would do the exact things that the other participant does. The partners switch the roles after a while.

The leader switches off the lights and closes the curtains and asks the participants to find a shadow in the hall. When the participants discover a couple of shadows, he/she starts generating shadows on the wall by using the flashlight. The flashlight is drawn away from the body therefore the shadow grows bigger; the flashlight is moved nearer the body therefore the shadow decreases. Each participant is allowed to observe the shadows that they make with their flashlights: How do they move differently? How are the shadows formed when the participants jump on one foot, stand on one foot, wave their hands or manipulate their hair?

**Improvisation:** The leader asks the participants to sit comfortably and indicates that he/she will tell them a story and that they will finish the story.

“One day, you lose your dog while playing on the field. You look for your dog with your friend. Then you find a small hole in the grass and you start thinking that your dog may have fallen down the hole. In the hope that your dog is in there, with your friend, you enlarge the hole by digging it as much as you can. You climb into the hole with your friend. You are very surprised by the things that you see inside. This is a giant cave... And this is no ordinary cave at all... There are many beautiful drawings on the walls. In the meantime your little dog comes to you! (This story is taken from Rockett&McClure). You are baffled by a sound that you have never heard before. You head in the direction where the sound comes from with your friend. There you see just a light, what is this? Very interesting shadows... You wonder whose shadows they are but you are frightened at the same time. Who or what can those shadows belong to?”

The leader divides the participants into groups and asks them to think and find whose shadows they are. He/she then states that the participants should improvise with the shadows by using flashlights. Improvisation is observed.

Evaluation: The leader sits with the participants, forming a circle and those questions below are directed to the participants by the leader:

- What did we do in improvisation?
- What else can those shadows be?
- How are the shadows formed? (day-night)
- What did we use to form a shadow?
- What else could we use to form a shadow?
- Which parts of our body did we use to form shadows?
- Which parts of our body could we also use to form shadows?

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## Geniş Özet

Hayal gücü, doğal bir yetenektir ve toplumsal ilerleme için gerekli olan yaratımların ortaya çıkması için geliştirilmesi gereklidir. Hayal gücü çok güçlü, gizemli bir yetenektir ve beyin sağ yarıküresinin işlevidir. Oysa günümüzde eğitim sistemleri beyin sol yarıküresinin işlevlerine daha fazla önem vermektedir. Beynin iki yarıküresinin birlikte çalışması, yaratıcı hayal gücünün etkili bir şekilde ortaya çıkmasına olanak sağlar. Toplum beyin sağ yarıküresinin işlevlerine önem vermez, eğitim sistemleri de beyin sol yarıküresine önem vermeye devam ederse, bu durum çocukların yaratıcı hayal güçlerini ortaya çıkaramamasına neden olacaktır. Bu, toplum için ciddi bir durumdur.

Drama hayal gücünü geliştirir. Bu araştırmanın amacı, farklı yaş gruplarındaki çocukların yaratıcı hayal güçleri üzerinde dramanın etkisinin farklılık gösterip göstermediğini ortaya koymaktır. Bu amaçla şu sorulara cevap aranmıştır: a) Dramanın yaratıcı hayal gücü üzerinde etkisi bulunmakta mıdır? b) Dramanın yaratıcı hayal gücü üzerindeki etkisi çocukların yaşlarına göre farklılık göstermekte midir? c) Dramanın yaratıcı hayal gücü üzerindeki etkisi çocukların cinsiyetine göre farklılık göstermekte midir?

Bu araştırma, yarı deneysel desenli deneme modelidir. Bu araştırmanın deney grubunu, bir ilköğretim okulundaki 10 yaş grubundan 30 çocuk ve 13 yaş grubundan 30 çocuk olmak üzere 60 çocuk; kontrol grubunu ise çocukların birbirinden etkilenmemeleri için sosyo-ekonomik düzey olarak eş düşünülen başka bir ilköğretim okulundaki 10 yaş grubundan 30 çocuk ve 13 yaş grubundan 30 çocuk olmak üzere 60 çocuk oluşturmuştur.

Drama uygulaması, deney grubunu oluşturan 10 ve 13 yaşındaki çocukların bulunduğu iki farklı yaş grubuna da ayrı ayrı haftada dört saat toplam kırk sekiz saat olmak üzere üç ay boyunca bizzat araştırmacı tarafından yapılmıştır. Etkinliklerin her biri iki ders saati olmak üzere toplam yirmi dört etkinliktir. Drama programı, ilköğretim 4. ve 7. sınıflardaki çocuklara ilişkin ilköğretim programının amaçları göz önüne alınarak ve hayal gücü gelişimine ilişkin literatür taranarak

hazırlanmıştır. Drama alanında çalışan uzman görüşleri doğrultusunda gerekli düzeltmeler yapıldıktan sonra drama programına son şekil verilmiştir. Çocuklara uygulanan etkinlikler, çocuklarda fikir yaratma akıcılığını kışkırtma amacına yönelik hazırlanmıştır. Her bir drama etkinliği; ısınma-hazırlık, doğaçlama ve değerlendirme aşamalarından oluşmaktadır. Drama etkinliklerinin doğaçlama aşaması; rol oynama, doğaçlama, pandomim gibi farklı drama tekniklerini içermektedir.

Bu araştırmada veri toplama aracı olarak, Janusz Kujawski tarafından geliştirilen Yaratıcı Hayal Gücü Testi kullanılmıştır. Yaratıcı Hayal Gücü Testinin Türkiye’de Gündoğan (2011) tarafından geçerlik ve güvenilirlik çalışması yapılmış ve varyans analizi ile hesaplanan güvenilirlik kat sayısı 0.76 bulunmuştur.

Dramanın yaratıcı hayal gücü üzerindeki etkisine ilişkin çalışmadan elde edilen bulgular incelendiğinde; hem 10 yaş deney grubu hem de 13 yaş deney grubu olmak üzere her iki grubun da drama uygulaması sonrası daha orijinal ve daha fazla fikir ürettikleri ortaya çıkmıştır. Kullanılan şekil sayısı açısından; hem 10 yaş deney grubunda hem de 13 yaş deney grubunda istatistiksel olarak anlamlı bir farklılık ortaya çıkmamıştır.

Hem 10 yaş deney ve kontrol grupları hem de 13 yaş deney ve kontrol gruplarının Yaratıcı Hayal Gücü son test sonuçları incelendiğinde de, deney grubunun kontrol grubuna göre daha orijinal ve daha fazla fikir ürettikleri görülmüştür. Drama uygulaması sonrası kullanılan şekil sayısı açısından istatistiksel olarak anlamlı bir farkın bulunmaması, drama uygulamasında kullanılan etkinliklerin orijinal fikirler yaratmaya yönelik hazırlanmasından kaynaklanmış olabilir.

Bu bulgulardan hareketle, 10 ve 13 yaş deney gruplarına uygulanan drama programının çocukların yaratıcı hayal gücünü geliştirmede etkili olduğu söylenebilir.

Bu araştırmada 10 ve 13 yaş gruplarındaki kontrol grubunun yaratıcı hayal gücü ön test ve son test sonuçları arasında anlamlı fark bulunmamıştır. Bu durum 10 ve 13 yaş gruplarındaki kontrol grubunda geleneksel yöntemin çocukların yaratıcı hayal gücünü geliştirmede yeterince etkili olmadığını göstermektedir.

Bu araştırmada drama uygulaması bir günde iki ders saati olmak üzere haftada dört ders saati, toplam on iki hafta sürmüş ve 10 ve 13 yaş grubundaki çocukların daha orijinal ve daha fazla fikir ürettikleri ortaya çıkmıştır. Verilen eğitimin uzun dönemde yapılmasının bireylerin ürettikleri fikirlerin sayısını artırdığı söylenebilir.

Dramanın yaratıcı hayal gücü üzerinde yaşa göre etkisine ilişkin elde edilen bulgular incelendiğinde; 13 yaş grubundaki çocuklara göre 10 yaş grubundaki çocukların daha ayrıntılı çizimler ve daha orijinal fikirler ortaya koydukları bulunmuştur. Bu bulgu, 13 yaş grubundaki çocuklara göre 10 yaş grubundaki çocukların yaratıcı hayal güçlerinin geliştirilmesinde drama programının daha etkili olduğunu göstermektedir.

Ancak bu araştırmada 13 yaş deney grubunu oluşturan çocuklar, 10 yaş deney grubundaki çocuklarla aynı düzeyde drama ön yaşantısına sahip oldukları halde, drama etkinliklere katılmada zorlanmışlardır. 10 yaşındaki deney grubunu oluşturan çocukların, 13 yaş deney grubunu oluşturan çocuklara göre drama etkinliklerine ilk başlarken daha fazla katıldıkları, etkinlikten daha fazla hoşlandıkları görülmüştür. Türkiye’de liselere girmek için sınav yapılmaktadır ve çocuklar bu sınavlara hazırlanmak için resim, müzik gibi derslerde bile test çözmektedirler. Çocuklar için yaşam, sınavlara hazırlanmak ve iyi bir liseye girip ileride iyi gelir getiren bir mesleğe sahip olmak anlamına gelmektedir. 10 yaş grubundaki çocuklar ise, sınavların yaşamlarındaki öneminin çok fazla farkında olmayan bir yaş grubudur. Çocukların yaşama bakış açısı, bu sonucun ortaya çıkmasına neden olmuş olabilir. Ebeveynler, eğitimciler, eğitim sistemi ve toplum çocukların yaratıcılıklarının gelişiminde temel belirleyicilerdir.

Bu araştırmada çocukların çizdiği fikirlerin puanlanmasında, on yaş grubundaki çocuklara göre aynı fikri çizen on üç yaş grubundaki çocuklara yaşantı çeşitliliğinin zenginliğinden dolayı daha düşük puan verilmiştir. On üç yaş grubundaki çocukların on yaş grubundaki çocuklara göre fikirlerin orijinalliği açısından daha düşük sonucun ortaya çıkması puanlamadan da kaynaklanmış olabilir.

Bu bulgular, araştırmanın sonucunu desteklemektedir. Hayal gücü gelişimine yönelik etkinlikler küçük yaşlardan itibaren başlatıldığında daha etkili sonuçlar vermektedir. Bu bağlamda drama çalışmalarına, mümkün olduğunca küçük yaşlardan itibaren eğitim programlarında yer verilmeye başlanmalıdır.

Dramanın yaratıcı hayal gücü üzerinde cinsiyete göre etkisine ilişkin elde edilen bulgular incelendiğinde, kız çocuklarının erkek çocuklarına göre daha fazla fikir ürettiği ortaya çıkmıştır. Bu sonuçtan kız çocuklarının erkek çocuklarına göre daha fazla fikir ürettiği söylenebilir.

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