



Draw A Physical Education Lesson *

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Abstract

The aim of this study was to analyze the perceptions of students in the 11 - 12 age groups about physical education courses through the pictures they had drawn. The Document Analysis Technique, which is a qualitative research method, was used in the study. The study sample consisted of 691 students in the 11 - 12 age group who were enrolled in 20 schools in nine cities in different geographical regions of Turkey. According to the obtained findings, nine themes were identified in the pictures. The study data were analyzed by calculating the frequencies and percentages of each theme identified in the drawings. Then, the data were presented in tables. As a result, it was revealed that students perceived physical education classes as a course in which few sports branches were constantly repeated, the relevant basic techniques were taught, sports perception and athletic performance were prioritized. It is also perceived as a course where male students and students without mental/physical disabilities dominate, and which is performed outdoors, related with natural environment elements and give pleasure as well.

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Introduction

Studies about understanding emotions and the thoughts of students through the drawings by them have been widely used in various fields of science, such as psychology and medicine. Hence, children are able to express their emotions, thoughts, and observations about their environment through drawings (Yavuzer, 2009). For children, drawing pictures is a process that unites different experiences with the aim of creating something individual, unique, and new. The process of drawing requires that a child selects and organizes colors, shapes, and lines by synthesizing various components such as the content, style, format, and composition with the aim of communicating a certain thought, emotion, event, or observation (Malchiodi, 2005). In this way, children reflect their observations about their environments through pictures and are able to express their images and thoughts in detail (Yavuzer, 2009).

Drawing pictures is a quite natural method in terms of enabling children to reflect their emotions naturally (Aykaç, 2012). Artut (2004) emphasized that drawings and children completed each other; and that drawings were the essential elements for children in describing themselves as well as perceiving and depicting the beings in the nature. Since pictures are agreed to be the indicators

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of the way children perceive the outer world, they assist adults in communicating with children as well as overcoming the challenges that children experience (Artut, 2002). Children demonstrate their emotions in various ways such as by solving problems, looking comfortable, running away, staying distant, spending time, diverting attraction to another point, and more basically, by playing games (Zimmer-Gembeck & Skinner, 2011).

Drawings are means of presentation, expression, and reflection that are stronger than notifications made by children using words. Drawing pictures is the creation of an image of the most natural representations of the emotional and intellectual life that are authentically and simply expressed by children (Yaşar & Aral, 2009). Certain lines, symbols, and signs that are obtained by children through perception are extremely meaningful in terms of the processes, and are perceived as essential elements reflecting their world directly, simply, and purely (Artut, 2004, p. 225). Therefore, children are able to reflect their emotions, thoughts, and perceptions about events, situations, and objects through drawings (Aykaç, 2012, p. 300).

Pictures drawn by children become more detailed, proportional and realistic as they grow up in line with their development. Furthermore, there are certain striking and distinctive characteristics that define the pictures drawn by children at all development stages with respect to improving their drawing (Yavuzer, 2009). Lowenfeld analyzed these characteristics according to the artistic development stages and reported the following, in line with the physical activities of a child (Alakuş, 2004; Artut, 2004, Kırıçoğlu & Stokrocki, 1997):

1. Scribble Stage (2-4 years old),
2. Pre-schematic Stage (4-7 years old),
3. Schematic Stage (7-9 years old),
4. Dawning Realism (9-12 years old),
5. Stage of Reasoning (13-14 years old).

Artistic development at all stages reflects the characteristics of the age group. Within the 11-12 age group (Dawning Realism) of the sampling, reality increases perceptibly. In the pictures of children in this age group, gender roles (male-female) become more significant; clothing becomes different; genders are taken into account; love/hate pictures and previous schemes are repeated; colors are realistic and there is some shading; and mixed colors are used. While multi-dimensional base lines are observed in the space, the problem of perspective still remains (Kırıçoğlu & Stokrocki, 1997).

The recognition of this evolution in pictures by children increased the performance of the study by using these pictures. These types of studies have a history of more than one hundred years, mainly in the fields of psychology and medicine. In recent years, these studies, in which children draw pictures, have become more popular in all fields after the "Draw-A-Scientist Test" (DAST)" was developed by Chambers (1983). In his study, Chambers (1983) asked 912 students, who were aged between 5 and 7 years, to draw pictures and tried to reach "a standard image" of a scientist in children's minds by identifying their opinions of a scientist. Finson and Beaver (1995) made use of this study by Chambers (1983) and developed the "Draw-A-Scientist Test Checklist."

In addition to this study by Chambers (1983), both in Turkey and in other countries of the world, there have been many studies in which children were expected to draw pictures (Buldu, 2006; Rose, Jolley, & Burkitt, 2006; Güler & Akman, 2006; Camcı, 2008; Korkmaz & Kavak, 2008; Erkorkmaz, 2009; Shiokou, 2012; Aykaç, 2012; Makise, 2013; Villarroel & Infante, 2014). However, such studies in the field of physical education and sports are quite limited in number (Kuhn, 2003; MacPhail & Kinchin, 2004; Mowling, Brock, & Hastie, 2006; Temel & Güllü, 2014). On the other hand, according to the results of many studies, it is known that the attitudes of the students towards Physical Education classes is positive, and they participate in the classes willingly (Güllü, Güçlü, & Arslan, 2009; Hünük & Demirhan, 2010; Koca & Demirhan, 2004; Kangalgil, Hünük, & Demirhan, 2006; Hünük & Demirhan, 2003). Although there have been many studies conducted on various fields like determining the attitudes of children by making them draw pictures, the need for this study arose because of the scarcity of the studies on Physical Education in our country. Based on this, the aim of

the study is examining the perceptions of students of 11-12 age group on Physical Education classes by evaluating the pictures they draw.

Methods and Procedures

This study made use of the Document Analysis Technique, which is a qualitative research method. Document Analysis involves the analysis of written and visual materials that contain information about the phenomenon or phenomena that are the target of the research; and they are essential sources of information used frequently in qualitative research (Silverman, 2001; Creswell, 2003; Yıldırım & Şimşek, 2005). The study group was formed with the Purposeful Sampling Method, and consisted of 691 students in the 11 - 12 age group, enrolled in 20 schools in 9 cities in different geographical regions of Turkey. The necessary permission was obtained from the Turkish Ministry of National Education (Date: 04.03.2014; No: 930210). With respect to the data collection, firstly, physical education and visual arts teachers in schools were contacted by phone, and then they were interviewed through an online conference call. They were e-mailed the data collection directive that had been previously prepared. Accordingly, written approvals were received from the parents of the students, and A4 size papers were distributed to the students in the visual arts classes and were asked to "draw a physical education class" without giving any other explanations. In response to the questions asked by students, the same expression was repeated indicating that students should reflect their own perceptions on the paper. The main reason for the researchers to use the method of collecting data by making the students draw pictures is that drawing is one of the most influential methods in revealing the inner world of the children in a plain and understandable manner.

Within the study, the pictures were collected from 785 students who are from 9 Cities (Ankara, İzmir, Samsun, Kars, Malatya, Mersin, İstanbul, Edirne, Diyarbakır) and 20 schools. Ninety-four of these pictures were omitted from the study as they contained drawings that were out of the context of the study or were in the characteristics that could not be understood, and the remaining 691 pictures were analyzed.

Analysis of the Data

Pictures obtained from the students within the study were analyzed through the Content Analysis Technique. For this purpose;

1. All pictures were analyzed and the pictures with inappropriate contents were omitted.
2. The images of the themes in the drawings were identified by each researcher separately without notifying each other. Upon the image analyses of the researchers, there was an agreement on 52 images of the themes, and there were no agreement on 13 images. This result is 80% reliable according to the Reliability Formula ($=\text{agreement} / (\text{agreement} + \text{disagreement})$) which was suggested by Miles and Huberman (1994). Miles and Huberman (1994) accepts a study as reliable if the reliability formula is obtained as being over 70%. The images on which there were no agreement were collected under the "Other" title in the themes. By doing so, the images of themes were determined.
3. The themes and images that were determined in the drawings were separately analyzed by researchers. In the separate analyses of the researchers, 59 images and 691 drawings were examined, and were marked as "There is" and "There is not", and the frequencies were determined. Both researchers marked 11207 common images as "There is". The 1st Researcher marked 718 images as "There is"; and the 2nd Researcher marked 603 images as "There is". 28241 images were marked as "There is not". The agreement between the image frequencies was examined with the Kappa Coefficient of Cohen and the Kappa Coefficient was found as 0,89. According to Koch (1977), the Cohen Kappa Coefficient between 0,81 -1.00 shows perfect agreement (as cited in Sim & Wright, 2005). Afterwards, when the researchers analyzed the images again, they found 11309 image frequency.
4. While some of the drawing involved a single theme, there were many other drawings that involved drawings reflecting multiple themes. Analyses were performed by identifying the frequencies of the data related to each theme that the pictures reflected.
5. Frequencies and percentages of the images related to the themes were calculated and presented in the table.

Findings

According to the findings obtained, nine themes were identified in the drawings of the students in the 11 – 12 age group. Findings related to these themes are presented in the table below.

Table 1. Athletic Activities in the Pictures

Type of Activity	f	%
Football	324	26,28
Basketball	264	21,41
Volleyball	190	15,41
Badminton	124	10,06
Physical activities	107	8,68
Skipping rope	83	6,73
Gymnastics	31	2,51
Tennis	17	1,38
Athletics	16	1,30
Order exercise	13	1,05
Table tennis	12	0,97
Other	52	4,22
Total	1233	100,00

According to Table 1 , a vast majority of the students (73.15%) drew football, basketball, volleyball, and badminton in their pictures. Furthermore, there were a few pictures displaying students performing physical activities (8.68%).

Table 2. Athletic Techniques in the Pictures

Athletic Technique	f	%
Passing	280	50,36
Shooting	142	25,54
Dribbling	112	20,14
Other	22	3,96
Total	556	100,00

A vast majority of the students (96.04%) were observed to draw about passing the ball, shooting, and dribbling skills, which could be described as basic athletic techniques in line with the sports branches in the pictures.

Table 3. Clothes in the Pictures

Clothes	f	%
Sportswear	309	44,72
Uniform	146	21,13
School Uniform	58	8,39
No Clothing	178	25,76
Total	691	100,00

According to Table 3, most of the students (44.72%) drew students in their sportswear during the physical education classes. However, in a number of pictures (21.13%), there were students in uniforms, which was rather significant.

Table 4. Sports Equipment in the Pictures

Sports Branch	Equipment	f	%
Football	Football	299	38,83
	Goal	330	42,86
	Net	35	4,55
	Playground (lines)	81	10,52
	Other	25	3,25
	Total	770	100,00
Basketball	Basketball	255	62,65
	Hoop (Basket)	145	35,63
	Other	7	1,72
	Total	407	100,00
Volleyball	Volleyball	186	70,19
	Pole	43	16,23
	Net	33	12,45
	Other	3	1,13
	Total	265	100,00
Badminton	Shuttlecock	128	45,55
	Racket	127	45,20
	Net	23	8,19
	Other	3	1,07
	Total	281	100,00
Other Branches	Various equipment	82	100,00
Skipping Rope	Rope	83	100,00

As displayed in Table 4 , the equipment for football, basketball, volleyball, and badminton were drawn as sports equipment by the students in the pictures, which was consistent with the findings above.

Table 5. Total Number of Human Figures in the Pictures

Gender	f	%
Male	3130	71,94
Female	1221	28,06
Total	4351	100,00

In Table 5 , male figures were observed to be drawn in a majority of the pictures by students (71.94%).

Table 6. Course Location in the Pictures

Course Location	f	%
Outdoors	642	92,91
Indoors	49	7,09
Total	691	100,00

As displayed in Table 6 , a vast majority of the students (92.91%) drew the course activities as outdoors. This finding was in line with the fact that physical education classes were practiced in the schoolyards in Turkey, in general.

Table 7. Emotional States in the Pictures

Emotional State	f	%
Happiness	604	90,28
Sadness	33	4,93
Anxiety	12	1,79
Attention	11	1,64
Other (Uneasiness, Astonishment)	9	1,35
Total	669	100,00

As displayed in the Table above, human figures in the pictures had smiling faces; and happiness (90.28%) was identified to be one of the general characteristics of the pictures.

Table 8. Nature and Environment Tools in the Pictures

Environment	f	%
Sun	171	31,73
Cloud	167	30,98
Tree	50	9,28
School Building	38	7,05
Bird	28	5,19
Butterfly	16	2,97
Grass	12	2,23
Sky	8	1,48
Balloon	6	1,11
Other	43	7,98
Total	539	100,00

According to Table 8 , most of the students (62.71%) drew the images of the sun and clouds, which reflected the outdoors.

Table 9. P.E. Teacher in the Pictures

P.E. Teacher in the Pictures	f	%
There is a P.E. teacher	85	12,30
There is not a P.E. teacher	606	87,70
Total	691	100,00

According to Table 9 , most of the students (87.70%) did not draw a physical education teacher.

Sample Pictures



Conclusion

According to the findings of the study, the sports branches drawn by students were mainly similar to the popular sports branches in Turkey (football, basketball, volleyball, etc...) (Table 1). In line with this finding, certain techniques that were used in these branches such as passing the ball, shooting, and dribbling were observed in the athletic techniques theme (Table 2); and sports equipment used in these branches were observed in the sports equipment theme (Table 4). This may be considered to stem from two significant reasons. Firstly, within the curriculum that was implemented in Turkey between 1987 and 2006, the above mentioned sports branches were taught in the physical education classes (MoNE, 1987). Despite the fact that the curriculum is no more effective in both regulations and practices, it is still commonly used by a variety of physical education teachers (Erdoğan, 2009). Secondly, these sports branches are studied as compulsory majors in the higher education institutions that train physical education teachers in Turkey. Therefore, physical education class activities have been taught using mainly the sports branches listed in Table 1 as well as the athletic techniques used in these branches. Tannehill and Lund (2010, p. 23-26) reported that the same teaching method was frequently used in physical education classes, the same content was repeated

every academic year, there was very little emphasis on teaching modern athletic skills, and that students usually failed to adapt the skills they attained to new situations. Similarly, Hardman (2008) identified that physical education classes were subject to various obstacles in many countries, in addition to insufficient course hours and inappropriate curriculum. Data presented in the first four tables in the research findings section indicated that physical education classes in Turkey had similar problems to those experienced in other countries.

It is known that physical education is a subject in which both female and male students demonstrate their gender roles (Lines & Stidder, 2003). Male students preferred to draw pictures of males (Table 5); and drew female and male students in separate groups. Temel and Güllü (2014) determined in their study that male figures were mainly drawn in physical education classes. Furthermore, drawings of uniforms were also significant under the clothes theme (Table 3). In the pictures with uniforms, human figures were drawn in uniforms and in a competitive attitude. In these types of pictures, football and basketball were drawn. This could be due to the fact that drawings of football, which is perceived as a masculine sport, were the highest in percentage (Table 1). Additionally, there were no disabled student figures in any of the analyzed pictures.

Another significant finding of the study was the illustration of the physical education course in relation to the natural environment elements such as the sun, clouds, birds, trees, and butterflies (Table 8) and the outdoors (Table 6). None of the pictures had winter and autumn elements such as rain, snow, or falling leaves. Hence, it is believed that students at this age group associated movement and natural environment elements with summer and spring months as intermingled and completing each other.

Almost all of the student figures in the pictures were observed to display happiness (Table 6) as the emotional state. In many other studies, students' attitudes towards physical education classes were positive, which was in line with these findings (Hagger, Cale, Almond, & Krüger, 1997, p. 144; Ryan, Fleming, & Maina, 2003, p. 28; Cho, 2004, p. 99; Subramaniam & Silverman, 2007, p. 610).

The main topic of the research was the physical education course; however, the frequency of physical education teachers being drawn in the pictures was also analyzed. In a vast majority of the analyzed pictures, there was no physical education teachers (Table 9); and it was observed that the existing teacher figure was not drawn in detail in the pictures. This is a significant finding and it may be concluded that the physical education teacher is the "invisible human" in the pictures drawn by students. However, a study was conducted by Aykaç (2012) by analyzing the student drawings and it was reported that the class teachers were described as teaching the lesson next to the board with a piece of chalk in their hands. The reason for this may be the fact that the class teachers are a figure that is constantly in front of the students with high numbers of classes in a limited area. Physical Education teachers, on the other hand, teach the lesson in different media, with fewer numbers of classes and in an area where there are a lot of outside stimuli. For these reasons, it may be claimed that, although there is not a clear definition of Physical Education teacher figures on the minds of the students, further studies are necessary to reveal the true nature of the problem.

The results given above are limited with the drawings of the students in the study group on the Physical Education teachers and the analyses of the authors on these drawings. Based on this, as a result, it was concluded that students perceived physical education as a course in which few sports branches were constantly repeated, relevant basic techniques were taught, sports perceptions and athletic performance was prioritized. It is also perceived as a course where male students and students without mental/physical disabilities dominate, and which is performed outdoors, related with natural environment elements and give pleasure as well.

Recommendations

It may be recommended that the studies that are planning to collect the data by making students draw something may also make use of other data collection techniques (participant observer, interviews, and written compositions, etc.).

It may be recommended that in order for Physical Education teachers to achieve the acquisitions of the classes, they should organize new and creative activities to enrich the contents of the classes.

It is suggested that in order to resolve the problems, the supervisors make evaluations that take the education program into the center, school managements struggle to develop the tools-devices, materials and physical conditions, and all the other stakeholders contribute to the process in a way that is proper for the importance of the Physical Education Classes for the students.

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