

The Impact of Scientific Content of National Geographic Channel on Drawing Style of Kindergarten Children

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Abstract—This study depends on tracking children style through what they have drawn after being introduced to 16 visual content through National Geographic Abu Dhabi Channel programs and the study of the changing features in their drawings before applying the visual act with them. The researchers used Goodenough-Harris Test to analyse children drawings and to extract the features which changed in their drawing before and after the visual content. The results showed a positive change especially in the shapes of animals and their properties. Children become more aware of animals' shapes. The study sample was 220 kindergarten children divided into 130 girls and 90 boys at the Orman Experimental Language School in Dokki, Giza, Egypt. The study results showed an improvement in children drawing with 85% than they were before watching videos.

Keywords—National Geographic, children drawing, kindergarten, Goodenough-Harris Test.

I. INTRODUCTION

DRAWING is considered as an unspoken language through which children try to communicate with the outside world and try to convey a message to those around them. The drawings are a diagnostic tool for the child's status and a tool for understanding his/her attitudes and tendencies.

Drawing is an attractive tool for children used for playing and entertainment. Through children's drawings, specialists can tell their artistic age and compare it to their actual age. A child's drawings can be used to diagnose a child's condition and try to modify his/her behavior by observing his/her drawings over a certain period of time as those drawings show the child's inner world [1].

The current study is concerned with linking drawings with the effects of any external influence on them. The teachers of classes made workshops for children, and exposed them to National Geographic Documentaries, then observed their drawings, and compared the drawings before and after watching the documentaries.

By monitoring the drawings submitted by children involved in the research, using some standards to analyze the features of their drawings, a change was revealed in the shape, appearance and colors of the drawings before and after watching the documentaries.

The drawing is an important means of expression. It expresses what is going on inside the human psyche. It is a

reflection of the things that surround man. It is a way of communicating with the surrounding world as an expressive language that speaks to all human beings [1], [2].

Through the analysis of children's drawings, the knowledge of hidden emotions reflect the fears or happiness of children through these drawings, which allows us to discover the child's psychological condition without harassing him with questions that do not have a lot of answers. It is confirmed by some studies that the drawing by the child scans us to know his world and how to see himself [3]-[5].

Detecting the Problem

A survey was done for kindergarten teachers to know how teachers manage the drawing activities of children. According to the survey response, teachers allow the children to make free drawing without being exposed to any external influence or even being directed or monitored. Furthermore, in most kindergartens, they do not use any educational media to help enrich the visual samples drawn by children.

The current research is based on the problem of having features of weaknesses in children's drawings and visual artwork as a result of never being exposed to any samples to help enrich their visual experience or any other methods to improve their free artistic expression which is reflected in their meaningful sketches.

Questions Held by the Research

The main question is how effective a program is when it is based on showing children the content of National Geographic. The sub questions are:

- What are the shapes of their drawings before and after being exposed to the content?
- What are the features associated with children's drawings after watching the content?
- What changes and improvements occur in their drawings after the visual enrichment of the content?

The Aims of the Research

- Making the symbolic drawings of children's visual expressions more meaningful by exposing children to the content of national geographic.
- Building a vision and an analysis of children's drawings before and after watching the content of National Geographic programs then compare between them.
- Measuring the evolution of the shape and type of children's drawings before and after.

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The Importance of the Research

The theoretical importance:

- Focusing on children's drawings and analyze them to develop their sensory perceptions.
- Studying the artistic sense in children's drawings and analyze them.

The practical importance:

- Leading those who teach children to pay more attention to children's drawings and learn about patterns they draw under certain influences.

The Theoretical Frame

Drawing is a way of playing to children. When a child holds a pen or a piece of chalk and tries to draw, he is then happy with the result he made on the surface.

Children's drawings are considered to be a set of cryptic free diagrams that need to be described and cleared out. Those drawings are considered to be one of the child's ways of expressing a certain feeling and a means of communication through which he tries to convey a message to other people.

Studies indicate that analyzing and improving children's drawing skills and strengthening their control over the tools while creating visual symbols, also participate in the integrated personal development and behavior assessment after analyzing those drawings carefully [6], [7].

There is a methodology analysis for children's style of drawing as they are important means of self-expression which reflects the hidden feelings of happiness and fear.

The Importance of Children's Drawings

Drawing is considered to be a powerful tool for:

- Judging a child, discovering his or her feelings and personal characteristics.
- Knowing his or her IQ and how much they are influenced by the environmental impact of his or her surroundings.
- Comparing the child's artistic age with his or her actual age.

II. METHOD

Art of drawing is a part of daily our lives which is a part of our society. This study shows the importance and the effect of our videos related to the wild animals' life transmitted by National Geographic, NAT Geo, TV channel which was shown to young children aged from six years old at the kindergarten of the Orman Experimental Language School in Cairo.

Before watching videos, we asked children to draw what they know of animals such as lion, elephant, giraffe, zebra etc. Some of them replied they could not draw any of it. After watching videos for three consequences days, the young children showed excessive concern about the wild animal life, and they really enjoyed observing the content attentively. Kids felt good about the animal subjects and started their creative experience of drawing. This kind of activities allows the developmental growth of youth in various areas such as language, social, creative, motor and coordination skills etc.

Research Method

The researchers used a semi-experimental method on the group of children to determine the extent of the evolution on visual symbols of children's drawings after viewing National Geographic content.

The Research Assumptions

1. There must be statistical differences between the two average scores in the observation sheet to drawings of children under the study before and after the National Geographic channel content was shown to them.
2. There are no statistic differences between the two average scores in the observation sheet to drawings of children under the study before and after the National Geographic channel content was shown to them.

III. RESULTS AND DISCUSSION

The researchers have determined 13 items for evaluating the drawings of children. The items are shown in Table I.

TABLE I
ITEMS USED FOR EVALUATING THE DRAWINGS

Items	
1	Clear shape of animal
2	Clear drawing with background
3	The shape of animals organs
4	Clarity of forest background with drawing
5	Good distribution on the page
6	Drawing by clear lines
7	Coordinated colors and clear content
8	Accurate shape of animals
9	Using decorating pattern
10	Using geometrical pattern
11	Using realistic pattern
12	Using writings with the drawing
13	Drawing and semantics appears content

Item 1: Clear Shape of Animal

Before watching content, children used unclear optical symbols to shapes like the animals and called it animals. But it was not clear. After watching content of national geographic program, shapes improved and child's realization was clear in using symbols of animals in paints. Percentage of Item 1 increased as in Table IV. As a result, animals shape became clear after watching content of National Geographic.

Item 2: Clear Drawing with Background

Before watching content, the drawings have not background and most children drew animals without a background, just animal on page without pointing a time or a place. After watching content of national geographic program, their drawings improved in showing background and appeared more. Percentage of Item 2 increased after the program as in Table IV. As a result, background became clear after watching content 13 times sequentially.

Item 3: The Shape of Animal Organs

Before the application, when children draw, they drew members truncated of animals, and the legs were not present

in the drawings of animals. But after the application of the programs, the shape of the animals became very clear and completed with the appearance of its colors and the children

affected with the real shape, and this is evident through their drawings.

TABLE II
DRAWINGS BEFORE WATCHING CONTENT

item	accepted	good	very good	excellent	total points
	1	2	3	4	
1	69	71	22	38	429
2	85	62	41	12	380
3	85	98	17	0	332
4	84	71	22	23	384
5	69	85	46	0	377
6	97	62	33	8	352
7	74	79	38	9	382
8	94	59	11	36	389
9	77	58	29	36	424
10	87	76	23	14	364
11	104	69	14	13	336
12	96	86	10	8	330
13	102	89	5	4	311

TABLE III
DRAWINGS AFTER WATCHING CONTENT

item	accepted	good	very good	excellent	total points
	1	2	3	4	
1	37	72	69	22	476
2	38	92	59	11	443
3	27	77	96	0	469
4	21	92	68	19	485
5	47	91	62	0	415
6	29	93	69	9	458
7	31	77	85	9	476
8	41	93	58	8	433
9	35	71	62	32	491
10	26	76	81	17	489
11	14	98	75	13	487
12	16	92	83	9	485
13	6	101	89	4	491

Item 4: Clarity of Forest Background with Drawing

Before watching the program, the children used to draw animals without cage/trees or at a lake, but after watching the program, trees are found in the drawings.

Item 5: Good Distribution on the Page

Before watching, the children used to draw animals in one of the page's angles, which were not clear-cut. After the application, the drawings were large and clear.

Item 6: Drawing by Clear Lines

Before the application, the lines were weak and fragile, without power or clear direction showing visual symbols for the animals. The artistic expression from children was very weak. After watching the program, the visual content was enriched.

Item 7: Colors Coordination and Clear Content

Before application, colors were not present, and after application, colors appeared and have symbolic indications

showing the shape of the content, the content is clear, and the colors are bright.

Item 8: Accurate Shape of Animals (Cognitive Content of the Image)

The images of animals before the application did not have cognitive connotations in the form of the animal drawn and the indications were weak before viewing the content, but after watching the content, the shape of the animals has a visual definition and has a cognitive content that is clarified in the form of the drawings after the application of the content.

Item 9: Use Decorative Pattern

Children did not use the decorative pattern before or after application, except in the narrowest limits, and their percentage did not exceed 20%. Very few drawings were distinguished by clear decoration.

Item 10: The Use of Geometric Pattern in Drawings

Only 10% of children used the geometric pattern in the

drawings. There was only a slight change in the pattern after application, but there was an improvement in the shape of animals without changing the pattern.

TABLE IV
 COMPARISON OF RESULTS BEFORE AND AFTER WATCHING

	result after	result before	difference
Item 1	476	429	47
Item 2	443	380	63
Item 3	469	332	137
Item 4	485	384	101
Item 5	415	377	38
Item 6	458	352	106
Item 7	476	382	94
Item 8	433	389	44
Item 9	491	424	67
Item 10	489	364	125
Item 11	487	336	151
Item 12	485	330	155
Item 13	491	311	180

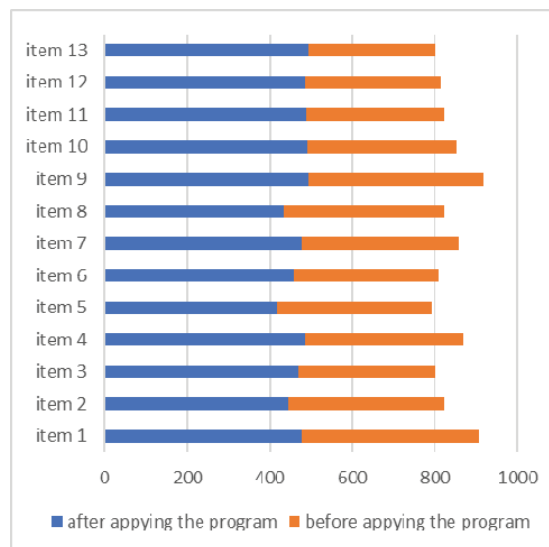
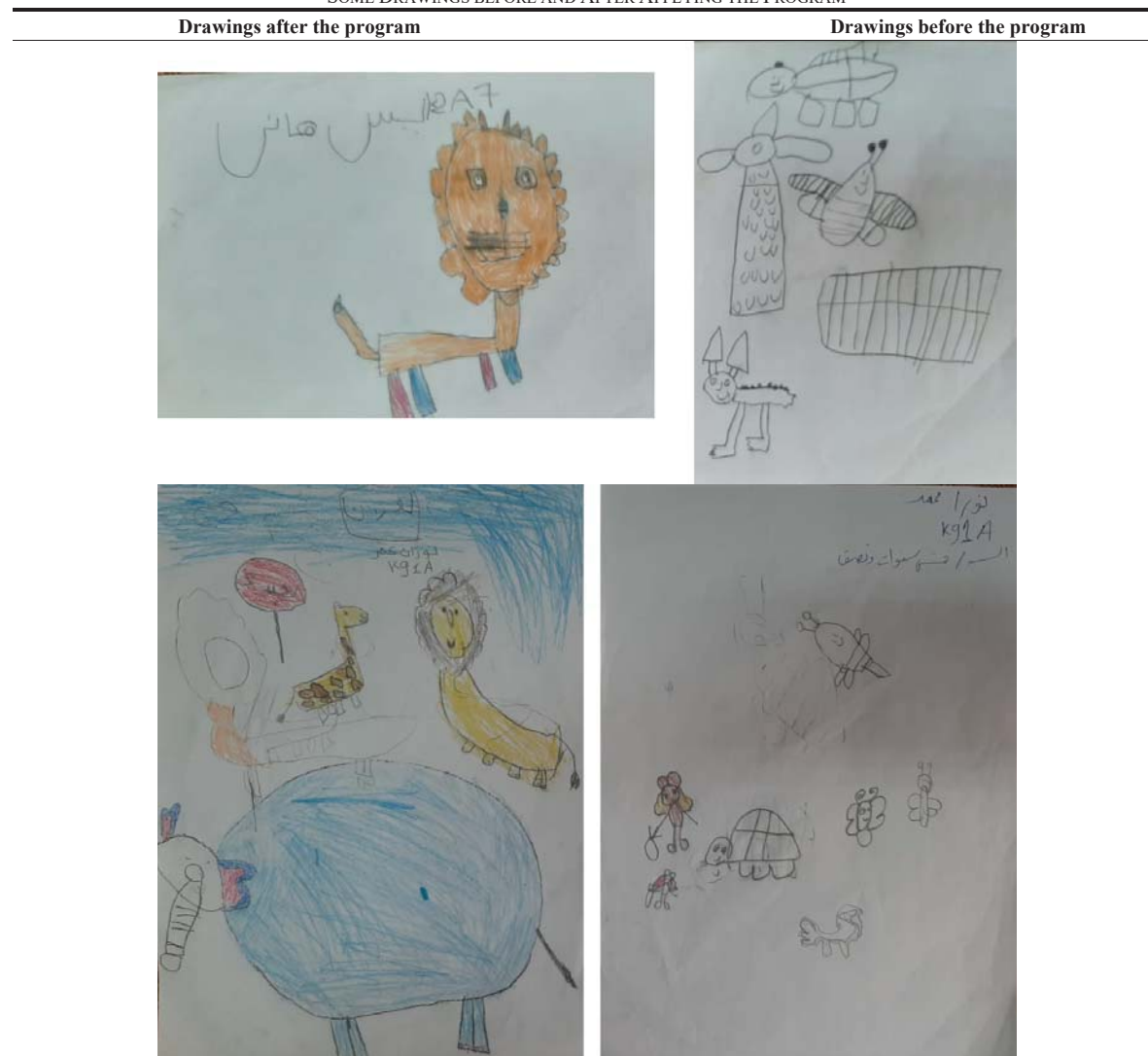


Fig. 1 Comparison of results before and after watching

TABLE V
 SOME DRAWINGS BEFORE AND AFTER APPLYING THE PROGRAM





Item 11: Using the Realistic Style

85% of the children used the realistic style in their drawings before and after the application where their drawings were realistic, because their ages are between 6 to 9 years and this age is characterized by the realistic style and this appeared in their drawings.

Item 12: Using Writings with the Drawing

Before application, 20% of kids used words that accompany the graphics. But after application, the words disappeared and the graphics became clear and indication.

Item 13: Drawing and Semantics Appears Content

After the application, the drawings became clearer, the colors are indicative, and the symbols denote the animals of the jungle. The drawings had a cognitive, cultural and symbolic significance for the shape of the animals, and 92% of the children succeeded in drawing the animals, and that drawings became indication drawings.

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