This study examined characteristics of human figures representing the self as drawn by 3-, 4-, and 5-year-olds and the presence of age or gender differences. A total of 150 children who were selected randomly from day care centers drew themselves on paper with crayons. There were equal numbers of boys and girls in each age group. Human figure drawings were analyzed on a 5-point scale using Saastamoinen's (1993) test battery. Results suggested that there were developmental changes and marked gender differences in the drawings. Over 40 percent of 3-year-old boys' drawing were not recognizable as human; all others had a circle for the head. Eyes appeared as large dots among 4-year-olds and as small dots or lines among 5-year-olds. A mouth appeared as a curved line in 3-year-olds, but was a curved line or "smiling" mouth in 4- and 5-year-olds. Almost all the children omitted ears in their figures. Only 16 percent of the 3-year-olds added a body to their figure; 95 percent of the older girls and 36 percent of the older boys did so. Arms were added to figures at 5 years, with girls more likely to add arms symmetrically and to add fingers. Girls added hair and clothing to their figures at a younger age than did boys. Contains 10 references. (KDFB)
Human figure drawing as a representative medium of perceptual motor development among 3-to 5-year-old children

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Running head: Human figure drawing
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Abstract

Through drawing children express ideas that are meaningful and important to them. Thus children’s human figure drawing may reflect the important role of her/his own body plays in a certain stage of child’s perceptual motor development. Thus this study tries to ascertain: 1) What kind of human figure representing her-/himself is drawn by a child at a certain age (aged 3,4 or 5), and 2) Do these drawings display any age- and gender- related differences? The subjects (n=150) were asked to draw themselves on a drawing paper with crayon. Their human figure drawings were analyzed on a 1- to 5- scale using a test- battery developed by Saastamoinen (1993). Based on the results of this study, it seemed that the development of children’s own human figure drawings developed according to age, but there were marked differences according to gender.
Based on developmental psychology the perceptual motor skills form the basis for children's affective, cognitive and motor development (Kephart, 1960). Most of the perceptual skills are affective since birth, but the sensory stimuli acquired, need to become specialized and integrated through physical (motor) experiences children meet in various environments (Cratty, 1970; Fröhlich, 1991). Through these experiences the acquired sensations become meaningful (Ayres, 1979).

Through drawing children express ideas that are important and meaningful to them. Thus the most frequently drawn idea in 3-5-year-old children's drawings is the figure of her-/himself. The most important part(s) of this figure is/are drawn large "tadpole" (Brittain & Chien, 1983), and the less important smaller (the eyes, the arms) or totally omitted (the body) (Di Leo, 1970; 1983). Boys draw "tadpole" six months longer than girls (Willsdon, 1977). Girls also add hair and clothes to their drawings more often than boys (Mortensen, 1984). Thus 3-5-year-old children's human figure drawing may reflect the important role of her/his body plays in a certain stage of her/his perceptual development. Through this "physical body image" a child develops understanding of the relationships in her-/himself and of her-/himself and other objects in environment. Thus this study tries to ascertain: 1) What kind of her-/his own human figure is drawn by a child at a certain age (3-, 4- and 5- years), and 2) Are there any differences in these drawings according to age and gender?
Methods

Hundred and fivety (n=150) 3-5-year-old children chosen with a random sampling from different daycare centers were asked to draw her/his own figure on a drawing paper (size A4) with a crayon. Drawing occured in the beginning of an appropriate activity session. The human figure drawings were analyzed in 1-5-point scale with a test battery developed by Saastamoinen (1993). The mean for interobserver persentage being 97,8%. For the analysis the subjects were devided according to age into three groups (3-,4- and 5-years) so, that girls and boys were equally (n=25) presented in each group.

Conventional statistical methods were employed to describe the qualitative data in percentages (%) and chi- square- test was used to determain gender and age differences.

Results

The results of this study support the results of the earlier studies (Di Leo, 1970, 1983; Willsdon, 1977; Brittain & Chien, 1983). Human figure drawing developed in line with age. 43% of the three-year-old boys’ figures were not recognizable for human, while all the others had a circle for head. Eyes appeared in figures as large dots among the four-year-olds (girls 37 `)/0 and boys 18 %). At the age of five children drew the eyes either as small dots or lines in their figures (37 % of the girls and 44% of the boys). 22% of the three-year-olds and 35% of the four-year-olds drew a nose in their figure. More than half (58%) of the five-year-olds also drew a nose. A mouth appeared as a curved line in children’s drawings at the age of three (girls 31% and boys 20%). At the age of four
67% of the girls and 40% of the boys drew a curved line or "smiling" mouth. Most of the girls (78%) drew a "smiling" mouth and of the boys (68%) drew a curved or "smiling" mouth in their figures. 92% of the 3-5-year-old children omit ears in their figures.

16% of the three-year-olds added a body to their figure. 95% of the four and five years old girls and only 36% of the boys added the body in their figure. The shape of the body among the five-year-old girls was either triangle or had two different parts, but among the boys it was an open or closed square.

Arms were added to the figure at the age of five (88% of the girls and 64% of the boys). Simultaneously 72% of the girls and 40% of the boys added the arms to the body symmetrically. The girls (48%) also added fingers to the arms. 27% of the three-year-olds added legs to their figure, the percentages for the five-year-olds being 72% and 84%, respectively. Hair was added to the figure at the age of three (girls 26% and boys 18%), and at the age of five the percentages were 86% for the girls and 64% for the boys. Four-year-old girls (38%) added clothing to the figure, and clothing appeared also among the five-year-old boys (20%). Gender differences were found in the figures of the four-and five-year-old girls (28% and 44%) and of the five-year-old boys (12%). (Figure 1.)

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Figure 1. here

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It seemed, that children's human figure drawing developed according to age. Their perception of their own physical form evolved from a holistic understanding into a more detailed and sophisticated conception. The three-year-olds presented themselves as an open or closed circle with large eyes and legs as a "tadpole". The form of the head, the eyes, and the legs developed according to age. It might be, that children perceive and draw easier the body parts that are seen or used more frequently and have meaning in their daily activities. Surprisingly the children of all ages wanted to express themselves smiling!

In the "tadpole" a perception of the body appeared earlier among the girls than the boys. Because of this, the shapes of the body drawn by the girls were more mature than in drawings by the boys. Possibly the games girls play with arms and legs help them to pay attention to the body even at this early age.

The children recognized the symmetry of body parts when they added the arms to the body at the age of five. This might reflect the development of laterality. Children were now able to perform symmetric and gradually also lateral movements.

Gender differences were observable in relation to hair and clothing, the girls adding these to their figures earlier than the boys. Based on these gender differences the figures of the girls were recognized as "girls" much earlier than those of the boys as "boys". These differences might stem from the quality dolls that have hair and clothing.

It is up to the parents and pre-school teachers to provide children with equal opportunities for the development of perceptual motor skills- the basis for further learning.
[h1]References


Figure 1. Me - a lady. 5-year-old girl.
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Date: August 29, 1996

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