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## **AN ANALYSIS OF THE EFFECT OF FOLK DANCES ON VISUAL MOTOR PERCEPTION LEVEL OF PRIMARY SCHOOL FIRST GRADE (7 AGES) STUDENTS\***

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### **ABSTRACT**

The purpose of this study is to examine the effects of folk dances on visual motor perceptions of primary school primary (7 ages) students. The study was conducted using experimental design with pretest / posttest control group. The study group of the study is composed of seven year old children who are educated in Süleyman Türkmani Primary School in Kırşehir in 2016-2017 educational year and selected by objective sampling method. The study group is a total of 90 people consisting of 45 experiments and 45 controls. "Visual Motor Gestalt Test" was used as the measurement tool in the research. For the experimental group, the folk dances education program was applied as 2 hours a day for 3 days a week for 12 weeks, whereas for the control group only the education was given according to the Ministry of National Education Education Program. The obtained data were analyzed and analyzed using SPSS 22 (Statistical Package for the Social Sciences) package program. In the analysis of the data, the dependent sample t-test was used to examine the differences between the experiment and control groups, while the demographics were examined on the percentage and frequency. As a result of the study, it was seen that there was a significant difference in favor of the experiment group between the visual motor perception levels of children who received the folk dances curriculum and children who received the National Education Ministry Pre-School curriculum. This result shows the effectiveness of folk dances in improving the visual motor perception level. This result shows that folk dances are effective in improving visual motor perception level. There was also no significant

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difference in terms of sex. It is thought that sex roles in this age group are not yet evident.

### STRUCTURED ABSTRACT

Psychological tests examine the individual differences between the intended subjects. By looking at the results of a psychological test, one must determine similarities and differences to other individuals in the environment. In the historical process, psychological tests have been placed on a scientific basis. The Bender Gestalt Test is widely used in hospitals and Guidance Research Centers in our country. Bender Gestalt Test, has been used as a projective and organic test in adults and children since it was introduced by Bender (1938). Koppitz (1963) used the test as a developmental visual-motor test for children, and after a study on a large sample of this area, the use of the test on children in elementary school was even widespread.

There are studies supporting visual perception development in childhood. There are educational games that support visual perception developments that enable children to learn by playing. It is ensured that the behavior of the child who plays with the selected games continues to be active in a certain period of time in line with the directions for the purpose of the game. In the direction of these plays, the ability to develop a part-whole relationship, cause-effect, similarity-difference, shape-ground distinction, hand-eye coordination, The game on this counts; It can contribute to children's perception, attention and solution to problems. As a result of the researches made by going out of this way, studies about the effect of folk dances on visual perception level were not found.

The purpose of this study is to examine the effects of folk dances on visual motor perceptions of primary school primary (7 ages) students. Thus, it is necessary to determine whether there is progress in visual perception by applying folk dances on children. The research model is of an experimental nature. The study was conducted using experimental design with pretest / posttest control group. For the experimental group, the folk dances education program was applied as 2 hours a day for 3 days a week for 12 weeks, whereas for the control group only the education was given according to the Ministry of National Education Education Program.

The sample consists of 90 students including 45 experimental groups and 45 control groups selected by the objective sampling method in Süleyman Türkmani Primary School located in Kırşehir province. A purposeful sample is an in-depth study of the richness of information, depending on the purpose of the study. As a result of the pre-test, it was seen that the raw scores of the visual-motor perception test of all the students were almost close to each other. The test used in the research was carried out in small groups (5) in a quiet room with the guidance of Psychological Counselor and Guidance Teachers. Directive: (When cards are off) "Here are 9 cards I want you draw, I open the card, here is the figure 1. Now draw it as you see it." After you draw, we ask students: "Okay? Is it over? Is it the same?" If yes it's the same, we go with the new shape. Scoring: We evaluate each drawing from four types of errors. We

give a score to each child's mistake and finally we get the sum of all the scores. The lower the error score, the better the visual motor detection level.

As a result of the study, it was seen that there was a significant difference in favor of the experiment group between the visual motor perception levels of children who received the folk dances curriculum and children who received the National Education Ministry Pre-School curriculum. This result shows the effectiveness of folk dances in improving the visual motor perception level. As gender roles do not settle in this age group, differences based on sex were not provided.

When the researches on the subject are examined, tests for visual perception development in studies conducted abroad have often been used for studies aimed at revealing the differences between diagnostic or other developmental individuals. Tests for visual perception development in studies conducted abroad have often been used for studies aimed at revealing the differences between diagnostic or other developmental individuals.

Visual motor sensory development can be achieved by taking time for children and playing various games with them. Opportunities should be created for the needs of children to play and to relax. They can support this issue by taking time for their children and playing various games with them.

**Keywords:** Visual-Motor Perception, Folk Dances, Primary School, Seven Age

### **HALK OYUNLARININ İLKOKUL BİRİNCİ SINIF (7 YAŞ) ÖĞRENCİLERİNİN GÖRSEL MOTOR ALGI DÜZEYLERİNE ETKİSİNİN İNCELENMESİ**

#### **ÖZET**

Bu araştırmanın amacı, halk oyunlarının ilkokul birinci sınıf (7 yaş) öğrencilerinin görsel motor algıları üzerine etkisini incelemektir. Araştırma ön-test/son-test kontrol gruplu deneysel desen kullanılarak yürütülmüştür. Araştırmanın çalışma grubunu, 2016-2017 eğitim öğretim yılında Kırşehir ilinde bulunan Süleyman Türkmani İlkokulunda öğrenim gören ve amaçsal örnekleme yöntemi ile seçilen 7 yaş grubu çocuklar oluşturmaktadır. Çalışma grubu 45 deney ve 45 kontrol olmak üzere toplam 90 kişidir. Araştırmada ölçme aracı olarak "Gelişimsel Bender Gestalt Görsel Motor Algılama Testi" kullanılmıştır. Deney grubuna, halk oyunları eğitim programı, 12 hafta boyunca haftada 3 gün günde 2 saat olarak uygulanmış, kontrol grubuna ise sadece Milli Eğitim Bakanlığı Eğitim Programına göre eğitim verilmiştir. Elde edilen veriler, SPSS 22 (Statistical Package for the Social Sciences) paket programı kullanılarak düzenlenmiş ve incelenmiştir. Verilerin analizinde deney ve kontrol grubu arasındaki farkları incelemek için ilişkili örneklem t testi, demografik özelliklerde ise yüzde ve frekansa bakılmıştır. Araştırma sonucunda, halk oyunları eğitimi alan 7 yaş çocukları ile Milli Eğitim Bakanlığı Eğitim Programına göre eğitim alan 7 yaş çocuklarının görsel motor algı düzeyleri arasında deney grubu lehine anlamlı bir fark olduğu

görülmüştür. Bu sonuç, halk oyunlarının görsel motor algı düzeyini geliştirmede etkili olduğunu göstermektedir. Ayrıca cinsiyet açısından anlamlı bir farklılık bulunmamıştır. Bu yaş grubunda cinsiyet rollerinin henüz belirginleşmediğinden kaynaklı olduğu düşünülmektedir.

**Anahtar Kelimeler:** Görsel-Motor Algı, Halk Oyunları, İlkokul, Yedi Yaş

## Introduction

Psychological tests examine the individual differences between the intended subjects. By looking at the results of a psychological test, one must determine similarities and differences to other individuals in the environment. In the historical process, psychological tests have been placed on a scientific basis. The Bender Gestalt Test is widely used in hospitals and Guidance Research Centers in our country. Bender Gestalt Test, has been used as a projective and organic test in adults and children since it was introduced by Bender (1938). Koppitz (1963) used the test as a developmental visual-motor test for children, and after a study on a large sample of this area, the use of the test on children in elementary school was even widespread (Somer, 1988).

Perception occurs through our different sense organs. Sometimes several sensory organs must be functional together for a certain period to take place. But, in every perception process, one usually plays a more prominent role than the others in the sense of the word. For example, visual perception that is centered on visual sense, visual perception that is centered on sensation, sensory perception that is centered on sensation, and so on. It is possible to distinguish between different types of perceptions (İnceoğlu, 2011).

*Visual Perception:* It is a psycho-physiological, complex process involving many processes such as perceiving, coding and analyzing the object by the definition, evaluation and decision-making approach according to the aim and direction of the action (Bezrukikh and Terebova, 2009).

*Visual Motor Coordination:* The ability to coordinate between sight and body movements. This ability involves combining visual and visual perception with kinesthetic perception. Although coordination of vision and movement involves different parts of the body, eye-hand and eye-foot coordination are often very important in physical education and sport activities. Effective eye-hand, foot coordination is essential for basic skills such as dressing, shoe binding, knitting, using simple tools in academic work such as cutting, playing with dough, finger painting, drawing, painting, using chalk, using clay, playing with toys (Özer, 2005).

*Visual Perception / Spatial Ability:* The multidimensional nature of spatial capability made it difficult for researchers to examine the spatial capability as a whole. Definitions made can be different from each other and the different dimension of spatial ability can be foregrounded. According to Lohman, the spatial ability is the ability to think, transform, and remember well-structured visuals. According to Carroll, spatial ability is the ability to imagine, perceive, interpret, understand visual relationships of objects or shapes. Towle (2005) defines spatial ability as the ability to conceptualize three-dimensional states of objects given two-dimensional views. Olkun (2003) defines space ability as the ability to visualize, rotate, and interpret two- and three-dimensional pieces of objects. If we talk about the importance of Spatial Skills / Visual Perception, in daily life people need a lot of ability to sustain their lives, most of which are directly or indirectly related to spatial skills. For example, while bowling, walking on the road, we use our spatial skills while organizing items. Spatial flair is a tool that people use and use in their daily lives. Academic achievement of students is closely related to visual perceptions. For example, visual perception is necessary in

geometry calculations and has an important place (from Towle, 2005 and Olkun, 2003 transfer TÜZDER, 2013).

There are studies supporting visual perception development in childhood. There are educational games that support visual perception developments that enable children to learn by playing. It is ensured that the behavior of the child who plays with the selected games continues to be active in a certain period of time in line with the directions for the purpose of the game. In the direction of these plays, the ability to develop a part-whole relationship, cause-effect, similarity-difference, shape-ground distinction, hand-eye coordination, The game on this counts; It can contribute to children's perception, attention and solution to problems. As a result of the researches made by going out of this way, studies about the effect of folk dances on visual perception level were not found.

### **Purpose of the Research**

The purpose of this study is to examine the effects of folk dances on visual motor perceptions of primary school primary (7 ages) students. Thus, it is necessary to determine whether there is progress in visual perception by applying folk dances on children.

### **Method**

#### **Research Model**

The research model is of an experimental nature. The study was conducted using experimental design with pretest / posttest control group (Büyüköztürk at al, 2012).

For the experimental group, the folk dances education program was applied as 2 hours a day for 3 days a week for 12 weeks, whereas for the control group only the education was given according to the Ministry of National Education Education Program.

#### **Population and Sample**

The sample consists of 90 students including 45 experimental groups and 45 control groups selected by the objective sampling method in Süleyman Türkmən Primary School located in Kırşehir province. A purposeful sample is an in-depth study of the richness of information, depending on the purpose of the study (Büyüköztürk at al, 2012). As a result of the pre-test, it was seen that the raw scores of the visual-motor perception test of all the students were almost close to each other.

The number of students in the groups and the distribution by sex are given in the table below:

**Table 1.** Distribution of Experiment and Control Groups Based on Sex

<b>Experiment Group</b>	<b>Famele</b>	<b>Percent</b>	<b>Male</b>	<b>Percent</b>	<b>Total</b>	<b>Percent</b>
	26	%57,8	19	%42,2	45	%100
<b>Control Group</b>	<b>Famele</b>	<b>Percent</b>	<b>Male</b>	<b>Percent</b>	<b>Total</b>	<b>Percent</b>
	23	%51,1	22	%48,9	45	%100

### **Data Collection Tools**

Bender – Gestalt Visual Motor Perception Test: Original name is “Visual Motor Gestalt Testi.” It was developed by Bender (1938) measures visual motor perception level in children between 5 and 10 years of age. It consists of 9 forms. During application, 2 blank A4 paper, pencil and eraser are required. Yalin and Summer (2015) adapted to Turkish Reliability; Coefficient of correlation of product of Pearson moments with test re-test technique was found to be .80 for the first class. Validity; The correlation coefficient between the scores obtained from the WISC-R and the Bender test was -.43.

### Implementation

The test used in the research was carried out in small groups (5) in a quiet room with the guidance of Psychological Counselor and Guidance Teachers.

Directive: (When cards are off) "Here are 9 cards I want to you draw, I open the card, here is the figure 1. Now draw it as you see it." After you draw, we ask students: "Okay? Is it over? Is it the same?" If yes it's the same, we go with the new shape.

Scoring: We evaluate each drawing from four types of errors. We give a score to each child's mistake and finally we get the sum of all the scores. The lower the error score, the better the visual motor detection level.

Errors:

1. Distortion of shape; draw another shape. For example, the circle is square or the size is different.
2. Rotation error; angular change problem. Can not do it on the same level.
3. Perseveration error; It happens in two ways: (1) Go over a figure many times. (2) Add another shape to that shape.
4. Fault of integration and Coupling error; the two interlaced shapes are not in contact with each other, they are interlaced or interleaved.

### Analysis of the Data

The obtained data were analyzed by SPSS 22 program for analysis after being transferred to the computer environment by the researcher. In the analysis of the data, the dependent sample t-test was used to examine the differences between the measurements in the experimental and control groups, while the percent, frequency and arithmetic mean were used in the demographic characteristics.

### Findings

In this section, findings of intra-group comparisons of pre-test post-test scores of visual motor perception level of experiment and control group are presented.

**Table 2.** Comparison of the Visual Motor Perception Level Pre-Test and Post-Test Scores of the Experiment Group

Group	Measurements	N	$\bar{X}$	S	sd	t	p
Experiment Group (Folk Dances)	Pre-Test	45	15,60	6,49	44	7,36	<b>.000</b>
	Post-Test	45	10,82	6,58			

Table 2 shows the results of the dependent samples t-test used to determine whether there was a significant difference between the attention level pre-test and post-test scores obtained from the experiment group. As a result of the analyses, the mean pre-test score was found as  $\bar{X}_{pre}=15,60$ , while the mean post-test score was found as  $\bar{X}_{post}=10,82$ . It was seen that the t value obtained in regards to the difference between mean scores ( $t=7,36$ ) was significant on level of .05 ( $p<.05$ ).

**Table 3.** Comparison of the Visual Motor Perception Level Pre-Test and Post-Test Scores of the Control Group

Group	Measurements	N	$\bar{X}$	S	sd	t	p
Control Group	Pre-Test	45	21,46	5,81	46	,813	.420
	Post-Test	45	21,42	5,84			

Table 3 shows the results of the dependent samples t-test used to determine whether there was a significant difference between the attention level pre-test and post-test scores obtained from the control group. As a result of the analyses, the mean pre-test score was found as  $\bar{X}_{pre}=21,46$ , while the mean post-test score was found as  $\bar{X}_{post}=21,42$ . It was seen that the t value obtained in regards to the difference between mean scores ( $t=,813$ ) was not significant.

### Discussion and Conclusion

As a result of the study, it was seen that there was a significant difference in favor of the experiment group between the visual motor perception levels of children who received the folk dances curriculum and children who received the National Education Ministry Pre-School curriculum. This result shows the effectiveness of folk dances in improving the visual motor perception level. As gender roles do not settle in this age group, differences based on sex were not provided. This study coincides with the study results of Memiş and Harmankaya (2012) examining Visual Perception Levels of First Grade Primary School Students.

Çamlıyer (1994) examined the effects of movement education on perceptual development levels in children with educatable intelligence, at the end of 13 weeks of practice, he found that mobility training was a positive development in the level of visual perception of children at educatable intelligence level. Akaroğlu and Dereli (2012) aimed to demonstrate the effects of visual perception training given to educational toys on children's visual perception skills. They trained with experimental educational toys for visual perception training for 3 days a week for 35-45 minutes for 14 weeks. As a result of the research, they found that the visual perception training program provided with educational toys increased the children's Frostig developmental visual perception sub-test scores and found that the effect of the training program applied was continuous after one year follow-up study.

Altun (2017)'s Physical Activity Cards and Brain Teasers examined the Effect of Primary School Students on Attention and Visual Perception Levels; all experimental groups showed a significant difference in visual perception and attention on post-test scores compared to the control group in improving visual perception and attention. This result shows that brain teasers, physical activities, and the combination of both brain teasers and physical activities are effective in improving visual perception and attention. It has been determined that the most effective method of increasing visual perception from experimental methods applied to groups is to apply brain teasers and physical activities together.

Özkan and Tuğluk (2018) significant difference between the classification and measurement posttest scores of the experimental and control groups. Likewise, the pretest and posttest scores of the experimental group also differ significantly. According to this result, it can be said that the applied program is effective on the experimental group. In literature, it is seen that different programs have an effect on scientific process skills.

When the researches on the subject are examined, tests for visual perception development in studies conducted abroad have often been used for studies aimed at revealing the differences between diagnostic or other developmental individuals. Tests for visual perception development in studies

conducted abroad have often been used for studies aimed at revealing the differences between diagnostic or other developmental individuals.

### Recommendations

Visual motor sensory development can be achieved by taking time for children and playing various games with them. Opportunities should be created for the needs of children to play and to relax. They can support this issue by taking time for their children and playing various games with them.

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