The Analysis of Children’s Drawings: Social, Emotional, Physical, and Psychological aspects

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Abstract

The drawings of young children have attracted and interested many professionals in the field of education. Researchers, psychologists, teachers, and parents have done various researches to clarify the meaning and interpretation of children’s drawings. Through the process of observing and analyzing the drawings of young children, insights can be gained as to the social/emotional, physical, and intellectual development of each child. Children usually explore the world around them through intellectual, physical and emotional methods for young children; pencil, brush and paper are the best means of conveying their fondest hopes and most profound fears. The progression of drawings that children make over a period of time can show significant growth and development, as well as determine academic capabilities and skills characteristic of their developmental level (Brittain & Lowenfeld, 1987). According to Lowenfeld, children begin their drawing process as early as they can physically hold a drawing utensil. From their first attempts at a drawing, consisting of random marks and lines, to their first representational drawing, children are making efforts to communicate to the world around them and establish meaning through the images they create (Brittain & Lowenfeld, 1987). It is through their drawings that children express the views and interpretations of their experiences.

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1. Introduction

"Humans are animals who use tools": as Benjamin Franklin has said, human beings have, as an extension of hand functions, come to make tools according to the purpose. And the tools are refined to become easier to use, and eventually, they led up to not only being used for the purpose of survival, but also to the act of "drawing pictures" in order to enrich life. Pictures indeed tell of the drawer’s existence, thoughts, and inner self. People enjoy drawing because drawing stimulates the universal desire to express oneself. By expressing oneself, the heart is released. Drawing techniques provide a relatively easy way to gather social information from and about children (King, 1995). The use of drawings for evaluation purposes is a powerful tool, since most children tend to enjoy drawing without showing any sign of tension. While many children dislike answering questions, drawing tests can be completed quickly, easily and in an enjoyable way (Lewis & Greene, 1983). According to Chambers (1983),

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drawings avoid linguistic barriers and enable comparisons between groups of different languages and abilities. Crook (1985) argues that 'it is widely recognized that the content of children's drawings may provide insight into their feelings and thoughts about the world'. Children's drawings provide a 'window' into their thoughts and feelings, mainly because they reflect an image of his/her own mind (Thomas & Silk, 1990).

1.1 The Study of Children's Drawings

Children's drawings have received much attention on the part of teachers and educators. The child's expression is a part of his nature. When children draw, they carefully choose their materials, crayons, colours, patterns, plus the size and position of what they want to draw. Children's drawings are unique and can give us precise information about the young artist. The study of children's drawings dates from the late 19th century (Thomas & Silk, 1990). Since then, the study has been used mainly for aesthetic, educational and clinical reasons. There are mainly three different types of research into the emotional-expressive aspects of children's drawings. First, drawings were analyzed as manifestation of personality traits, interpreted mainly by Freud, within the theoretical framework of psychoanalytic theory and its derivatives. The second, identified largely in the work of Koppitz (1968), attempted to devise and scientifically validate a classification of 'emotional indicators' to be found in children's drawing. The third type has been concerned with the ways in which normal children depict personally important or emotionally significant topics, rather than with personality assessment or clinical diagnosis. Children's drawings are analyzed to explore their view of major problems in the world today and in the future.

1.3 Children's Drawings In Different Cultures

Kellogg (1970) has argued that there is a universal pattern of development in children's drawings and art. The following statement by Kellogg and O'Dell (cited by Grieve & Hughes, 1990) captures the perceived western view: 'Cultures the world over ... use the same forms to express what they wish to say. The forms may appear to change from one country to another but at heart they remain alike. The art of young children everywhere is identical'. Alland (1983), however, suggests that children in different cultures may differ not only in details of drawing style, but also in the basic strategies used to construct their drawing. Culture plays a fundamental role in the development of symbolic representations (Wales, 1990). According to Alland's theory, local cultural symbolism affects the way children draw. So, even if the mental representation of a person is essentially the same, the way in which that representation may be pictorially realized can differ fundamentally as a function of the representation's place in the culture and its iconography conventions (Wales, 1990).

1.4 Drawing as a communicative tool

While drawing is a kind of individual expression, it can also be a communicative tool. Drawing tends to recount far more things to the reader than language. Children do not yet have sufficient capabilities for abstract linguistic expression, but they have symbolic communication methods such as drawing. Through pictures, children make communication with familiar people, they develop skills for living, and build a sense of trust (Kitahar & Matsuishi, 2002). Children's drawings have an order of development, and that accompanies the development of motor skills, emotional development, psychosocial development and the development of perception. Children draw "what they know" in their own style. In other words, the perception functions, sensibility/emotions and motor functions interact, and there, the factor of social experience is added and the picture is drawn onto paper.

1.5 The development of drawing skill in children

In order to draw what one is thinking, the skilled control and development of the fingers becomes necessary. As well, children draw what they know about. What they know, what they wish to communicate to others, these are expressed not simply as they are seen, but with the child's personal style. It follows that, the extent to which a child is conscious of the surroundings, in other words, the breadth of the child's world vision has a great influence on the contents of the drawing. Moreover, in order to draw something, there is a need to have an interest in familiar matters and events. Sensitivity toward matters, things, feelings such as joy, anger, sadness and contentment, as well as the development of emotions, enriches the drawing activity.
The development of various skills promotes the development of drawing expression. And, the fulfillment of life experience and the expansion of worldview are greatly influences for the furthering of drawing activities. By expressing these in pictures, the consciousness becomes entrenched in the child; it enriches the world of creativity, and expands the substance of daily life. From this, there arise correlating effects such as progressing the child's overall skills or development of drawing. Although there exist some differences in lifestyle, at the infant stage, all children around the world show a universally shared development process. In children's pictures, there may be the primordial shapes and forms of drawing activity. Again, in addition to the inherent individual differences such as those that were mentioned before, the culture and the state of the lifestyle environment that surround the children and the education methods, etc. also have an influence on the development of drawing. Kitahar & Matsuishi (2002) believe that children's drawings according to the development of their various skills, can be said to develop comprehensively on the two fronts of the inherent/universal factors that grow according to an intrinsic development program, and of factors due to the lifestyle environment in which they live and the education culture environment.

1.6 Measuring the intellectual level of children by their drawings

The examination results of drawings collected in Switzerland show that among children who drew good pictures, the percentage of intellectually superior children was higher than the percentage of intellectually inferior children. In the early 1900s, many research methods were developed, such as the reproducing method that attempted to measure the development level of the drawer through reproduction, the completion test that completed a picture by drawing in the missing parts, etc. One of the most well-known methods used is the DAM (Draw-a-Man), issued by Goodenough in 1926. It is an intelligence test that is measured using portrait drawings and using IQ (intelligence quotient) as a basis. Drawing a person is, at the same time as expressing a subject that belongs to the category of people, also to express what kind of being the self is. Consequently, portrait drawings are an image of the self and an image of others, and it is necessarily drawn based on various perceptive information such as self-acceptance information, visual information, knowledge acquired by learning, and actual experiences. The projection approach is a method that can close in on the interiority of the drawer. The drawing tells more about the drawer himself or herself rather than the subject that was drawn. Even when drawing a tree, more than the tree it, which is the subject of the drawing, the psychological state of the drawer is drawn into this. Drawing is a symbolic expression of the inner psyche (the unconscious). The unconscious part of the psyche can appear through symbols (drawing). Drawing is a direct communication from the unconscious, and it cannot be camouflaged as easily as in the case of communication with words. When a drawing appears from the unconscious, a vast amount of psychological information is generated, and the depths of the drawer’s psyche can be felt through the drawing.

1.7 Why interpret children’s drawings?

Drawing is in the same field of expression as play and speech. Children who draw are happy children. They express their fears, joys, dreams, pain etc. through drawings, and also give you leads about their relationship to the world and to other things. Drawing is an outlet for communication and children's artwork represents a view of their personality. It is rare for children not to draw; this can be a reflection of trauma.

1.7.1 Choice of paper and colures

Children do not choose their tools by chance. When they have a choice they will lean towards a certain type of paper or pencils. This choice reveals mood and personality. For example, pencils with wide, fat points are favourites with determined children, while children who have more difficulty expressing or asserting them prefer pencils with a fine point. The size of the sheet of paper chosen is a good indication of the place a child wants to occupy in general life. The bigger the sheet is, the more the child wants to show themselves off, while choosing a smaller sheet of paper shows that a child has good concentration.

1.7.2 Interpretation of repetition

When children draw they feel free to express themselves, to transmit strong messages, positive and negative, and also things of no great importance. So don’t make hasty conclusions! Analysis of drawings is done through
repetition of elements like colour, shapes and recurring details which point to meanings.

1.8 The interpretation of some children’s drawing

Drawing a very big person: Usually the huge drawing indicate aggression and overactive. Children who do not adept well tend to draw exaggerated human figures. Drawing a very tiny person: Usually said about the small drawings of human figure that it shows the feelings of incompetence, cheese, shame, fear and depressive.

Head: If the child exaggerates the head, this indicates that his ego is inflating. Children who are normal, they draw the head appropriately for the body. Oral mouth: Children's who talk a lot more who are aggressive paint a very large mouth with large size teeth as if they were always willing to cut and consume. But the normal children tend to draw the appropriate size of the mouth for the body. Eyes: Disturbed children, who feel they were being watched or controlled by others, often draw large eyes, with sceptical view. As for those who tend to draw the eye in the form of small circles, this indicates the dependence and the shallowness of emotion, similarly the deletion of the eyes of human figure evidence of an unwillingness to mix with others. Nose: Of course, children who are self-harmonious supporters draw the nose appropriate to the body, but emphasizing the nose holes and enlarging them indicates aggression Neck: The child who paints a too long neck means that there are difficulties in achieving his wishes and satisfying them. Children who are face troubles eliminate the neck completely. Hands: Stretching hands out indicate of a desire to connect to the environment or other persons or a willingness to help and interact. Large hand found in children's drawing of those who steal and small hands indicate the emotions associated with insecurity and helplessness. Also the disabled child and abusive one may always forget to draw hands. Shading: If the whole body is shaded, this indicates of anxiety, but if a particular part is shaded anxiety associated with this part of the body. The child, who tends to distort the shape or more when shading it, is found more often in children who are anxiety and lack compatibility with their environments. Pen pressure reflect the muscle tension plus, the weight and light of the degree lines indicate the level of energy and tension of the child, is common phenomenon in boys' drawings rather than girls' drawings, reflect the rush. 

The pen

Faint lines indicate: Low level of physical and mental energy, shame and depression associated with severe, pressure varies and ranges demonstrate the flexibility and compatibility, the analysis of children’s drawings should be done by specialists; nevertheless there are some signs that may suggest a problem: If you get recurring feelings of unease from the drawings, If certain parts of figures are always missing, If eyes squint or are hollow, If crossing out is abnormal, If there is excessive darkening, If the drawings are tiny or, confined to a small space, If a child always refuses to draw or to describe drawings, If the same drawings are repeated within a month, If figures are empty, If shapes are not closed. 

Contrary to popular belief, violent scenes or the appearance of genital organs are not necessarily worrying signs, as long as they are not repeated obsessively. The child is artist by nature, he has a universal language of expression (drawing), through it he can address the adult without hesitation when he translates his emotion to a group of lines that appear randomly in the beginning, and it's normal when the mother doesn't understand the meaning of his drawing, but the mother should learn more about the children's drawings to encourage and motivate her child and try to discuss him about what he draws and understand what he wants to tell her through his drawing, because that gives the child motivation and of Self-confidence, which helps in configuration the child's personality. And if we could explain what the child's Expressions through his painting, we may discover many things about his personality, that maybe useful for us if our education and treatment are good with him or need to change, to keep safety of his mental health.

1.9 How to analyze the children’s drawings?

In order to read into pictures, firstly, it is important to constantly pay attention to the first impression of a drawing. Rather than interpreting a picture, it is more important to emphasize the first feeling that the reader had. The person who interprets must become conscious of the impression that he or she feels, and must keep this information until much later. Sometimes, there is a possibility that the first impression that was felt means that there was close contact with the drawer’s unconscious world. Also, instead of putting the focus on finding symbols, there
is a need to look at the picture as a whole. The integrated whole is larger than a total sum of its parts. This is called the "preeminence of the whole".

At an early age, the themes of the drawings are secondary, and the drawing activities are performed in a dimension where the entirely psychological and physical activities are united. However, when children become slightly older, the theme becomes more important. When a single symbol or theme appears repeatedly in a single drawing, it merits attention, and there are instances in which there are hidden meanings behind them. This is because unconscious thoughts, feelings, and actions are the root source of symbols and themes.

With regard to free drawing, the interests and needs in the depths of the child's heart can be understood by how the themes are chosen. In a study in Florence, the drawings of children from grade 1 to grade 5 were studied, and an interesting tendency was found. According to this, "houses" were depicted in 60% of the free drawings drawn by children aged 6 and 7, and in these drawings, there were very few objects depicted other than the "house" (such as trees and flowers). What the "house" symbolizes is the "emotions and stability that are achieved by life in the home, a place where basic needs are pursued", and in the childhood in which the home accounts for a large portion of one's life, the "house" is often depicted. And by 10, 11 years old, the "house" becomes only one item in a wide composition that includes "trees", "flowers", and the "sun", which symbolize needs of the world that extends beyond the range of the home. It can be understood that this kind of smooth transition takes place because, as the range of interests grows wider and that needs that extend beyond the home arise, they are gradually released from the strong family ties of childhood. As well, the drawings that have a characteristic of projection are, at the same time as being an analytical tool, also an effective diagnostic and treatment method. Researchers who take a scientific stance have held doubts about the projection method. In truth, it cannot be denied that the subjective factors of the reader have a great influence when analyzing the pictures. However, although the projection method certainly cannot satisfy the standards of reliability and validity as a psychological analysis, it is an important tool for experienced clinicians. Once one becomes accustomed to its usage, it becomes possible to pursue clues that cannot be compensated by standardized tests, and at the clinical site, the therapist can, at the same time as creating a rapport with the drawer with the pictures as a medium, the therapist can also understand the personality of the drawer. For the drawer as well, drawing pictures is an effective method to release one's mind. The symbols help the state of the mind to transfer from the unconscious level to the conscious. Pictures that are symbols recount something extremely deep and complex, so with a consciousness that, itself has limits, it cannot immediately understand everything. It is normal for the symbol (drawing) to carry aspects that are unknown or indecipherable, and there are times that the drawer himself or she cannot understand the drawing that he or she drew. However, by using pictures, it is possible to exchange information within the realms of the mind that are expressed or repressed. Drawings release mental energy that was unconsciously repressed. From this mental energy, even people faced with difficulties may be able to overcome their problems. It could be said that it is basis for which drawing is used as a psychological treatment. However, the therapist is dealing with an individual and the pictures are only a medium for communication. The analysis of pictures is a system that allows people to become more conscious, and if the conscience is expanded, the contents of unconscious would be spared from being abused and ignored. They would be valued, and be integrated into the lifestyle. If that were to happen, people would be able to establish characteristics that suit themselves and live their remaining time as more complete human beings. As above, I have discussed children's drawings from 3 perspectives One drawing suggests, truly, many things. In undertaking this research, I have witnessed how pictures articulately tell of the children themselves. This may be the aspect of the development of children, or of their inner side. And through the pictures, I was able to be closer to the children. For us, pictures can be a useful communication tool if used effectively.

1.10 Children's Drawings and their Environmental Perceptions

Analyzing children's drawings has always been as a systematic measure to evaluate children's perceptions and attitudes towards their environment. Children's drawings are emotional indicators for specific environmental problems, and indicate their attitudes towards different environmental situations. Brown et al. (1987) used children's drawings (children aged between 11 and 15), to reveal their changing perceptions of nuclear power stations. Matthews (1985) used children's drawings (children aged between 6 and 11), to represent their journey to school and
home area by means of free-recall mapping technique. King (1995) used drawings from children between the ages of 5 and 15, to discover the variety and kinds of concerns children might have about the environmental crisis. She asked children to draw a picture about what it means to them when someone says, 'You have to save the planet'. She found that 87% of the children were very much aware of the environmental crisis. Nearly half (47%) depicted themselves or others taking personal action for positive social/environmental change.

2. Discussion
Everything we perceive is influenced by the perception of other people (Mays, 1985). Children show not only their ability to draw, but also put together their knowledge and their visual perception. These elements are vital for the development of the higher thinking processes and mental representations. Drawings are affected by knowledge, age and the ability to draw. Children's age and cognitive development are important factors to consider. Traditional theoretical approaches suggested that children's drawings principally reflect their state of conceptual and intellectual development. Children often know more than their drawings reveal (Grieve, 1990).

3. Conclusions
Cognitive development and drawing skills are important factors to consider when analyzing children's pictures. The information children have about an environmental issue will be crucial for its mental representation. Children's drawings can thus provide valuable information on the development of children's environmental perceptions. The strategies used by children in making drawings are of interest not only because they allow us to make a more satisfactory analysis of children's art, but also because they open up the possibility of progress in understanding the development of planning and organizing skills in general (Thomas & Silk, 1990).

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