

A Comparative Study of Teacher Figures in 5 to 7 Year-Old Children's Drawings

5-7 Yaş Grubu Çocukların Resimlerine Yansıyan Öğretmen Figürünün Karşılaştırmalı Olarak İncelenmesi

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Abstract

This study aims to analyze how the teacher is represented in children's drawings by focusing on the differences caused by age and gender of the children. The study is carried out by using Koppitz's system of indicators of emotionality in human figure drawings. From the age group of 5 to 7 year olds, 40 girls and 40 boys were chosen from each age in years to make up 240 children in total for the study group. The children were then asked to "draw a teacher figure". As a result of the study, it was found that there are significant differences between the age groups and impulsivity, insecurity-inadequacy and emotional indicators in grand total, and that this difference is caused by the significant drop in scores from five to seven years of age.

Keywords: Early childhood, human figure drawing, emotional indicators, teacher, teacher-child interaction

Öz

Bu araştırma, çocukların çizimlerine yansıyan öğretmen figürünün yaş ve cinsiyete bağlı olarak nasıl değişim gösterdiğini incelemek amacıyla gerçekleştirilmiştir. Araştırma Koppitz'in İnsan Figürü Çizimlerini duygusal belirleyiciler açısından değerlendirme yöntemi dikkate alınarak yapılmıştır. Araştırmada 5-7 yaş grubunun her birinden 40 kız, 40 erkek öğrenci olmak üzere toplam 240 çocuk çalışma grubunu oluşturmuş ve bu çocuklardan "bir öğretmen çizmeleri" istenmiştir. Araştırma sonucunda yaş grupları ile tepkisellik, güvensizlik-yetersizlik ve genel toplamdaki duygusal belirleyiciler arasında anlamlı farklılıklar olduğu ve bu farkın beş yaştan yedi yaşa doğru puanlardaki önemli düzeyde düşüşten kaynaklandığı bulunmuştur.

Anahtar Sözcükler: Erken çocukluk, insan figürü çizimi, duygusal belirleyiciler, öğretmen, öğretmen-çocuk etkileşimi.

Introduction

As early childhood coincides with the formation of basic patterns of behavior and attitudes in a fast manner, it is essential that children's developmental areas be supported. Without doubt, this responsibility is both parents' as well as teachers'. Early childhood is a period in which children develop their sexual identity through identification. In this period, children need not only to learn to live and work together in kindergartens, but also to see a healthy teacher model that they can copy in detail (Çağlar and Kurtuluş, 2003; Oktay, 2000; Yavuzer, 1995). Children spend most of the day with their teachers. Teachers, on the other hand, not only teach them new information, but also play with them, sing songs, paint pictures, help them eat their food, and share children's happiness and sorrows that are important to them. In this period, it is equally important that parents and teachers both set a positive and ideal role model for the development of children's behavior and attitudes (Başal, 2005; MEB, 2006; Oktay, 2000).

One of the fundamental factors underlying children's role models is attachment. The behavior of attachment reflects the feeling that children can trust an adult caregiver in a sensitive

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and emotional situation (Ainworth et al., 1978). Studies on child care and education stress the fact that teachers are as important as parents in being attachment figures (Goossens & van Ijzendoorn, 1990; Howes and Hamilton, 1992). Children, by taking advantage of the positive relationship they have with their teachers and receiving their encouragement, become socially and academically more efficient in early childhood educational environments (Birch & Ladd, 1996,1997; Egeland & Heister, 1995; Howes, 2000; Pianta & Nimetz, 1991).

Previous studies have agreed that children's personal, social and academic adaptation takes place during the early years of schooling via relations characterized by positive traits such as closeness, love and openness to communication, as well as negative ones such as disagreement and dependence (Birch & Ladd, 1996,1997; Howes, 2000; Pianta & Nimetz, Bennett,1997; Pianta & Steinberg, 1992; Pianta, Steinberg & Rollins, 1995). At the same time, longitudinal studies have shown that the quality of early relationships are crucial to set the foundations of children's future academic career (Hamre & Pianta, 2001). An examination of skills in children's academic career shows more positive feelings for school (Birch & Ladd,1997), fewer problem behaviors (Pianta et al., 1995), fewer discipline problems (Hamre & Pianta, 2001), less aggressive and antisocial peer interaction (Ladd & Burgess, 1999), better social skills (Pianta & Steinberg, 1992), better study habits (Ladd & Burges, 1999) better academic performance in visual arts and language skills (Birch & Ladd,1997), basic concepts (Pianta et al., 1997), basic skills, language arts and maths (Burchinal, Peisner-Feinberg, Pianta & Howes, 2002; Hamre & Pianta, 2001) and a reduction in falling behind in class (Pianta & Steinberg, 1992), as well as less conflict with teachers. Studies in the field show that first close relations and conflicts largely continue over time (Howes, Phillipsen & Peisner-Feinberg, 2000; Ladd & Burges, 1999). The quality of children's first relationships also affect their academic success and behaviors throughout the following school years (Hamre & Pianta, 2001; Howes, 2000). Taking these into consideration, teachers need certain competences in order to set a good model for children in the early childhood period. The teacher's being a positive role model for children entails having certain competencies. The teacher, as a model, should constantly observe him/ herself, make sure the children benefit from the positive models around them, and follow the developments in the teaching field (Tuğrul, 1993).

It is crucial that teachers educate themselves in the subjects of music, dance and drawing as children in early childhood are rather fond of these activities. Among these artistic activities, children's favorite one is usually drawing. Drawing is a projection of the most natural images of emotional and intellectual life which children express in the most authentic and simple way. For children, drawing is a process which brings together different experiences in order to create something personal, unique, and brand new. The process of drawing necessitates choosing and arranging colors, forms and lines by synthesizing components such as content, style, form and composition in order to convey a thought, feeling, an event or an observation. This natural environment makes it possible for the caregiver to know about the real feelings of the child (Malchiodi, 1998). It is apparent that what a child draws means more than what it seems to at first glance. In addition to children's way of thinking, these drawings reflect the problems they have with other children and adults and offer clues about the way they handle these problems (Burkitt et al., 2003a, 2003b; Forrest & Thomas, 1991; Malchiodi, 1998; Yavuzer, 1995). As a result of a detailed analysis of children's drawings, it is possible to have important insight into their abilities, habits and personalities or their relations with their surroundings (Koppitz, 1984; Malchiodi, 1998).

In the 1940s, a trend started to develop towards children's drawings. Personality assessment studies known as the projective method added a new dimension to Human Figure Drawing (HFD). According to this, children's drawings and drawing techniques might give us information about their personality, habits and behavior. Machover (1949) and Koppitz (1968, 1984) analyzed children's drawings sensually. Koppitz (1968) used the "Draw a Man" approach in determining certain emotional disorders in children and proposed alternative ideas in interpreting special signs. The Koppitz method can be used in identifying emotional disturbance and problems during difficult children's education and in helping them deal with these. This makes it

possible to express hidden emotions in a non-verbal way and evaluate children in a comfortable environment. Projective assessment on children's drawings has raised important questions and debates concerning the validity and reliability of the method used. (Garb, Wood, Lilienfeld & Nezworski, 2002; Smith & Dumont, 2000). However, it is still widely used in the UK and especially the USA (Camara, Nathan & Puente, 2000; Cashel, 2002; Costenbader, Allison & DiFonzo, 2000; Lubin et al., 1985; Lubin et al., 1984; Watkins et al., 1995).

This study has been designed based on the hypothesis put forward by many researchers working in this area claiming that the quality of the relationship between children and their loved ones is reflected in their drawings (Cugmas, 2004; Fury et al., 1997; Hamre & Pianta, 2001; Harrison, 2007; Kaplan & Main, 1985; Madigan et al., 2003). The quality of the children's relationship with their teachers affects their social and academic adaptation to school to a great extent. Children who interact closely with their teachers are inclined to be less problematic and display more positive behavior towards school. However, so far, studies of teacher-child interaction have mostly used assessment tools geared towards teachers, thus completely neglecting children's perspective. It is worth noting that there are very few articles in the literature analyzing children's interaction with their teachers from these children's perspective by relying on their drawings. In this study, children's perspective toward their teachers as reflected in their drawings during early childhood were analyzed according to age and gender by using emotional indicators, which is one of Koppitz's methods of assessing HFD.

Method

Study Group

The study group was formed through random sampling among the 5 to 7 year-old children from independent kindergartens in Ankara city center, the kindergartens of primary schools and the first grades of primary schools. In each age group, 40 boys and 40 girls were selected, a total of 240 children. Students from each age group were chosen from classes in 6 different schools. The distribution of the sample group's families according to several socio-demographic attributes is given in Table 1 below.

Table.1.

The Distribution of the Sample Group's Families according to Socio-demographic Attributes

Age Attributes	5 age		6 age		7 age		TOTAL	
	n	%	n	%	n	%	n	%
Order of birth								
First	47	58.7	48	60.0	37	46.2	132	55.0
Second	29	36.2	28	35.0	26	32.5	83	34.6
Third	3	3.7	3	3.7	10	12.5	16	6.7
Fourth and more	1	1.2	1	1.2	7	8.7	9	3.7
Number of children								
One	31	38.7	26	32.5	17	21.2	54	30.8
Two	43	53.7	47	58.7	40	50.0	130	54.2
Three	6	7.5	6	7.5	16	20.0	28	11.7
Four and more	0	0.0	1	1.2	7	8.7	8	3.3
Mother's educational background								
Primary school	4	5.0	4	5.0	20	25.0	28	11.7
Secondary school	6	7.5	1	1.2	19	23.7	26	10.9
High school	23	28.7	27	33.7	19	23.7	69	28.7
University	47	58.7	48	60.0	22	27.5	117	48.7
Father's educational background								
Primary school	3	3.7	3	3.7	7	8.7	13	5.4
Secondary school	4	5.0	3	3.7	13	16.2	20	8.4
High school	26	32.5	20	25.0	28	35.0	74	30.8
University	47	58.7	54	67.5	32	40.0	133	55.4

Data Collection Instruments

In this study, the drawings of children were analyzed according to Koppitz's method of "Human Figure Drawing". The method of Human Figure Drawing (HFD), which is based on 5-11 year-old children, was developed by Koppitz. In this method, children are given a piece of paper, which is 15x21 cm in size, and are seated at a comfortable table. They are given either crayons or pencils. They are asked to draw by giving the instruction: "I want you to draw a teacher, it can be a woman or a man". In order not to be affected from each other, children are made to draw individually or carefully seated away from each other. After they finish drawing, they are asked by the researcher to talk about the person they drew, what that person thinks, feels and does. Koppitz (1968) scored the indicators in children's drawings in two different types. The first is "developmental criteria", which determine age and the level of maturity. The second is "emotional indicators", which define children's attitudes and worries. In this study, 5-7 year-old children's HFDs were analyzed in terms of emotional indicators.

Koppitz's categories for emotional indicators in children's human figure drawings are given below:

1. *Impulsivity (Avoiding social communication)*: Disjointed body parts, extreme asymmetry in arms and legs, transparency, big figures, omission of neck
2. *Insecurity-Inadequacy*: Slanting figure, tiny head, omission of hands, arms, legs or foot, monster or grotesque figures, or robot
3. *Anxiety*: Shading of face, arms, legs/body, hands or neck, feet pressed together, omission of eyes, clouds, rain and flying birds
4. *Shyness-Timidity*: Tiny figure, short arms, arms folded around the body- arms pressed together, omission of nose and mouth
5. *Anger-Aggression*: Crossed eyes, teeth, long arms, big hands, naked figure-genitals

The scores obtained from the HFD are calculated by examining whether the criteria in each category are present. While the criterion that is not present in the drawing is given 0 point, the ones present receive +1 point (Koppitz, 1968). Children in the study group were observed for five weeks, for four hours per week. The assessment of children's HFD was done by a trained researcher by using the data obtained from the children's observations and by taking into consideration how they talked about the elements in the drawings. In addition, the researcher analyzed the sentences which the children used while explaining their drawings and considered the number of sentences and their content. The number of sentences was evaluated in 6 categories ranging from none to five or more. The content of the sentences, on the other hand, was examined in 3 categories. The first was called "no sentence" and meant that the child did not explain the drawing or used sentences like "I have a sister", which is not related to the drawing. The second was named "positive statements" and included positive statements about the teacher or school life. Finally, the third one was called "negative statements" and included negative statements related to the teacher or school life. The data obtained from these categories were analyzed statistically.

Data Analysis

The data from this study were analyzed by using SPSS 12. Frequency counts and percentages were obtained. In addition, children's emotional indicators scores from the HFD were calculated, and comparisons were made among age groups and genders. As the scores did not show normal distribution, the comparison among age groups was made by using Kruskal-Wallis H test, and the comparison among gender groups was made by Mann-Whitney U test. For categorical data, dependency tests were conducted via Chi-Square test. The level of significance was taken to be $\alpha .05$.

Findings

Data obtained in this study are examined below in three parts. In Table 2, the emotional indicators present in children's drawings are given by age group across the sample, while Tables 3-5 show children's drawings with respect to gender at each age level. Finally, in Table 6, by evaluating the content and the number of sentences that children used while talking about their drawings, their distribution according to age groups and gender are analyzed.

In Table 2, the emotional indicators present in the drawings of children according to age groups are given. As a result, the differences in anxiety scores within age groups pertaining to teacher figures are analyzed by using Kruskal-Wallis Test and no difference is observed, $H=.00$, $p>.05$. Similarly, it is found that no a meaningful difference existed between the shyness-timidness scores obtained from the HFDs for teacher and age, $H=3.3$, $p>.05$. It is also determined that there is a statistically meaningful decrease ($p<.05$) in the scores obtained from emotional indicators from 5 to 7 years of age in impulsivity, insecurity-inadequacy, and overall. In addition, it is concluded that there are statistically meaningful differences between the scores from teacher drawings in the category of anger-aggression and age groups according to Kruskal-Wallis Test (For impulsivity $H= 27.3$, $p<.05$; for insecurity-inadequacy $H= 38.1$, $p<.05$; for overall $H= 26.6$, $p<.05$) and that the emotional indicator scores of 6 year-olds in this category is higher than other age groups ($p<.05$).

Table 2.

The Differences in Emotional Indicator Scores Specified in Teacher Drawings and Age Groups

Factor	Variable	n	Avg.	SD	Mean rank	KWH	p	Diff.
Impulsivity Score	5 Years	80	.95	.39	144.2	27.3	.000	1-2
	6 Years	80	.75	.56	120.9			1-3
	7 Years	80	.53	.55	96.3			2-3
Insecurity-Inadequacy Score	5 Years	80	2.19	1.44	147.4	38.1	.000	1-3
	6 Years	80	1.78	1.30	130.2			2-3
	7 Years	80	.88	1.06	83.9			
Anxiety Score	5 Years	80	.30	.75	121.1	.0	.989	-
	6 Years	80	.31	.79	120.0			
	7 Years	80	.23	.45	120.4			
Shyness-Timidness Score	5 Years	80	.61	.85	110.0	3.3	.193	-
	6 Years	80	.84	.97	125.3			
	7 Years	80	.80	.85	126.2			
Anger-Aggression Score	5 Years	80	.01	.11	118.5	9.1	.010	1-2
	6 Years	80	.10	.38	126.0			2-3
	7 Years	80	.00	.00	117.0			
TOTAL	5 Years	80	4.06	2.23	141.1	26.6	.000	1-3
	6 Years	80	3.78	2.31	131.8			2-3
	7 Years	80	2.43	1.77	88.6			

In Table 3, the differences in 5 year-old children's insecurity-inadequacy scores obtained from the HFD related to teacher and overall scores calculated by the Mann Whitney U test, and the differences between the two genders are given (For insecurity-inadequacy $Z= -2.97$, $p<.05$; for overall $Z=-2.98$, $p<.05$). In addition, it was observed that, apart from the anger-aggression category, 5 year-old boys made use more emotional indicators than girls.

Table 3.

Differences of 5 Year-Old Children's Emotional Indicators in HFD and Gender

Variable	Gender	5 years				Mann-Whitney U	
		n	Avg.Avg.	SD	Mean Rank	Z	p
Impulsivity Score	Boy	40	1.00	32	42.4	-1.18	.238
	Girl	40	.90	44	38.6		
Insecurity-Inadequacy Score	Boy	40	2.67	1.31	48.0	-2.97	.003
	Girl	40	1.70	1.42	33.0		
Anxiety Score	Boy	40	.27	.60	40.9	-.20	.839
	Girl	40	.32	.89	40.1		
Shyness-Timidness Score	Boy	40	.82	.98	44.8	-1.89	.059
	Girl	40	.40	.63	36.2		
Anger-Aggression Score	Boy	40	.00	.00	40.0	-1.00	.317
	Girl	40	.02	.16	41.0		
TOTAL	Boy	40	4.77	2.11	48.2	-2.98	.003
	Girl	40	3.35	2.14	32.8		

Similar to 5-year-olds, 6-year-olds also had meaningful differences between the scores obtained from the HFD related to teacher in the categories of impulsivity, insecurity-inadequacy and overall, according to the Mann Whitney U test (For insecurity-inadequacy $Z=-2.38$, $p<.05$; for the total $Z=-2.37$, $p<.05$). The difference was due to the fact that boys use more emotional indicators than girls. The results are given in Table 4.

Table 4.

Differences in 6 Year-Old Children's Scores Obtained from Emotional Indicators in HFD and Gender

Variable	Factor	6 Years				Mann-Whitney U	
		n	Avg.	SD	Mean Rank	Z	P
Impulsivity Score	Boy	40	.825	.501	43.4	-1.328	.184
	Girl	40	.675	.616	37.6		
Insecurity-Inadequacy Score	Boy	40	2.125	1.181	46.4	-2.375	.018
	Girl	40	1.425	1.338	34.6		
Anxiety Score	Boy	40	0.325	.944	38.8	-.933	.351
	Girl	40	.300	.608	42.2		
Shyness-Timidness Score	Boy	40	1.050	1.061	45.0	-1.858	.063
	Girl	40	.625	.838	36.0		
Anger-Aggression Score	Boy	40	.075	.267	40.4	-.063	.950
	Girl	40	.125	.463	40.6		
TOTAL	Boy	40	4.400	2.340	46.6	-2.372	.018
	Girl	40	3.150	2.131	34.4		

Table 5.

The Differences between 7 Year-Old Children's Emotional Indicator Scores from HFD and Gender

Variable	Factor	7 years			Mann-Whitney U		
		n	Ave	SD	Mean rank	Z	p
Impulsivity Score	Boy	40	56	55	42.5	-86	392
	Girl	40	48	55	38.6		
Insecurity-Inadequacy Score	Boy	40	95	1.24	40.3	-08	938
	Girl	40	80	85	40.7		
Anxiety Score	Boy	40	26	42	40.9	-21	834
	Girl	40	26	48	40.1		
Shyness-Timidness Score	Boy	40	68	73	38.0	-1.06	291
	Girl	40	93	94	43.1		
Anger-Aggression Score	Boy	40	00	00	40.5	00	1.00
	Girl	40	00	00	40.5		
TOTAL	Boy	40	2.43	1.85	40.0	-.19	849
	Girl	40	2.43	1.71	41.0		

When children's statements related to their teacher drawings are analyzed in relation to age and the number of sentences, it can be observed that 7-year-old children mainly used 1-2 sentences, whereas 5 and 6-year-olds explained their drawings with at least 3 sentences ($\chi^2=90.22$, $p<.05$). Table 6 presents 5, 6 and 7-year-old children's explanations of their teacher drawings. When the content of their sentences explaining the drawings is analyzed, it is found that 5 and 6 year-olds use negative statements at a higher rate ($\chi^2 = 18.11$, $p<.05$).

Table 6.

Children's Explanation of their Teacher Drawings with Respect to Age

Factor	Variable	Age Group								χ^2	p
		5 Years		6 Years		7 Years		TOTAL			
		n	%	n	%	n	%	n	%		
Number of sentences											
	No sentence	5	6.3	2	2.5	0	.0	7	2.9		
	One sentence	2	2.5	4	5.0	21	26.3	27	11.3		
	Two sentences	12	15.0	16	20.0	43	53.8	71	29.6		
	Three sentences	18	22.5	23	28.8	11	13.8	52	21.7	90.22	.000
	Four sentences	16	20.0	19	23.8	3	3.8	38	15.8		
	5+ sentences	27	33.8	16	20.0	2	2.5	45	18.8		
	TOTAL	80	100.0	80	100.0	80	100.0	240	100.0		
Content of the sentence											
	No sentence	5	6.3	2	2.5	14	17.5	21	8.8		
	Negative statements	13	16.3	13	16.3	3	3.8	29	12.1	18.11	.001
	Positive statements	62	77.5	65	81.3	63	78.8	190	79.2		
	TOTAL	80	100.0	80	100.0	80	100.0	240	100.0		

The sentences used by children in explaining their teacher drawings were analyzed qualitatively and negative statements were particularly dealt with. Negative statement samples from 5-7 year-old children were exemplified in Sample 1, Sample 2, Sample 3 and Sample 4. In Sample 1, a 5 year-old boy said "I drew a male teacher. An angry teacher"; in Sample 2, a 5 year-old girl said "S/he is going to the pool to sunbathe. There are a lot of children at school. But there is only her/his child in the class and s/he is teaching him/her". In Sample 3, a 6 year-old boy described his teacher figure drawing as "I drew my teacher. S/he feels bad. S/he is shouting at everyone." Finally, a 7 year-old boy expressed his feelings as "I drew my teacher. Our teacher was angry at us, but then his/her anger waned."

Discussion and Conclusion

This study aimed to analyze how the figure of teacher, who is a role model for children in early childhood after their parents, is reflected in their drawings by using the "draw a teacher" technique. The findings will be discussed under three headings: differences in the emotional dimension with respect to age, age-gender and statements.

The analysis of the emotional dimension of children's teacher drawings with respect to age showed that drawing displaying impulsivity, insecurity-inadequacy and anger-aggression were fewer in the 7-year group than other age groups. When the entire sample is considered, it can be seen that as children grow older, there is a meaningful decrease in emotional indicators in their drawings.

The analysis of the emotional dimension of children's teacher drawings with respect to age and gender showed that boys drew more insecurity-inadequacy indicators at ages 5 and 6, while gender was not a meaningful factor in any category in 7-year-old children. Across the entire sample, more indicators were drawn in the category of anger-aggression at age 6. At the same time, gender was not observed to be a meaningful factor across the entire sample or in any age group in relation to anxiety related drawing traits.

Previous studies have shown that impulsivity indicators in children's drawings may reflect emotional discomfort (Hammer, 1958; Machover, 1949), the indecision of a figure may reflect weakness in human and peer relations, weak coordination in movements and lack of environmental stimuli (Albertyn, 1994; Cox, 1993; Jones, 1992; Kaufman & Wohl, 1992; Koppitz, 1968). Drawings related to the insecurity-inadequacy category reflects the tendency of one's personality to change quickly under various effects (Machover, 1949), mental insufficiency and failure (Koppitz, 1968), non-compliance, disobeying rules, hostile emotions and lack of strength and power (Cox, 1993; Gillespie, 1994; Koppitz, 1968; Kaufman & Wohl, 1992; Yavuzer, 1995).

When evaluating the emotional indicators in children's teacher drawings, it is necessary to consider the developmental characteristics of 5-7 year-old children who constitute the sample of this study. In the early childhood period, children are self-centered, cannot distinguish between fantasy and reality, and rational thinking is not yet developed. While self-centeredness is at its peak at age 2, it gradually declines towards age 7. The main reason why fantasy and reality cannot be distinguished and why children cannot think rationally at this age is that their cognitive skills are not yet developed. However, it has been evidenced through research that children begin to understand and accept that there are other viewpoints other than theirs starting from the second half of age 6. With this understanding, they start to distinguish fantasy from reality and gradually develop rational thinking (Camaioni et al. 1998; Gzesh et al., 1985; Lloyd et al., 1995; Loomis & Knapp, 2003). At the same time, it should be noted that physical and motor skill development happens very fast between the ages of 5 and 9 (Brown, 1990; Cherney et al., 2006; Dağlıoğlu & Deniz, in press; Özer, 2009). It was found in most studies about children's drawings that girls drew more details than boys (Brown, 1990; Cherney et al., 2006; LaVoy et al., 2001) and showed more development in fine motor skills (Halpern, 2000).

Drawings related to anger-aggression have been interpreted as verbal aggression, ambition of gaining sadistic emotions, discussing issues considered to be taboos by the society, making an effort to be love and be loved, insufficiency in manual skills, and a weakness in controlling bodily anxiety and stimuli (Albertyn, 1994; Cox, 1993; Gillespie, 1994; Karp, 1997; Kaufman & Wohl, 1992; Koppitz, 1968; Mortensen, 1991). Many studies exploring child aggression found that boys display these behaviors more than girls (Orçan & Deniz, 2004; Gürşimşek et al., 2004; Dizman, 2003; Şehirli, 2007; Mccoby & Jacklin, 1980). In a study by Dağlıoğlu, Deniz and Kan (2010) involving preschool children's drawings, characteristics of emotional indicators particularly at age 6 were found to preferred mostly by boys. Kanlıkılıçer (2005) studied 3-6 year old children's behavior problems with respect to certain variables and found that boys displayed more problem

behaviors than girls. This is parallel to the findings of the present study.

When these emotional indicators in children's teacher drawings are evaluated in general, it can be said that children had disagreements in their relationships with their teachers, felt insecurity and anger, boys' drawings had more emotional indicators, and as children grow this type of drawings decrease.

This study evaluated the child-teacher relationship from children's perspective by using their drawings. It was found in studies which evaluated the teacher-child interaction from the perspective of teachers that (Birch & Ladd, 1997; Hamre & Pianta, 2001; Harrison et al., 2007; Pianta et al., 1995) when children had more negative than positive emotions about their teachers, this led to poorer academic success, more discipline problems, weaker social skills, and less adaptive behaviors during group work in class. In a study by Cugmas (2004), children's emotional attachment to their teachers was found to be highly distinctive, and a weak relation was found between children's drawings and teachers' evaluations. At the same time, Harrison et al. (2007) and Valeski and Stipek's (2001) studies showed a strong correlation between preschoolers' relationships with their teachers and their feelings for school attitudes. Studies conducted with children in later years of elementary school found positive correlations between loyalty to teachers and the school as stated by children and their classroom competence as evaluated by teachers (Murray & Greenberg, 2000). These studies revealed that children's drawings can be used as a tool in defining their adaptation problems at school and the teacher-child relationship.

In studies conducted by considering children's emotional statements about their teacher drawings, it can be observed that 5 and 6 year-old children express themselves in more sentences compared to 7 year-olds. When the content of sentences is examined, it can be seen that 5-6 year-old children use more negative statements compared to 7 year-olds and that the latter refrain from expressing their feelings and thoughts concerning their drawings. In addition to this, it was determined that more than 75% of children have positive thoughts about their schools and teachers. This result suggests that the majority of children have adapted to their schools and teachers, and that they have developed an attachment with their teachers, too.

These results may be attributed to the characteristics of the developmental stage which the children are in. Additionally, it may be asserted that 5 and 6 year-old children can easily and naturally express their positive or negative feelings and thoughts, whereas 7 year-olds are shy in doing so since they are in a different developmental stage, have passed onto a different educational environment from pre-school, and thus are trying to adapt to a new environment. This is also parallel to the result that, although not meaningful, their scores from emotional indicators in the category of shyness-timidness according to age increase as children get older.

In this study, the negative statements that children used in relation to their teacher drawings were also analyzed. As a result, as can be understood in the samples provided above (Sample 1, Sample 2, Sample 3 and Sample 4), it should be remembered that teaching is an occupation which requires professionalism. Early childhood is a critical period in life, and the attitudes and behaviors gained during early childhood education are usually permanent. As has been pointed out before, there are certain personal and professional qualities that early childhood education teachers should possess. It should also be noted that children adopt basic attitudes and behavior through modeling. Çorbacı et al. (2003) analyzed the opinions of inspectors and instructors, and school managers and parents concerning teachers, and found that inspectors and instructors had a more negative opinion of the teachers compared to parents and school managers. A similar study was carried out by Gökalp (2003) in which the participants were teachers, inspectors, school managers, instructors and parents from primary and high schools located in seven different city centers across Turkey. His findings revealed that teachers' field knowledge is generally insufficient; they cannot follow new developments; and they do not love their profession. These findings point to the fact that teachers are generally not open to learning and updating their knowledge and, even worse, they do not love the profession of teaching. On the other hand, in

another study aiming to analyze Turkish and American early childhood teachers' interaction with children, it was found that Turkish teachers had a closer relation with children compared to their American counterparts (Beyazkürk & Kesner, 2005).

The findings from this study suggest that children reflect their development and culture in their teacher drawings and, as they grow older, they refrain from expressing their feelings and thoughts more, especially the negative ones. In addition to this, it can be seen that teacher's personal and professional competencies play an important role. From the way in which children explain their teacher drawings, it can be said that they reflect negative teacher attitudes in their drawings. However, as they grow older, the negativity reflected in the drawings is not reflected similarly in statements. Harrison's (2007) study has revealed that children's teacher drawings provide important clues as to the emotional quality of the interaction between the teacher and child. Thanks to this tool, it is easier to reflect negative, difficult and hard-to-express emotions in drawings instead of directly stating them. As a result of this study, it was concluded that the relationship between children's teacher drawings and teachers' scores of their interaction with the children is far more powerful than the relation between the children's drawings and verbal statements.

In this study, the perspective of the teacher was omitted and the interaction between the teacher and child was limited to the children's drawings only. Thus, the results of this study reflect the teacher solely from the children's point of view. In addition, the limited sample size should be considered in generalizing the results. This study used Koppitz' Human Figure Drawing, a projective technique developed towards the end of the 1960's, in order to evaluate children's teacher drawings. In a study carried out by Catte and Cox (1999), it was found that Koppitz' original criteria are still largely up-to-date (except for 4 items) and that many evaluation criteria developed in this field use Koppitz' criteria. Due to the limited sample size in this study, non-parametric tests were used. This necessitates more careful and limited interpretation of the results obtained.

The following may be recommended in light of the findings of this study:

It can be suggested that teacher preparation programs and in-service training for teachers should emphasize ways of interpreting children's feelings and thoughts from their drawings and of maintaining a positive teacher-child interaction.

For children to adapt to school and reveal their true potentials, it is crucial to evaluate the teacher-child relationship both from the teacher's and the students' perspective, and to determine how children perceive their teacher.

Drawings from children's perspective, teacher and student statements, and different measurement tools such as observation and interviews may be used in order to evaluate the teacher-child interaction. It is believed that conducting future comparative studies on different age groups, school types, children from different socioeconomic levels and with different developmental characteristics will be useful.

References

- Ainsworth, M. D. S., Blehar, M. C., Waters, E. & Wall, S. (1978). *Patterns of attachment, a psychological study of the strange situation* (Hillsdale, NJ, Erlbaum).
- Albertyn, H., J. (1996). *The use of children free drawings in assessing the presence of pediatric pain*. Cape Town: University of Cape Town.
- Başal, H.A. (2005). *Okul öncesi eğitimin ilke ve yöntemleri*. İstanbul: Morpa Yayıncılık.
- Beyazkürk D., & Kesner, J.E.(2005). Teacher-child relationships in Turkish and United States schools: A cross-cultural study, *International Educational Journal*, 6(5)547-554.

- Birch, S. H., & Ladd, G. W. (1996). Interpersonal relationships in the school environment and children's early school adjustment: The role of teachers and peers. In J. Juvonen, & K. Y. Wentzel (Eds.), *Social motivation. Understanding children's school adjustment* (pp. 199–225). NY:Cambridge University Press.
- Birch, S. H., & Ladd, G.W. (1997). The teacher–child relationship and children's early school adjustment. *Journal of School Psychology, 35*, 65–79.
- Brown, E.V. (1990). Developmental characteristics of figure drawings made by boys and girls. aged five through eleven. *Perceptual and Motor Skills, 70*, 279–288.
- Burchinal, M. R., Peisner-Feinberg, E., Pianta, R., & Howes, C. (2002). Development of academic skills from preschool through second grade: Family and classroom predictors of developmental trajectories. *Journal of School Psychology, 40*, 415–436.
- Burkitt, E., Barrett, M., & Davis, A. (2003b). The effect of affective characterisations on the size of children's drawings. *British Journal of Developmental Psychology, 21*, 565–584.
- Burkitt, E., Barrett, M., & Davis, A. (2003a). The effect of affective characterisations on the use of colour within children's drawings. *Journal of Child Psychology and Psychiatry, 44*, 445–455.
- Çağlar, A., & Kurtuluş, E.(2003). Okul Öncesi Eğitimde Etkili Sınıf Yönetimi. M. Sevinç (Ed.). *Erken Çocuklukta Gelişim ve Eğitimde Yeni Yaklaşımlar* (ss:414-421). İstanbul: Morpa Kültür Yayınları.
- Camaioni, L., Erconi, A.P., & Llyod, P. (1998). The development of referential communication-learning to speak and learning to process verbal information are not same thing. *Current Psychology of Cognition. 17*, 3-30.
- Camara, W. J., Nathan, J. S., & Puente, A. E. (2000). Psychological test usage: Implications in professional psychology. *Professional Psychology: Research and Practice, 31*, 141–154.
- Cashel, M. L. (2002). Child and adolescent psychological assessment: Current clinical practices and the impact of managed care. *Professional Psychology: Research and Practice, 33*, 446–453.
- Catte, M., & Cox, M., V. (1999). Emotional indicators in children's human figure drawings. *European Child and Adolescent Psychiatry.8*:86-91.
- Cherney, I.D., Seiwert, C.S., Dickey, T.M., & Flichtbeil, J.D. (2006). Children's drawings: A mirror to their minds. *Educational Psychology, 26*, 127–142.
- Çorbacı A. Haktanır, G., & Dinçer, Ç. (2003). 0-6 Yaşındaki Türk Çocukları ile İlgili Olarak Yapılmış Olan Araştırmaların Değerlendirilmesi. Association for the Development of Early Childhood Education in Turkey, OMEP 2003 World Council and Conference, 5-11 October 2003, Turkey. Proceeding Book, pp: 91-117.
- Costenbader, V., Allison, M.R., & DiFonzo, N. (2000). Kindergarten screening: A survey of current practice. *Psychology in the Schools, 37*(4), 323–332.
- Cox, M. V. (1993). *Children's drawings of human figure: Essays in developmental psychology*. Hove: Lawrence Erlbaum Associates Publishers.
- Cugmas, Z. (2004). Representations of the child's social behavior and attachment to the kindergarten teacher in their drawing. *Early Child Development and Care, 174*(1)13-30.
- Dağlıoğlu, H.E., & Deniz. Ü. (in press). Okul Öncesi Dönem Çocuklarının İnsan Figürü Çizimlerinin gelişimsel açıdan cinsiyete göre incelenmesi. *Elektronik Sosyal Bilimler Dergisi. 35*,
- Dağlıoğlu, H.E., Deniz. Ü., & Kan, A. (2010). A study on the emotional indicators in 5-6 year-old girls' and boys' human figure drawings. *Procedia Social and Behavioral Sciences, 2*, 1503–1510.
- Dizman, H. (2003). *Anne-Babası ile Yaşayan ve Anne Yoksunu Olan Çocukların Saldırganlık Eğilimlerinin*

- incelenmesi*. Unpublished Master Dissertation, Ankara University, Natural and Applied Science Institution: Ankara.
- Egeland, B., & Hiester, M. (1995). The long-term consequences of infant day-care and mother-infant attachment. *Child Development*, 66, 474-485.
- Forrest, M., & Thomas, G. V. (1991). An exploratory study of drawings by bereaved children. *British Journal of Clinical Psychology*, 30, 373-374.
- Fury, G., Carlson, E. A. & Sroufe, L. A. (1997) Children's representations of attachment relationships in family drawings, *Child Development*, 68, 1154-1164.
- Gillespie, J. (1994). *The projective use of mother and child drawings: A manual for clinicians*. New York: Brunel-Mazel.
- Gökalp, M. (2003). Türk Eğitim Sisteminin Kalkınma Planları Doğrultusunda İhtiyaç Duyduğu İnsan Gücü Niteliklerinin Belirlenmesi ve Buna Uygun Öğretmen Yetiştirilmesi. Unpublished Doctoral Dissertation, Atatürk University, Social Sciences Institution, Erzurum.
- Goossens, F. A., & van IJzendoorn, M. H. (1990). Quality of infants' attachments to professional caregivers: relation to infant-parent attachment and day-care characteristics, *Child Development*, 61, 832-837.
- Gürşimşek, I., Girgin, G., Harmanlı, Z. & Ekici, D., (2004). Annenin Ruhsal Belirtileri ile 5-6 Yaş Dönemi Çocukların Davranış Problemleri Arasındaki İlişkinin İncelenmesi. 1. *International Preschool Education Congress. Proceeding Book (2006)*. v:3, 359-369.
- Gzesh, S.H., & Surber, C.F. (1985). Visual perspective-taking skills in children. *Child Development*. 56 (5) 1204-1213.
- Halpern, D. (2000). *Sex differences in cognitive abilities*. New Jersey: Lawrence Erlbaum Associates.
- Hammer, E. F. (1958). *The clinical application of projective drawings*. Springfield. Charles C. Thomas.
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72, 625-638.
- Harrison L.J.(2007). Children's drawings as a measure of teacher-child relationship quality *Early Childhood Quarterly*, 22, 55-71.
- Howes, C. (2000). Socio-emotional classroom climate in child care, child-teacher relationships and children's second grade peer relations. *Social Development*, 9, 191-204.
- Howes, C., Phillipson, L., & Peisner-Feinberg, E. (2000). The consistency of perceived teacher-child relationships between preschool and kindergarten. *Journal of School Psychology*, 38, 113-132.
- Howes, C., & Hamilton, C. E. (1992). Children's relationships with caregivers: Mothers and child care teachers. *Child Development*, 63, 859-866.
- Jones, C.J. (1992). *Human figure drawings of mildly handicapped students: Learning disabled, mild mentally retarded, emotionally disturbed and speech/language impaired*. Springfield: Charles Thomas Publishers.
- Kanlıklıçer, P. (2005). *Okul Öncesi Davranış Sorunları Tarama Ölçeği Geçerlik Güvenirlik Çalışması*. Unpublished Master Dissertation, Marmara University, Social Sciences Institution, İstanbul.
- Kaplan N., & Main, M. (1985). Internal representations of attachment at six-years as indicated by family drawings and verbal responses to imagined separation. In M. Main attachment: A move to the level of representation. Symposium conducted at to a biennial meeting of to Society for Research in Child Development, Toronto.

- Karp, M.R. (1997). Symbolic participation: The role of projective drawings in a case of child abuse. *Psycho-Analytic-Study of the Child*, 52(ed):260-300.
- Kaufman, R., & Wohl, A.(1992). *Casualties of childhood: A developmental perspective on sexual abuse using projective drawings*. New York: Brunel-Mazel.
- Koppitz, E. (1984). *Psychological evaluation of Human Figure Drawings by middle school pupils*. London: Grune and Stratton.
- Koppitz, E. M. (1968). *Psychological evaluation of Children's Human Drawings*. New York: Crune and Stratton.
- La Voy, S.K., Pedersen, W.C., Reitz, J.M., Brauch, A.A., Luxenberg, T.M., & Nofsinger, C.C. (2001). Children's drawings: A cross-cultural Analysis from Japan and the United States. *School Psychology International*, 22, 53-63.
- Ladd, G. W., & Burgess, K. B. (1999). Charting the relationship trajectories of aggressive, withdrawn, and aggressive/withdrawn children during early grade school. *Child Development*, 70, 910-929.
- Lloyd, P., Camaioni, L., & Ercolani, P. (1995). Essential referential communication skills the primary school years-A comparative study. *British Journal of Developmental Psychology*, 13, 13-29.
- Loomis, J.M., & Knapp, J.M. (2003). *Visual perception of egocentric distance in real and virtual environment. In virtual and adaptive environments*. Lawrence Erlbaum Associets, Mahwah, NJ. Hettinnger and M.W. Hoas, Eds., 21-46.
- Lubin, B., Larsen, R. M., & Matarazzo, J. D. (1984). Patterns of psychological test usage patterns in the United States: 1935-1982. *American Psychologist*, 40, 857-861.
- Lubin, B., Larsen; R.M., Mattarazzo, J.D. & Seever, M.(1985). Psychological test usage patterns in five professional settings. *American Psychologist*. 39, 451-454.
- Machover, K. (1949). *Personality projection in the drawings of the human figure*. Springfield IL: C C Thomas.
- Madigan, S., Ladd, M., & Goldberg, S. (2003). A picture is worth a thousand words: Children's representations of family as indicators of early attachment. *Attachment & Human Development*, 5, 19-37.
- Malchiodi, C.A. (1998). *Çocukların Resimlerini Anlamak* (çev: T. Yurtbay) İstanbul: Epsilon Yayıncılık
- Mccoby, E.E., & Jacklin, C.N. (1980). Sex differences in aggression: A rejoinder and reprise. *Child Development*, 51 (4), 964-980.
- MEB (2006). *Okul Öncesi Eğitimi Genel Müdürlüğü Okul Öncesi Eğitim Programı (36-72 Aylık Çocuklar İçin) Kitabı*. T. Gürkan ve G. Haktanır (Ed.) Ankara: Milli Eğitim Bakanlığı Yayınları.
- Mortensen, K.V. (1991). *Form and content in children's human figure drawings*. New York: New York University Press.
- Murray, C., & Greenberg, M. T. (2000). Children's relationship with teachers and bonds with school. An investigation of patterns and correlates in middle childhood. *Journal of School Psychology*, 38, 423-445.
- Oktay, A.(2000). Okul Öncesi Eğitime Öğretmen Yetiştirme. Ş. Yaşar (Ed.). *Okul Öncesi Eğitimin İlke ve Yöntemleri* (ss:120-132). Eskişehir: Anadolu Üniversitesi Yayınları.
- Orçan, M., & Deniz, E. (2004). Anaokuluna devam eden altı yaş çocuklarının sosyal uyumlarının incelenmesi. 1. International Preschool Education Congress, Proceeding Book (2006) v: 2, 310-321.
- Özer, S. (2009). Turkish children's human figure drawings: Can we borrow norms?. *Educational*

Psychology,29,6,701-712.

- Pianta, R. C., Steinberg, M., & Rollins, K. B. (1995). The first two years of school: Teacher-child relationships and deflections in children's classroom adjustment. *Development and Psychopathology*, 7(2), 295-312.
- Pianta, R. C., & Steinberg, M. (1992). Teacher-child relationships and adjusting to school. In R. C. Pianta (Ed.), *New directions for child development: No. 57. Beyond the parent: The role of other adults in children's lives* (pp. 51-80). San Francisco, CA: Jossey-Bass.
- Pianta, R., Nimetz, S., & Bennett, E. (1997). Mother-child relationships, teacher-child relationships, and school outcomes in preschool and kindergarten. *Early Childhood Research Quarterly*, 12, 263-280.
- Pianta, R.C., & Nimetz, S.L. (1991). Relationships between children and teachers: Associations with classroom and home behavior. *Journal of Applied Developmental Psychology*, 12, 379-393.
- Şehirli, N. (2007). *Çocuk Davranışları Değerlendirme Ölçeğinin geliştirilmesi ve bazı değişkenlere göre incelenmesi*. Unpublished Master Dissertation, Gazi University, Social Sciences Institution, Ankara.
- Smith, D., & DuMont, F. (1995). A cautionary study: Unwarranted interpretations of the draw-a-person test. *Professional Psychology: Research and Practice*, 26, 298-303.
- Tuğrul, B. (1993). *Anaokulu Eğitimi Alan ve Almayan Çocukların İlkokul Birinci Sınıftaki Akademik Başarı ve Ruhsal Uyum Davranışlarının Karşılaştırılması Olarak İncelenmesi*. Unpublished Doctoral Dissertation, Hacettepe University, Institution of Health Sciences, Ankara.
- Valeski, T. N., & Stipek, D. J. (2001). Young children's feelings about school. *Child Development*, 72, 1198-1213.
- van IJzendoorn, M., Sagi, A., & Lambermon, M. (1992). The multiple caretaker paradox: Data from Holland and Israel. In R. Pianta (Ed.), *Beyond the parent: The role of other adults in children's lives. New directions for child development 57* (pp. 5-24). San Francisco, CA: Jossey-Bass.
- Watkins, C.E., Campell, V.L., Neiberding, R., & Hallmark, R. (1995). Contemporary practice of psychological assessment by clinical psychologists. *Professional Psychology Research and Practice*. 26,54-60.
- Yavuzer, H. (1995). *Resimleriyle Çocuk*, (5th ed.). İstanbul: Remzi Kitabevi.