# CHAPTER 9

# Developmental Art Therapy

Cathy A. Malchiodi

ord Press **M** any therapists who use art therapy integrate a variety of developmental frameworks into their work, including psychosexual (Freud, 1905/1962), psychosocial (Erikson, 1963), object relations (Mahler, Pine, & Bergman, 1975), and more contemporary models involving attachment (Bowlby, 2005) In addition, art therapy is most often informed by the stages of normal artistic development presented by Lowenfeld (1957), Gardner (1980), Kellogg (1970), and Golomb (1990) and the general principles of cognitive development proposed by Piaget (Piaget, 1959; Piaget & Inhelder, 1971). Developmental art therapy is usually applied to work with children, but it may be used with individuals of any age, especially those with physical handicaps, cognitive impairments, or developmental delays. It may also be valuable in therapy with individuals who have experienced emotional stress or trauma because art making evokes early sensory experiences and taps into symbolic expression that is found throughout the developmental continuum (Malchiodi, 2002, 2008). For this reason, a neurosequential framework (Perry, 2002) is relevant to the application of art therapy from young childhood through adolescence.

This chapter presents an overview of developmental art therapy, including a summary of the stages of normal artistic expression in children. It also provides a framework for applying a neurosequential approach to art therapy intervention. Brief case presentations are used to demonstrate developmental art therapy and to underscore the major goals in a neurosequential approach.

### THEORIES OF DEVELOPMENTAL ART THERAPY

A developmental approach to art therapy uses normative creative and mental growth as a guide to understanding the individual. For more than 100 years,

psychiatrists and educators have recognized that changes in children's drawings relate to age (Malchiodi, 1998). The first formal test of intelligence was based on human figure drawings (Goodenough, 1926), founded on the premise that children in most cultures draw pictures of people and that characteristics of these figure drawings vary by age. The work of Victor Lowenfeld (1957), an educator who believed that the art process contributed to many aspects of children's creative and mental growth, is undoubtedly one of the most important influences on the practice of developmental art therapy. Lowenfeld believed that art making not only was a source of self-expression but also had the potential to enhance emotional well-being. He coined the term "art education therapy" to describe a therapeutic and educational use of art activities with children with handicaps. Lowenfeld was somewhat influenced by the psychoanalytic concepts of his time and, as a result, became interested in how handicapping conditions influenced children's self-concept and how the art process might be used to support children's development.

Many of Lowenfeld's concepts are reflected in the work of art therapists who have applied developmental principles to their work with children and adults. Kramer (1971), who worked with culturally disadvantaged and emotionally handicapped children, recognized the power of art to developmentally enrich the lives of children. Uhlin (1972) published studies of neurologically handicapped children and provided a theory for developmental art therapy informed by normal artistic development and psychoanalytic and analytic principles. Williams and Woods (1977) actually coined the phrase "developmental art therapy" and focused their work with children on the acquisition of cognitive and motor skills. Silver (1978, 2001, 2002, 2007) has contributed several decades of research on how art expression can be used to recognize and understand cognitive and developmental abilities in children and adults (see Malchiodi, Chapter 30, this volume, for a description of the Silver Drawing Test). Cox (2005) also provides a comprehensive account of children's developing abilities to produce images from early childhood through adolescence.

Henley (1992) synthesized the theories of Lowenfeld and Kramer to create an approach to treating children with physical and emotional disabilities; his work provides an excellent framework for application of the principles of art therapy and art education to children in both therapy and the classroom. Aach-Feldman and Kunkle-Miller (Aach-Feldman, 1981; Aach-Feldman & Kunkle-Miller, 1987) used not only developmental theories of art expression but also concepts of psychosexual, psychosocial, and motor development in work with children with various disabilities and emotional disorders. More recently, the impact of neuroscience as it relates to the brain's capacity to create images, both mentally and through image-making activities, is influencing how we look at human development, particularly the function of art expression in early childhood and throughout the lifespan (Malchiodi, Riley, & Hass-Cohen, 2001; Malchiodi, 2008).

### STAGES OF NORMAL ARTISTIC DEVELOPMENT

The therapist who uses a developmental approach generally uses the normal developmental stages of artistic expression, as well as normal play, motor skills, and social interactions, as a basis for evaluation and subsequent interventions. Most art therapists and developmental psychologists are familiar with the stages and characteristics of normal artistic development in children; however, for therapists who are not acquainted with these concepts, we provide the following brief section. Because an in-depth coverage of the developmental characteristics of children's art expressions cannot be fully addressed within the scope of this chapter, readers are referred to the work of Gardner (1980), Winner (1982), Golumb (1990), Kellogg (1970), and Lowenfeld and Brittain (1987) for more information. Malchiodi (1998) and Henley (1992) also provide frameworks for therapists who work with children with handicaps or developmental disabilities. Researchers in the fields of art education and art therapy are collecting data to reevaluate the established developmental norms, examine children's drawings from a cross-cultural perspective, and create an archive of normal children's art to assist researchers in future studies (Deaver, 2009).

Throughout childhood, all children follow expected, progressive changes in their art expression, changes that are characteristic of each age group. Table 9.1 provides an overview of the basic characteristics and graphic elements of these stages and approximate age ranges for each stage. (Note: Most of the current research has been on how children draw, while less attention has been paid to other art modalities such as paint and clay.) These stages of artistic development appear to be universal to children throughout the world and are commonalties of image making that are part of every normal child's ability to communicate through art. Some children may remain in one developmental stage for years; in other cases, the child may possess the ability to move forward but may need prompting or support from a skilled therapist to do so.

It is important to have a solid understanding of the normal stages of artistic development not only in using a developmental approach, but also in using any approach to art therapy. By understanding these stages and their graphic characteristics, one will be able to judge what qualities in art expressions are unusual for a child of a particular age and spot deviations in content and form. As with developmental skills and cognitive abilities, artistic expression is a sequential process. However, like motor development and cognition, there may be some overlap in age range and drawing skills, and most children fluctuate between stages. For example, a child may draw human figures one day (Stage III) and makes less complex forms (Stage II) a day later. It is also important to remember that although there are many universal commonalities in how children draw at each developmental stage, children also may have a "personal visual logic" (Winner, 1982) that influences how they place objects on the page, use color and line, or develop individual symbols for people and objects in their environments; this is considered to be a normal aspect of developing artistic expression.

# (cont.)

# TABLE 9.1. Stages of Artistic Expression

Stage 0: Attunement, attachment, and kinesthetic development

0-18 months

At this earliest stage children have visual perception and can see colors and shapes; are attuned to

picture books, images, and people; begin to form attachments to caretakers as well as objects; and

will grasp objects with hands. Toward the end of this stage a child may be able to hold a crayon

marks. There is enjoyment of movement, repetition, sensory activities, and gross motor skills.

and make marks or uncontrolled scribbles on paper, but may not know he or she made those

Stage I: Scribbling

18 months-

3 years

of the motions that used to make the scribble; accidental results occur and the line quality of these During this stage the very first marks are made by a child on paper. At first there is little control

early drawings varies greatly.

much conscious use of color (i.e., the color is used for enjoyment without specific intentions) and As motor skills improve, scribbles include repeated motions, making horizontal or longitudinal ines, circular shapes, and assorted dots, marks, and other forms. At this stage there is also not drawing is enjoyed for the kinesthetic experience it provides. Limited attention span and not much narrative about the art product.

Stage II: Basic forms

Children may still make scribbles at this age, but they also become more involved in naming and

inventing stories about them. The connection of his or her marks on paper to the world around

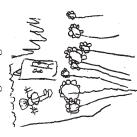
3-4 years



and rectangles. These forms are the precursors of human figures and other objects, the milestone unidentifiable scribbles. Attention span is still limited and concentration is restricted. Meanings for images change; a child may start a scribble drawing by saying "This is my mommy," only to pattern, and combinations of basic forms and shapes such as triangles, circles, crosses, squares, nim or her occurs. Children want to talk about their drawings, even if they appear to adults as Other configurations emerge at this time, including the mandala, a circular shape, design, or quickly label it as something else soon after.

TABLE 9.1. (cont.)

Stage III: Human forms and beginning schemas



4–6 years The

tadpoles, cephlapods, and prototypes. These human figures are often primitive and sometimes The major milestone of this stage is the emergence of rudimentary human figures, often called quite charming. There is still a subjective use of color at this stage, although some children may begin to associate color in their drawings with what they perceive to be in the environment (e.g., leaves are green) throughout a page without concern for a groundline or relationships to size. A figure may float Also, there is no conscious approach to composition or design, and children may place objects reely across the page, at the top or sides, and some things may appear upside-down because Children of this age are more interested in drawing the figure or object than the color of it. children are not concerned with direction or relationship of objects.

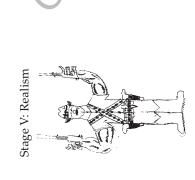
Stage IV: Development of a visual schema

6–9 years



Children rapidly progress in their artistic abilities during this stage. The first and foremost is the nside) and attempt beginning perspective by placing more distant objects higher on the drawing to depict a head with a circle, hairstyles, arms and legs; a tree with a brown trunk and green top; development of visual symbols or schemas for human figures, animals, houses, trees, and other is used objectively and sometimes rigidly (e.g., all leaves must be the same color green). There is see-through or x-ray pictures (such as cutaway images of a house, where one can see everything objects in the environment. Many of these symbols are fairly standard, such as a particular way a yellow sun in the upper corner of the page; and a house with a triangular, pitched roof. Color the development of a baseline (a groundline upon which objects sit) and often a skyline (a blue line across the top of the drawing to indicate the sky). During these years children also draw

emphasize the figure. Or a child depicting a person throwing a ball may draw a much longer arm It is normal at this age to use variations in size to emphasize importance; for example, children may depict themselves as bigger than the house or tree in the same drawing, if they wish to than usual.



9-12 years

in their drawings. This includes the first attempts at perspective; children no longer draw a simple At this stage, children become interested in depicting what they perceive to be realistic elements depiction of color in nature (e.g., leaves can be many different colors rather than just one shade of oaseline but instead draw the ground meeting the sky to create depth. There is a more accurate green), and the human figure is more detailed and differentiated in gender characteristics (e.g., more details in hair, clothing, and build).

At this stage, children begin to become more conventional in their art expressions and are more their pictures. In this stage children have increasing technical abilities and enjoy exploring new literal because they want to achieve a "photographic effect" in their renditions. They may also make drawings of cartoon or comic strip characters in order to imitate an adult-like quality in materials and can work on more detailed, complicated art expressions.

Stage VI: Adolescence

onward

12 years and

by the age of 13, children who have continued to make art or have art training will be able to use perspective more accurately and effectively in their drawings, will include greater detail in their discontinue drawing or making art at around the age of 10 or 11 due to other interests. However, work, will have increasing mastery of materials, will be more attentive to color and design, and Many children (and adults) never reach this stage of artistic development because they may will be able to create abstract images.

Note. Based on the work of Lowenfeld and Brittain (1987), Gardner (1980), Kellogg (1969), and Winner (1982). Adapted from Malchiodi (1998). Copyright 1998 by Cathy A. Malchiodi. Adapted by permission.

### **DEVELOPMENTAL ART THERAPY**

Developmental art therapy is most often applied to work with children whose cognitive or physical abilities fall outside the average range for their age group. While this generally includes children who may be challenged academically or in using fine and gross motor skills, it also may include children who are exceptional and above the normal average for their age group. In any case, a developmental approach takes into consideration the level of a child's ability and capitalizes on art making as medium for enhancing skills and overall growth and development.

Most art therapists who work from a developmental framework conduct an initial assessment to determine goals and objectives for future sessions with a child. In a developmental art therapy approach, assessment is based less on the symbolic content of the art expression and more on the stages of normal artistic development as a basis for comparison and evaluation. In an art therapy session with an 8-year-old girl with emotional trauma, does the child create human figures appropriate for her age or are they more characteristic of those of a 4- or 5-year-old? Children with developmental disorders are likely to have some sort of delay in artistic expression. For example, is an 11-year-old boy with mental retardation still making scribbles like a 3-year-old? For children with varying degrees of mental retardation, a therapist generally sees some sort of developmental delays in artistic expression. These are only a few of the issues that may arise in evaluating the drawings or paintings of a particular child.

The therapist may also use the stages of artistic development to evaluate motor, cognitive, or social skills. For example, does a child who is sensory-impaired, such as a child who is blind or autistic, have an age-appropriate ability to grasp or make marks and other fine motor skills? Has an adolescent with developmental delays reached the stage of concrete operations? Does a child with disabilities make appropriate eye contact with the therapist and respond to modeling or directions during art activities? Both the art product and the process of art making are used to evaluate these and related skill areas. Finally, a developmental art assessment also might determine if the individual could actually benefit from art as self-expression or if another expressive approach may be warranted. For example, a 6-year-old child with developmental delays whose pictorial abilities are more like those of a 3-year-old might benefit from sand play, water play, or other play therapy techniques before focusing on art skills or image making.

### TREATMENT GOALS

There are many areas that a developmental approach to art therapy may address, but several are particularly important:

• Sensory stimulation. Sensory stimulation refers to the use of art and play materials to enhance sensory, visual, motor, and even interactive skills with the therapist

and other children. The therapist may introduce a water play table where, for example, a child can touch or splash and eventually perhaps learn to use cups or other toys. This activity might serve as a prelude to learning to use a brush in water, followed by learning to use a simple set of paints or watercolors. Other sensory-related developmental tasks might include using a sandtray, interacting with a puppet, or touching different textures of fabric, oatmeal, pudding, or other tactile materials.

- *Skill acquisition.* Skill acquisition refers to learning a particular activity through a series of sequential steps for the purpose of assimilating increasingly complex motor skills. For example, the therapist may break a task down into the following steps with an individual: (1) learning to sit at a work table; (2) making eye contact with the therapist; (3) learning to hold a brush; (4) learning to dip the brush into the water, then into paint; and (5) learning to use a brush, water, and paint on paper. For some individuals, this process may take several sessions, whereas for others, learning these skills may take weeks, months, or longer.
- Adaptation. For some individuals, adaptations of art materials and tools are a necessary prelude to art making. For example, an older man who has suffered a stroke may not be able to hold a pencil or pen any longer; the therapist might adapt the activity by providing an inkpad or paint roller as alternatives, or by providing a splint so that the person can hold the drawing instrument. A therapist working with a child with hyperactivity disorder may remove extraneous materials from the art therapy room or set up a partition to decrease overstimulation. Creating a consistent environment in which shelves and containers hold similar items is another example of an adaptation that encourages self-confidence and self-reliance (Henley, 1992; Malchiodi, 1997).

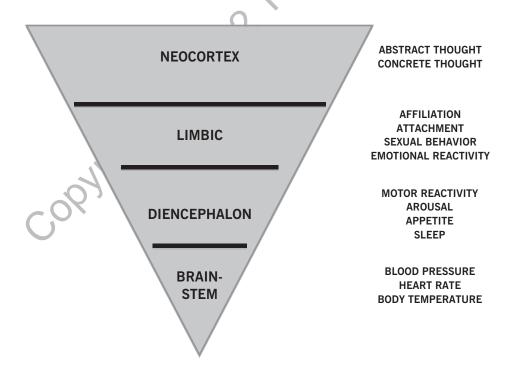
In a developmental approach, the therapist takes an active role in facilitating the aforementioned goals. Kramer (1986) explained a concept that she refers to as the "third hand" to describe the therapist's use of suggestion, metaphors, or other techniques to enhance the child's progress in therapy. The therapist is the third hand in strategically helping the individual to have successful experiences with the creative process. Henley (1992) provides a good example through his work with Peter, a boy with a hearing impairment. After being reprimanded for fighting in school, Peter drew a figure with distorted hands to which Henley responded by encouraging him to continue drawing hands, as opposed to not giving the boy any suggestion of theme. He also stimulated his interest with drawings of hands by famous artists and demonstrated artistic skills to the boy, such as shading to convey depth and contour drawing as a way to create lines and forms. Eventually, Peter, who was initially angry, anxious, and frustrated, began to become deeply engaged in the process of drawing, experiencing a great satisfaction and appreciation of his growing skills and development of his own drawing style. Henley believes that through third-hand interventions such as this one a therapist can encourage a child to reflect on his or her feelings while supporting artistic exploration as well as creative and mental growth.

### **NEUROSEQUENTIAL DEVELOPMENT AND ART THERAPY**

The growing understanding of brain functions, image making, language, and the senses is beginning to clarify methods used in art therapy, including developmental approaches. Perry (2002, 2006) provides a framework for neurosequential development that informs the application of art therapy to children from infancy through adolescence. In brief, it is founded on the principle that the brain is organized in a hierarchical fashion, beginning with the development of the brainstem to more complex areas including the limbic system and cortex (Perry, 2009).

A neurosequential approach is mastery-based and designed to stimulate and achieve new levels of cognitive, psychosocial, and physical development. In particular, Perry (2009) notes that relevant, repetitive, relational, and rhythm-oriented activities are fundamental to this approach. In brief, the neurosquential model of therapeutics is directed toward matching interventions to brain regions that develop throughout early childhood through adolescence. These principles can be applied to children of any age because a lack of neurosequential development may affect not only very young children, but also school-age children, teenagers, and adults.

A neurosequential art therapy approach begins with the lowest part of the brain affected and moves forward sequentially as improvements emerge. In brief, early developmental gains occur in the brainstem and midbrain/diecephalon, followed by the limbic system and cortex (see Figure 9.1 and Table 9.2 for a brief overview of the



**FIGURE 9.1.** Neurodevelopment and hierarchy of brain function. Adapted from Perry (2006). Copyright 2006 by The Guilford Press. Adapted by permission.

**TABLE 9.2.** Neurodevelopment and Arts Therapies

Area of brain	General functions	ETC level	Art therapy interventions
Brainstem	<ul><li>Focus</li><li>Attunement to others</li><li>Attachment to others</li><li>Stress responses</li></ul>	Kinesthetic/ sensory	<ul> <li>Sensory use of art materials</li> <li>Texture and tactile elements</li> <li>Self-soothing arts experiences (visual, musical, movement)</li> <li>Experiences of connection and approval</li> <li>Rituals/structure in presentation</li> </ul>
Midbrain diencephalon	<ul><li> Motor skills</li><li> Coordination</li><li> Stress responses</li><li> Attunement to others</li><li> Attachment to others</li></ul>	Kinesthetic/ sensory	<ul> <li>Physically oriented activities (cross the midline; engage body)</li> <li>Learning skills via art and play</li> <li>Self-soothing arts experiences (visual, musical, movement)</li> <li>Experiences of connection and approval</li> <li>Rituals/structure in presentation</li> </ul>
Limbic system	<ul><li>Affect regulation</li><li>Pleasure</li><li>Relationships</li><li>Attunement</li><li>Attachment</li></ul>	Perceptual/affective	<ul> <li>Masks, puppets for projection and relational play</li> <li>Arts and crafts for creative expression and skill enhancement</li> <li>Group art therapy/family art therapy</li> <li>Self-soothing arts experiences (visual, musical, movement)</li> <li>Rituals/structure in presentation</li> </ul>
Cortex	<ul><li>Cognition</li><li>Executive function</li><li>Self-image</li><li>Social competency</li><li>Communication</li></ul>	Cognitive/ symbolic	<ul> <li>Cognitive-based methods possible, but sensory and affective methods may still be needed</li> <li>Bibliotherapy with arts and play</li> <li>Arts for skill enhancement and self-esteem</li> <li>Teamwork in group art therapy</li> <li>Problem-solving skills</li> </ul>

Note. Based on the expressive therapies continuum (ETC) in Lusebrink (2010), Malchiodi (2011), and Perry (2006).

four brain functions, age ranges, and general milestones). When applying a neurose-quential approach, art therapy may focus on emotional self-regulation, self-soothing, basic attachment, mastery and control through the senses, and improvement in interpersonal and cognitive abilities, depending on the individual's brain development and physiological needs. In contrast to insight-oriented art therapy approaches, the goal is to help the individual make advancements using what is known about normal brain development from childhood through adolescence.

Ultimately, the goal is to help individuals achieve improvements in cognitive, emotional, and social functioning, including positive attachment, self-regulation,

attunement to others, and affiliation (Perry, 2006); the latter are milestones found in earlier psychosocial theories including Erikson (1963) and object relations (Mahler, Pine, & Bergman, 1975) and support an individual's abilities to learn, become productive, and thrive. While it is helpful to have an initial functional review of neuropsychiatric symptoms by a developmental specialist, with a basic understanding of these stages principles of developmental art therapy can be applied to most children, adolescents, and adults.

# **NEUROSEQUENTIAL ART THERAPY IN PRACTICE**

## Case Example: Addressing Brainstem and Diencephalon Development

Cassie is almost 5 years old, but has been removed from preschool because of problems with impulsivity and attention span. Her preschool teacher reported that she bit another child on one occasion, did not make regular eye contact, and often had extreme outbursts of anger, making it impossible to control her actions. Cassie also is having some problems with toilet training which should have been resolved at an earlier age and difficulty with fine and gross motor skills. Her drawings are more reminiscent of those of a 2-year-old (see Figure 9.2) and she is having difficulties using art materials and tools such as paintbrushes, pencils, and markers; she just as likely to try to eat art materials as she is to use them to make images.

Cassie experienced physical neglect for the first 6 months of her life, lived in foster care, and eventually was adopted. Cassie is a child who is having difficulty



**FIGURE 9.2.** Scribble painting by Cassie.

with focus, attention, and impulsivity, areas that make addressing brainstem and diencephalon functions a reasonable goal for developmental art therapy intervention. In her case, sensory-stimulating activities, combined with experiences supporting self-soothing and self-regulation, were provided. For example, the art therapist offered her structured opportunities to use tactile materials such as shaving cream, pudding, and sand to recapitulate earlier art and play activities Cassie may have missed experiencing due to a disrupted childhood. Interventions emphasized all the senses (smell, touch, sound, and taste) through listening to various rhythms and lullabies while drawing in sand and pudding, making cookies, and using felt markers with different smells of familiar foods. Goals for Cassie included improving coordination and motor skills through learning to use a paintbrush, glue stick, and child-safe scissors. She was also encouraged by her art therapist to talk about her scribbles, encouraging her to begin to tell stories, associate language with drawings, and enhance verbal skills.

The therapist also capitalized on attachment-building strategies, inviting Cassie's adoptive parents to weekly sessions so that they could learn art and play activities to practice at home with Cassie and learn expressive therapies methods to enhance attachment such as rocking and cuddling to soothing music and singing lullabies. While developmental art therapy and additional play and expressive therapies were provided weekly for a little more than a year, Cassie did make considerable progress and was able to enter kindergarten with her peers and successfully participate in a special classroom that continued to help her practice self-regulation and focus.

Although Cassie is a young child, an individual of any age could benefit from a developmental approach if brainstem and midbrain support is needed. Addressing early brain functions involving self-soothing and self-regulation, attunement to others and the environment, language and storytelling, and motor skills is applicable to many disorders discussed throughout this text. For example, an older adult who has suffered a stroke may need to revisit earlier neurosequential tasks in order to recover motor and language functions. A young adult with moderate mental retardation and anger management problems may be helped by similar self-soothing, rhythmic activities that Cassie's therapist provided, with adaptations appropriate for age and abilities.

# Case Example: Addressing the Limbic System and Cortex

James is 12 years old and has experienced two divorces and three long-term separations from his mother from the ages of 1 to 3 years old. There were several reports to child protective services concerning abuse and domestic violence; as a result, James spent a short amount of time in residential treatment. When he was 8 years old, he was hospitalized for a short time for a car accident. James is now living with his biological mother, Anna, and he recently has been placed on medications for attention deficit disorder (ADD) because of his erratic and disruptive behavior in school; his teacher reports that his has frequent short-term memory lapses. He also gets into

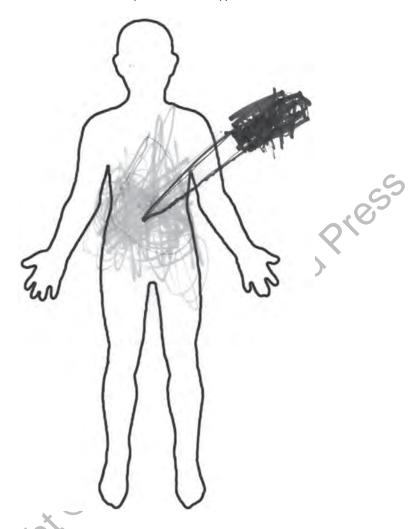
fights with other children on the playground, is overly anxious in new situations, has a sleep disorder and occasional nightmares, has difficulty understanding others' feelings, and is oppositional at home.

James has obviously been exposed to multiple traumas during his lifespan that possibly account for his current cognitive and behavioral problems. While James can benefit from activities that will help him learn self-regulation like Cassie, his trauma reactions also indicate limbic reactions such as hyperarousal (sleep problems, night-mares, and anxiety), a lack of empathy and attunement with others, and poor social skills. He can most benefit from interventions that address emotional reactions and stress responses, create a sense of safety, and teach empathy and social awareness.

The therapist began with helping James gain skills to calm his emotions and respond appropriately when feeling threatened or upset. Activities included construction with Legos and building with clay because James particularly enjoyed the tactile, self-soothing qualities of these materials. In order to help James communicate and learn more about what caused his anger reactions to other children, the art therapist asked him to use drawings to identify "how his body felt when he is worried" and "where he experienced the feelings." In particular, she asked him to show her how "fear" and "anxiety" looked in colors, shapes, and lines. For James, fear meant a racing heart and a wish to fight, while worries often caused his stomach to "hurt like a knife" (Figure 9.3). Repeating this activity over the course of art therapy was extremely helpful to James. With the therapist's help, he was able to begin to recognize how he felt various emotions in his body and when certain situations caused him to become anxious, angry, or fearful.

James also worked with the therapist to make collages of "happy places" to help him identify situations through hands-on activities that represented safe and restful experiences (Figure 9.4); she also had him practice relaxation exercises and visualize these places when events or others caused him to feel anxious. In order to help James learn more about others' feelings, his therapist introduced a mask-making activity using the outside of the mask to show how he thought others saw him. On the inside of the mask, he painted feelings he had that others might not know he had. In other sessions, the therapist invited James to play a "magazine picture game" with her, asking him to guess what feelings people in the photos were having.

In both case examples, art therapy interventions were selected for Cassie and James to specifically address their needs in terms of normal neurosequential development. In Cassie's case, she benefited from activities that helped her to develop motor skills, reduce impulsivity, and increase attachment; for James, a structured approach to reducing emotional activation, increasing attunement to the feelings of others, and self-regulation was helpful. In sum, a neurosequential approach to art therapy underscores areas of development that allow individuals of any age to grow, thrive, learn new skills, improve interpersonal responses, and achieve a sense of self-worth in the process.



**FIGURE 9.3.** James's drawing of how his stomach pain "hurts like a knife."

### CONCLUSION

Developmental art therapy is reflected in several chapters of this text, including Safran, who applies art therapy to children with attention-deficit/hyperactivity disorder (see Chapter 14); Gabriels and Gaffey, who describe interventions with children with autism (see Chapter 15); and Miller in working with adolescents (see Chapter 17). As this chapter illustrates, it is a particularly popular approach among therapists who work with individuals with developmental delays; cognitive, visual, or auditory impairments; and physical handicaps. It is also useful in work with other challenges including attachment issues and trauma reactions throughout childhood and adolescence. Although it is applicable to specific populations, a developmental approach can serve as a basis for all art therapy approaches with



FIGURE 9.4. James's collage of "happy places."

children and adults. It not only provides a method of evaluation, it also provides a framework for identifying treatment goals and objectives based on the foundation of normative artistic expression and brain development.

### **REFERENCES**

Aach-Feldman, S. (1981). Art and the IEP. In L. Kearns, M. Ditson, & B. Roehner (Eds.), *Readings: Developing arts programs for handicapped students*. Harrisburg, PA: Arts in Special Education Project of Pennsylvania.

Aach-Feldman, S., & Kunkle-Miller, C. (1987). A developmental approach to art therapy. In J. Rubin (Ed.), *Approaches to art therapy* (pp. 251–274). New York: Brunner/Mazel.

Bowlby, J. (2005). A secure base. London: Routledge.

Cox, M. (2005). The pictorial world of the child. New York: Cambridge University Press.

Deaver, S. (2009). A normative study of children's drawings: Preliminary research findings. *Art Therapy: Journal of the American Art Therapy Association*, 26(1), 4–11.

Erikson, E. H. (1963). Childhood and society. New York: Norton.

Freud, S. (1905/1962). Three essays on the theory of sexuality. In J. Strachey (Ed. and Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 7). London: Hogarth Press.

Gardner, H. (1980). Artful scribbles. New York: Basic Books.

- Golomb, C. (1990). *The child's creation of the pictorial world*. Berkeley and Los Angeles: University of California Press.
- Goodenough, F. (1926). A new approach to the measurement of intelligence of young children. *Journal of Genetic Psychology*, 33, 185–211.
- Henley, D. (1992). Exceptional children, exceptional art. Springfield, MA: Davis.
- Kellogg, R. (1970). Analyzing children's art. Palo Alto, CA: Mayfield.
- Kramer, E. (1971). Art as therapy with children. New York: Schocken Books.
- Kramer, E. (1986). The art therapist's third hand: Reflections on art, art therapy, and society at large. *American Journal of Art Therapy*, 24(3), 71–86.
- Lowenfeld, V. (1957). Creative and mental growth (3rd ed.). New York: Macmillan.
- Lowenfeld, V., & Brittain, W. (1987). Creative and mental growth (7th ed.). New York: Macmillan.
- Lusebrink, V. B. (2010). Assessment and therapeutic application of the expressive therapies continuum. *Art Therapy: Journal of the American Art Therapy Association*, 27(4), 166–170.
- Mahler, M., Pine, F., & Bergman, A. (1975). *The psychological birth of the human infant: Symbiosis and individuation*. New York: Basic Books.
- Malchiodi, C. A. (1997). *Breaking the silence: Art therapy with children from violent homes*. Philadelphia: Brunner/Mazel.
- Malchiodi, C. A. (1998). Understanding children's drawings. New York: Guilford Press.
- Malchiodi, C. A. (2002). Using drawing in short-term assessment and intervention of child maltreatment and trauma. In A. Giardino (Ed.), *Child maltreatment* (3rd ed., pp. 201–220). St. Louis: GW Medical Press.
- Malchiodi, C. A. (Ed.). (2008). *Creative interventions with traumatized children*. New York: Guilford Press.
- Malchiodi, C. A. (2011). *Trauma-informed art therapy*. Retrieved January 31, 2011, from www. cathymalchiodi.com/TraumaInformedArtTherapy.html.
- Malchiodi, C. A., Riley, S., & Hass-Cohen, N. (2001). *Art therapy mind–body landscapes* (Audiotape No. 108-1525). Denver, CO: National Audio Video.
- Perry, B. (2002). Childhood experience and the expression of genetic potential: What childhood neglect tells us about nature and nurture. *Brain and Mind*, *3*, 79–100.
- Perry, B. (2006). The neurosequential model of therapeutics: Applying principles of neuroscience to clinical work with traumatized and maltreated children. In N. B. Webb (Ed.), *Working with traumatized youth in child welfare* (pp. 27–52). New York: Guilford Press.
- Perry, B. (2009). Examining child maltreatment through a neurodevelopmental lens: Clinical applications of the neurosequential model of therapeutics. *Journal of Trauma and Loss*, 14, 240–255.
- Piaget, J. (1959). Judgment and reasoning in the child. Patterson, NJ: Littlefield Adams.
- Piaget, J., & Inhelder, B. (1971). Mental imagery in the child. New York: Basic Books.
- Silver, R. (1978). Developing cognitive and creative skills through art. Baltimore: University Park Press.
- Silver, R. (2001). Art as language. Philadelphia: Brunner-Routledge.
- Silver, R. (2002). The Silver Drawing Test. New York: Brunner-Routledge.
- Silver, R. (2007). The Silver Drawing Test and Draw a Story. New York: Routledge.
- Uhlin, D. (1972). Art for exceptional children. Dubuque, IA: Brown.
- Williams, G., & Woods, M. (1977). Developmental art therapy. Baltimore: University Park Press.
- Winner, E. (1982). *Invented worlds: The psychology of the arts*. Cambridge, MA: Harvard University Press.