ARTSEDU 2012

Study of effect of Ebru training on the developmental areas of children aged under five

Neriman Aral\textsuperscript{a}, Nuran Kayabasi\textsuperscript{b}, Mudriye Yildiz Bicakci\textsuperscript{a}, Aysem Aydin\textsuperscript{b}, Burcu Mutlu\textsuperscript{c}

\textsuperscript{a}Ankara University Faculty of Health Sciences, Department of Child Development, Ankara, Turkey
\textsuperscript{b}Ankara University School of Home Economics Department of Handicrafts, Ankara, Turkey
\textsuperscript{c}Ankara University, Preschool 2 Ankara, Turkey.

Abstract

The study aims at determining the development areas and the effect of ebru art training on the development areas of children aged under five attending kindergartens of elementary schools. The study domain consisted of children aged under five with normal development, who attended kindergartens of elementary schools of Ministry of National Education in the central distinct of Ankara. Two kindergarten classes of elementary schools that were determined as not having any art training were included into the study from among the schools of Ministry of National Education in the central district of Ankara. Test and control groups were determined by random sampling from the kindergarten classes. Experimental pattern with pre-test and post-test control was used in the study. Information on children and families participating in the study was collected from the school records and with the used “Family Information Form” developed by the author. “Brigance Early Preschool Screen II”, which was adapted to Turkish by Aral et al. (2008), was used to determine the development level of children. Art of ebru training program was prepared specifically for the development characteristics of children aged under five in the study. Prior to application of the training program, Brigance Early Preschool Screen II was applied as pre-test on the test and control groups. Art of ebru training was given to children in the test group for a period of approximately one hour per day for ten weeks with education provided within the framework of the preschool education program of the Ministry of National Education during the remaining education time. Children in the control group continued the preschool education program of the Ministry of National Education. Brigance Early Preschool Screen II was applied as the post-test on the test and control groups after the education program. At the end of this research, it has been determined that group x common effect of scores which are gotten from Brigance Early Development Inventory II Receptive and Expressive Language Development Sub-dimension is significant (p<.05). However, group x common effect gotten from total score and scores obtained from other sub-dimensions of Brigance Early Development Inventory II is not significant (p>.05).

Keywords: Preschool education, ebru education, ebru art, developmental areas;*

Introduction

During pre-school period, children become oriented to the outer world, try to discover the world full of various stimuli and develop basic abilities. During this period, it is very significant to provide children with an environment enriched with various stimuli since they are sensitive and open to learn (Davies, 2004). Accordingly, in order to develop development of the children, different activities are included in pre-school education. These activities have

*Corresponding Author: Mudriye Yıldız Bıçakçı, Tel.:00903123192016, e-mail: mudriyebicakci@gmail.com

© 2012 Published by Elsevier Ltd. Selection and/or peer review under responsibility of Prof. Ayşe Çakır İlhan
Open access under CC BY-NC-ND license.

Keywords: Preschool education, ebru education, ebru art, developmental areas;*

© 2012 Published by Elsevier Ltd. Selection and/or peer review under responsibility of Prof. Ayşe Çakır İlhan
Open access under CC BY-NC-ND license. doi:10.1016/j.sbspro.2012.08.162
a positive impact on children’s development, while art activities are very important since they make children meet art, develop positive notions about art and they represent an introduction to art education (Aral et al. 2011).

Art is a process which develops continuously. The aim of art education is to contribute the development of children sensitive to art, society, environment and nature. Art education has a very significant place in development of civilized people. Individuals can develop aesthetic concern, consciousness about unaesthetic implementations around them, enthusiasm to change these practices thanks to art education given beginning from childhood period (Kaya, 2007).

Art education given during the pre-school period should supportive for children to develop positive attitude towards the objects and events that have an impact on them, raise interest about art working, increase creativity and imagination through the activities to which children are involved in voluntarily with enthusiasm (Nikoltsos, 2000; Isbell and Raines, 2003; Malchiodi, 2005).

Art activities have significant impact on children for their development as creative, productive and sensitive to the beauty in their environment through supporting their creativity and aesthetic feelings during their early ages (Feeney and Moravcik, 1987; Schirrmacher, 2002; Tuna, 2007). According to scientific studies, if children meet art activities, in other words art education, as early as possible in the scope of formal education, children become more successful in mathematics, physical and natural sciences known as cognitive areas. Comparative studies on the differences between children getting art education and those not getting art education support this finding (Anonim, 1982; Çelik et al., 2009; Schirrmacher, 2002; Tuna, 2007).

In a nutshell, art activities develop children’s creativity and aesthetic feelings. In addition to this, art activities have positive effect on children’s psycho-motor abilities, cognitive/academic development, social/emotional development and language development (Çelik 2007; Eliason and Jenkins, 1994; Dikici, 2001; Isbell and Raines, 2003; Malchiodi, 2005; Nikoltsos, 2000).

Art education includes various activities that is appropriate for children and supportive for their development. Ebru training is an activity that attracts children and supports their development.

Ebru is a handcraft that is practiced by spitting colors on the water to create different shapes (Barutcugil, 2001; Özgören, 2001). Ebru training gives the practitioner the opportunity to choose any color wanted and create different shapes through using different materials. This make individual to develop trust feeling, accordingly other developmental areas could affect in a positive way.

Various colours and figures made use in ebru art increase children’s attention span and contribute their ability to use their creativity and to develop their handcraft and visual abilities. At the end of the research they conducted, Türkoğuz and Yayla (2010) concluded that science education supported by art activities contribute children’s academic success and their interest on science education. Different studies on the effects of the art activities on pre-school children put that art training supports children’s self-confidence (Aylward et al., 1993) and makes them happier (Yıldız et al., 2004). In line with these determinations, in this study, it has been aimed to determine the developmental areas of five-age group children (60-72 months) and to understand whether or not ebru art training have an effect on children’s developmental areas.

Material and Method

In this study, it has been aimed to determine the developmental areas of five-age group children and to understand whether or not ebru art training have an effect on children’s developmental areas.

Study model

In this study, in order to determine ebru art training on children’s development, experimental design based on pre-test and post-test control group has been utilized. Dependent variable of the experiment is developmental areas of five-age children and independent variable is ebru art training whose effects on children’s developmental areas are investigated.
Sample
Firstly, pre-schools which do not give ebru art training have been determined and are located in Ankara. Sample has been composed of randomly selected 54 children including 27 control group children and 27 experimental group children. Female children correspond to 55.6% of the sample, while male children correspond to 44.4% of the sample. It has been determined that children from experimental group (96.3%) and control group (%74.1) do not have any pre-school education experience. In addition, the ages of the parents of the children from experimental group (A: %63.0, B: %85.2) and control group (A: %74.1, B:96.3 ) range from 30 to 39. It has been determined that parents of the children from both experimental (A: %37.0 B: %66.7) and control group (A:%55.6 B:44.4) are graduated from high school. Mothers of the most of the children in experimental (%96.3) and control group (%88.9) are not employed. When the birth rank of the children in the sample is considered, it has been observed that 51.9 % of children in control group is first children of their families; while children in the control group, number of the first and last children are the same (48.1 %) and higher than middle children.

Means of Data Collection
Information about the children and their families who are included in the research has been collected through the “General Information Form” prepared by the researcher.

General Information Form: General Information Form developed by the researcher includes questions about the age, sex, length of education, age of the parents, education level of the parents and mother’s employment situation of the children in their sample.
The Brigance Early Development Inventory II (Brigance, 2004) is designed to evaluate the development of children from birth to age 7. It includes the following five sub-dimensions: motor skills, receptive and expressive language skills, academic/cognitive skills, social emotional skills, and daily life skills. Each correct answer is awarded 1 point, while incorrect responses receive no points. The total score for the inventory is calculated by adding a separate score for each sub-dimension and the sum of the scores obtained from the sub-dimensions. The higher the sub-dimension and total scores the more advanced are the general development skills. The inventory takes from 20 to 55 minutes to complete, depending on the child’s age (Brigance). The Brigance Early Development Inventory II was adapted for use in Turkey by Aral et al. (2008) with a study sample comprising 464 Turkish children under the age of 6. Correlations among all sub-dimensions were significant ($p < .01$); internal consistency reliability coefficients varied between .67-.98; test-retest correlation revealed consistent results over time ($r = .72-.96$); concurrent validity results were consistent ($p < .05$, $p < .01$); lower 27% and upper 27% item analysis showed the items of the inventory had acceptable levels of discriminant validity.

Application Period
In the study, an ebru art training program that is appropriate for the five-age group children attending in the pre-schools of primary schools and displaying normal development. Previously, Brigance Early Development Inventory has been applied to control and experimental groups as pre-test. Experimental group children get ebru art training for ten weeks. Children in the control group continued their education. At the end of the process, post-test was applied for children in the control and experimental groups.

Data Analysis
Pre-test and post-test score average obtained from total score that experimental and control group children got from Brigance Early Development Inventory II has been evaluated through ANOVA test (Büyüköztürk, 2002).

Findings
At the end of the research, it has been determined that although pre-test and post-test scores of both control and experimental group children got from Motor Skills (D:45,18-55,74, K: 48,15-57,07), Language Development (D: 124,22-138,41, K: 125,22-135,63), Academic/Cognitive Development (D:48,85-64,33, K:50,93-67,07), Daily Life Skills (D: 48,81-53,63, K:48,78- 53,52), Social/Emotional Development sub-dimensions of Brigance Early Development Inventory and they got from total score, ebru training does not have significant effect.
Moreover, it has been determined that there is no significant difference between pre-test and post-test scores control and experimental group children got from Brigance Early Development Inventory II total score (F(1,54)=0.410, p>.05) and Motor Skills (F(1,54)=1.378, p>.05), Language Development (F(1,54)=0.23, p>.05), Academic/Cognitive Development (F(1,54)=0.710, p>.05), Daily Life Skills (F(1,54)= 60.392, p<.05), Social/Emotional Development (F(1,54)=1. 311, p>.05) sub-dimensions.

Without considering the groups of children included in the research, it has been concluded that difference between pre-test and post-test scores obtained from Motor Skills (F(1,54)=17.094, p<.0001), Academic/Cognitive Development (F(1,54)=29.408, p<.05), Daily Life Skills (F(1,54)= 60.392, p<.05), Social/Emotional Development (F(1,54)=015.600, p<.0001) sub-dimensions and Brigance Early Development Inventory II total score (F(1,54)= 46.036, p<.0001) is not significant.

When group x common effect is considered, it has been determined that group x common effect of test scores obtained from Brigance Early Development Inventory II Language Development sub-dimension (F(1,54)=8.457 p<.05) is significant. On the other hand, it has been concluded that difference between pre-test and post-test scores obtained from Motor Skills (F(1,54)=2.132 p>.05), Academic/Social Development (F(1,54)=0.033 p>.05), Daily Life Skills (F(1,54)=0.038 p>.05), Social/Emotional Development (F(1,54)=2.437 p>.05) and Brigance Early Development Inventory II total score (F(1,54)=3,406 p>.05) is not significant. This indicates that ebru training is not effective on developmental areas of children other than language development and total development score.

Discussion

At the end of the research, it has been concluded that ebru training among other art activities has an outstanding effect on children’s motor, cognitive, social-emotional and daily life skill development. In line with this conclusion, it is thought that art activities are important for pre-school education. Art activities included in the pre-school education provide children to develop their abilities of self-expression. Ebru training is an activity through which children can share their products and thoughts. Thanks to ebru training, children express their thinking in different ways (Bertan et al., 2009; Nikoltsos 2000, Isbell and Raines 2003, Malchiodi 2005). Consequently, it is possible that language development of children has been positively affected by their communication during ebru activity.

Thanks to art activities included in the pre-school education program, children can develop their concentration on any activity, eye-hand coordination and self-confidence (Kaya Okan, 2011). Art activities positively affect academic performance of children and reflect on their emotional and cognitive development positively (Bertan et al., 2009). Art activities held during pre-school period can be performed in combination with physical activities. Group works are highly effective in such kind of activities besides individual works. Social behaviours such as collecting knowledge and cooperation can be taught by the help of art activities. These activities make children respect other children’s successes together with that of their own. Moreover, children can get responsibilities and enjoy the flexibility of making mistakes. In a nutshell, art activities included in pre-school education program have important place in children’s socialization and overall development (İşler, 2003).

Suggestions

At the end of the research, it has been determined that ebru training does not have significant effect on children’s developmental areas. In line with this conclusion, it can be suggested that this research can be repeated with different samples, with longer periods of ebru training and supplementary activities.

References


İşler, A.Ş. (2003). Theoretical Basis and Importance of Discipline Based Art Education in Pre-school Period. *Atatürk University Kazım Karabekir Educational Faculty Journal*, 1(8),35-54.


