

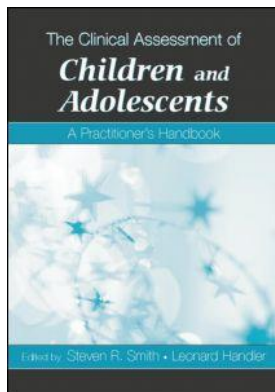
This article was downloaded by: 10.3.97.143

On: 24 Mar 2023

Access details: *subscription number*

Publisher: *Routledge*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: 5 Howick Place, London SW1P 1WG, UK



## **The Clinical Assessment of Children and Adolescents: A Practitioner's Handbook**

Steven R. Smith, Leonard Handler

### **Drawings in Clinical Assessment of Children and Adolescents**

Publication details

<https://www.routledgehandbooks.com/doi/10.4324/9781315827308.ch13>

Holly C. Matto

**Published online on: 11 Aug 2006**

**How to cite :-** Holly C. Matto. 11 Aug 2006, *Drawings in Clinical Assessment of Children and Adolescents from: The Clinical Assessment of Children and Adolescents: A Practitioner's Handbook* Routledge

Accessed on: 24 Mar 2023

<https://www.routledgehandbooks.com/doi/10.4324/9781315827308.ch13>

**PLEASE SCROLL DOWN FOR DOCUMENT**

Full terms and conditions of use: <https://www.routledgehandbooks.com/legal-notices/terms>

This Document PDF may be used for research, teaching and private study purposes. Any substantial or systematic reproductions, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The publisher shall not be liable for an loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

## DRAWINGS IN CLINICAL ASSESSMENT OF CHILDREN AND ADOLESCENTS

Holly C. Matto

*Virginia Commonwealth University, School of Social Work, Richmond, Virginia*

Good assessment is the cornerstone of mental health services delivery. Mental health clinicians are charged with providing reliable and valid assessment of their clients in order to make ethical and responsible treatment recommendations that competently meet the clinical needs of their client population. Comprehensive data integration is an essential part of good assessment practice, but clinicians must make assessment decisions based on the assessment resources available, while being responsive to their clients' abilities to impart the clinical information solicited. Given the importance and complexity of good assessment, there are several assessment-related questions that continue to challenge clinicians:

1. Are our assessment practices sufficiently clinically comprehensive? That is to say, do they include opportunities to assess all of the relevant clinical domains important to understanding a specific case?
2. Are our assessment practices sufficiently methodologically comprehensive? That is to say, do our assessment tools include the range of methods needed to gather the clinical information we need?
3. Are our assessment practices culturally competent and developmentally appropriate? That is to say, are we tailoring our assessment practices to match the needs of our diverse client populations to reduce the risk of making inaccurate or invalid clinical judgments that have unintended negative consequences for certain groups of youth? And, are our assessment practices congruent with the developmental strengths and limitations of our clients?

A careful review of the research and clinical literature suggests that incorporation of drawings into assessment practices may be beneficial in addressing some of these questions. Drawing methods offer the opportunity to obtain clinical information that may not be easily retrieved through conventional paper-and-pencil verbal tests and, as such, may broaden the range of clinical data to which we have access, as well as broaden the range of informants from whom we can obtain clinical data (e.g., children with reading or language limitations).

Drawings have been used as part of child and adolescent clinical assessment for decades. The use of drawings in assessment practices remains controversial because of persistent concerns about their validity (Garb, Wood, Lilienfeld, & Nezworski, 2002; Roback, 1968; Swensen, 1957, 1968). However, despite these concerns, drawings as assessment tools, and human figure drawings in particular, are psychological tests that continue to be widely used by clinicians (Camara, Nathan, & Puente, 2000; Watkins, Campbell, Nieberding, & Hallmark, 1995). And, over the past decade, the gap between human figure drawing research knowledge and practice use has grown smaller. Perhaps the most appealing clinical aspects of using drawings in assessment is that the nonverbal method transcends language limitations and cultural barriers, which are often encountered with traditional verbal tests, and is a child-focused information-gathering tool, which takes little time to administer and is usually an enjoyable activity. Of course, to focus on method gains at the expense of outcome accuracy would be a little like getting excited about a GPS system without caring about getting to the correct destination. As the saying goes, if you do not know where you are going, all roads lead there. And so the validity admonitions leveraged in the drawing assessment literature have justifiably served to temper enthusiasm for such methods while significantly shaping new empirical inquiry that has led to advancements in instrument development and psychometric refinements of existing drawing tests. This chapter discusses some of these new research developments, presenting a brief historical context of drawing assessment, and includes short clinical illustrations throughout to show how drawings can be used as part of clinical assessment practices.

Historically, drawings have been used to assess intelligence, personality characteristics, and family dynamics. Goodenough (1926) used drawings to assess intelligence or cognitive ability with her Draw-A-Man approach, and Machover (1949) developed the Human Figure Drawing (HFD) approach based on a psychodynamic understanding of personality development manifest through the drawn form, with the HFD representing the child's projected inner emotions, conflicts, and wishes. This Draw-A-Person approach was expanded to encourage the client to elicit a story about the drawing, using prompts such as "What is this person, thinking, feeling, doing?" "How does this person get along with others?" "How does he/she experience sadness?" (Handler, 1996; Machover, 1951).

Hammer (1958) used drawings to assess emotional functioning, and Koppitz's (1968) research identified both emotional and developmental indicators in the drawings of children aged 5–11, with interpretations based on the presence of specific unusual indicators represented in 6% of nonclinical child drawings. From a developmental perspective, Koppitz's research determined that, by age 11, all nonclinical children should include features such as head, eyes, nose, mouth, body, legs, feet, hair, and neck in their human figure drawings. Newer, shorter cognitive tests that employ human figure drawings, such as Naglieri's (1988) Draw-A-Person Quantitative Scoring System, have been found to possess validity relative to the Wechsler Intelligence Scale-Revised (WISC-R) and Wechsler Intelligence Scale-III (WISC-III) (Abell, Wood, & Liebman, 2001), although cautions are given that such tests should never be used in isolation from other intelligence measures.

Other tests that have been developed and that are well utilized by clinicians have taken a more systemic approach to drawing assessment. Buck's (1948) House-Tree-Person (HTP) test assesses an individual's orientation to self and to family life. From a psychodynamic perspective, the house represents home life, and a child's culmination of family experience can be examined; the tree represents the unconscious world, symbolizing how well the child is rooted in reality (i.e., assessing ego strength), the extent to which the child has a propensity toward growth, and the nature of the child's support network (symbolized by the tree's branches

reaching out to others). Burns and Kaufman's (1970) Kinetic Family Drawing (KFD) assesses family dynamics and the nature and quality of such interpersonal relationships, asking children to draw a picture of everyone in their family, including the child him/herself, doing an activity. A variation on the traditional KFD is Prout and Phillips' (1974) Kinetic School Drawings, which ask children to "draw a school picture. Put yourself, your teacher, and a friend or two in the picture. Make everyone doing something" (p. 304). Kinetic drawing scoring systems have been developed to assess structural characteristics of the drawn figures and their relationships to the child's drawn self by examining the nature of interpersonal interactions, distance between and among figures, and the placement of the figures on the page.

Some researchers have begun examining alternative scoring methods for diverse cultural groups (see Handler & Habenicht, 1994; Wegmann & Lusebrink, 2000 for brief reviews of KFD cross-cultural studies). Wegmann and Lusebrink (2000) created a revised scoring system, based on the original Burns and Kaufman protocol, comprising subscales such as "family composition" (e.g., figure omissions, figure erasures, extended family additions), "distance and closeness" (e.g., encapsulation of any figure), "interactions and relationships" (e.g., active versus passive action, figures facing each other, level of nurturance depicted), "activities" (e.g., extent of energy expended in activity portrayed), "sexual identification" (e.g., sharing activity with one parent, identification of figures to each other), and "developmental level" (e.g., space organization, body and face completions). These researchers tested their revised KFD scoring protocol across three nonclinical samples of children, 7 to 10 years old, from the United States, Taiwan, and Switzerland, and found that only 7 scoring protocol variables (major figure missing, major figure erasure, extended family added, distance between figures, encapsulation, self sharing an activity with a major figure, and incomplete face) held consistent reliability across these different populations, suggesting limitations in assuming cross-cultural applicability in the KFD's psychometric properties.

Overall, drawing assessment development has garnered some consistent empirical warnings. Knoff (2003) suggests that projective drawings are better used as "hypothesis-generating" tools during assessment, rather than "hypothesis-validating" assessment methods, because of the limitations in the empirical literature on their psychometric functioning (p. 105), although the research is uneven. Others concur that drawing techniques should never be used as a sole assessment tool (nor should any one instrument be used alone), and that the use of global scoring systems, rather than identification of single indicators or small sets of indicators, should be used for assessment interpretations. However, there has been some empirical support for certain drawing indicators' relationship with mental health status. For example, Handler and Reyher's (1965) review of 51 human figure drawing studies on 21 anxiety indicators showed that figure size, omissions, loss of detail, distortion, and head/body simplification were valid indicators of anxiety.

Indeed, there has been considerable controversy over the type of scoring approach that is most valid in the interpretation of drawings for clinical assessment purposes, particularly over whether quantitative or qualitative methods are more suitable. Tharinger and Stark (1990) developed and tested an integrative, holistic scoring system for the DAP and KFD projective drawing protocols, whereby raters were able to offer a general impression of a child's drawing, which was then placed on an overall pathology scale from 1 (absence of psychopathology) to 5 (severe psychopathology). The dimensions that raters used to make their pathology scale general assessments with the human figure drawings included: 1) inhumanness of human figure drawing, 2) lack of agency/ineffectual human figure, 3) indication of lack of well-being, and 4) presence of hollow, vacant, or stilted person in the drawing.

Using the same method, raters also gave general clinical impressions from clients' Kinetic Family Drawings, using the following assessment dimensions: 1) inaccessibility of family members to each other, 2) degree of member engagement/involvement, 3) inappropriate family structure (e.g., roles, boundaries), and 4) inhumanness of family figures (pp. 369–371). Results from the study showed that the researchers' integrative qualitative scoring approach successfully differentiated across mood/anxiety disorder groups and the control group, whereas the traditional Koppitz and Reynolds quantitative scoring systems did not differentiate among the treatment and control groups, with no single indicator showing discriminating ability. Similar support for the use of a holistic-intuitive scoring approach was found in a study of homeless men, psychiatric inpatients, and vocational rehabilitation clients (see Handler, 1996). Integrative impressions of these clients' drawings, with the use of four overall criteria (i.e., Is the person frightened of the world? Does the person in the drawing have intact thinking? Is the person in the drawing comfortable with close relationships? Is this person safe to be around?), significantly differentiated group membership, whereas the individual item scoring approach did not show differentiating ability (Handler, 1996).

Overall, the culmination of research consistently shows that single item indicators are unreliable, and, thus, scoring protocols should use global scores (Handler & Habenicht, 1994; Naglieri, McNeish, & Bardos, 1991; Smith & Dumont, 1995). Handler and Riethmiller (1998), for example, suggest that "configural scoring approaches," or those that combine drawing characteristics, may be more useful in clinical practice than relying on single-item indicators.

In addition to the unreliability, another problem in evaluating drawings with the use of discrete indicators rather than global indicators, is that the single-indicator method increases the risk of culturally insensitive assessment practice. For example, shading may represent an accurate depiction of a child's skin tone, rather than indicating "excessive anxiety" or other behavioral pathologies that have been hypothesized in the literature. Or representing grandparents or extended relatives in a family drawing while excluding the biological parents may be culturally syntonetic for a newly immigrated family from a southwest Asian culture, perhaps accurately reflecting the child's current family structure. And yet for other children, for whom the absence of the child's biological parents in the drawing represents family distress, such a drawing may suggest a significant area for clinical focus. Thus, empirical inquiries should investigate the appropriateness of each drawing instrument for diverse groups.

Despite these caveats, drawing assessment tools offer children important opportunities to contribute information to assessment that is not hindered by language difficulties, reading level, or other cultural barriers that exist in traditional emotional/behavioral verbal self-report measures. And new assessment developments have contributed to increased enthusiasm for their use. Three such developments are introduced here.

## **STANDARDIZED DRAWING TEST DEVELOPMENTS**

### **Draw-A-Person: Screening Procedure for Emotional Disturbance**

Knoff (2003) discusses the developments of Naglieri's Draw-A-Person Quantitative Scoring System (QSS) and Screening Procedure for Emotional Disturbance as examples of contemporary expansions on Goodenough-Harris's Draw-A-Man test, attesting to significant improvements shown in their scoring protocols. The Draw-A-Person: Screening Procedure for Emotional Disturbance (DAP:SPED; Naglieri, McNeish, & Bardos, 1991) asks the child to produce

three human figure drawings (man, woman, self), which are scored according to 55 item indicators that examine structural and content dimensions such as figure omissions, presence of objects, placement on page, and size of figure. The DAP:SPED standardization sample consisted of 2,355 youths, 6–17 years old, representative of the U.S. population for age, gender, geographic region, race, ethnicity, and socioeconomic status. The global scoring system produces a *T*-score (mean of 50 and *SD* of 10), with the use of separate age and gender norms, with higher scores indicative of more emotional/behavioral disturbance. Cronbach's alpha internal reliability estimate of the DAP:SPED is .76 (ages 6–8 years); .77 (ages 9–12 years); and .71 (ages 13–17 years).

The DAP:SPED has demonstrated validity in identifying youths with emotional/behavioral disorders, such as differentiating Conduct/Oppositional Defiant Disorder and control group youths (Naglieri & Pfeiffer, 1992) and special education students with identified emotional disturbance from regular education students (McNeish & Naglieri, 1993). In a recent study, Matto (2002) found the DAP:SPED was better at detecting internalizing as opposed to externalizing behavioral disturbance in a sample of youths receiving clinical services for emotional and behavioral problems, and showed predictive ability for internalization of behavioral disturbance beyond that which a standard pencil/paper instrument measured. Matto and Naglieri (2005) attempted to determine whether there was evidence of construct-irrelevant variance (race-based bias) in the DAP:SPED, using matched Black-White and Hispanic-White samples. Children and adolescents were drawn from a nationally representative sample and matched for gender, grade, and school classroom. No statistically significant differences in the item composites (e.g., large figure items, small figure items, or shading) were found for the race and ethnic comparisons, and DAP:SPED total *T*-scores did not differ significantly for the Black-White or Hispanic-White matched groups.

### **Diagnostic Drawing Series**

The Diagnostic Drawing Series (DDS) (Cohen, 1983) was developed in the early 1980s; it asks the child to produce three pictures with the use of 12 soft chalk pastels on white 18" × 24" drawing paper. The first picture is a free drawing, in which clients are directed to "make a picture using these materials" (in Mills, 2003, p. 402). The child is asked to then create a second picture with the directive "draw a picture of a tree" and finally is asked to "make a picture of how you're feeling, using lines, shapes and colors." The child has up to 15 minutes to work on each separate drawing, and all drawings are administered in one session. The technique can be used with children aged 13 and older and is designed to give a graphic profile to assess whether the child's drawings are representative of those drawings produced by clients with certain psychiatric diagnoses. Diagnostic categories have been formed by analysis of the drawings' structural properties (line quality, page coverage, and placement) rather than their symbolic content. According to test developers, the DDS has been normed on 21 different diagnostic groups (e.g., schizophrenia, major depression, eating disorders), based on differences in these structural qualities (see Mills, Cohen, & Meneses, 1993, for reliability of the rating system; and Cohen, Mills, & Kijak, 1994, for further inquiry into this drawing assessment tool).

### **The Silver Drawing Test**

The Silver Drawing Test (SDT) assesses cognitive skills and emotional strengths and is based on Piaget's cognitive development theory. The SDT was first developed in 1983 and has since

been revised (see Silver, 2002). The test has been administered to 1,399 unimpaired and impaired (brain injuries, hearing impairment, language difficulties, cognitive and emotional disabilities) children, adolescents, and adults, and norms have been developed for age and gender. Inter-rater reliability has been shown to range from .74 to .98; test-retest reliability from one study (see review, Silver, 2003) was .72. Some large sample standardization studies have been conducted in other countries (e.g., Australia, Brazil, Russia). The test was developed for use with children over age five, and usually takes about 20 minutes to complete. The test employs “stimulus drawings” of people, animals, and objects, using two sets of 15 stimulus drawings to assess cognitive and emotional dimensions such as spatial ability, sequencing, classification, emotions, self-image, and humor (Silver, 2002). Subtests include drawing from imagination, predictive drawing, and drawing from observation. During the drawing from imagination subtest, children are asked to choose two or more stimulus drawings, to imagine that something is happening between the subjects, and to draw what they imagine. Children can add titles to their drawings and are encouraged to discuss their stimulus responses. The technique assesses children’s abilities to select, combine, and represent objects and examines emotional themes, self-image identifications, and how humor is used during the process. During the drawing from observation subtest, children are asked to draw three cylinders and a small stone, to assess spatial ability. The predictive subtest, which assesses a child’s ability to sequence and conserve, asks the child to draw a sequence of glasses with decreasing liquid volume and to depict how a house might look in various positions on a hill.

Certainly it is wise to reiterate that these new and/or revised developments in standardized drawing assessment techniques should only be used as part of a larger, comprehensive assessment package (Hammer, 1997). Other areas of assessment needed for a complete and more holistic intake evaluation would include a client’s full biopsychosocial history and information about the child’s family history, a child’s developmental and medical history, information about the child in his/her community or neighborhood context, and school-related data on academic functioning and teacher/peer relationships. It may also include additional intelligence testing and personality assessment, if warranted.

## **DRAWINGS AS TOOLS TO ELICIT THE CLIENT STORY**

In addition to the use of drawings as standardized assessment tools, drawing directives can be used quite effectively to facilitate clinical communication between the client and clinician in a way that fosters a productive therapeutic relationship and allows for elicitation of the larger client story (Trombini & Montebanocci, 2004). For example, Trombini and colleagues have used the Drawn Stories Technique, which is a free drawing technique that asks the child to draw a created story in four quadrants on a piece of paper, with the first three quadrants depicting the story sequence and the fourth quadrant illustrating the story’s ending. In their technique, these researchers emphasize the importance of an accompanying narrative to the drawn story, examining the positive or negative outcome related to the story sequence. In a nonclinical sample of 211 girls and boys 8–13 years old, Trombini and Montebanocci (2004) found that higher anxiety and depression scores were related to those children’s stories with negative outcomes, as compared with those stories with positive outcomes, suggesting that the technique does indeed show promise in identifying psychological distress in children.

As a client story emerges from a drawing directive, it is important to note the dominant themes revealed in the picture. For example, clinicians would want to take note of the inter-

personal or intrapersonal conflicts that might be represented, any themes of social isolation, and expression of fears related to uncertainty, unpredictability, or interpersonal rejection. Although the “projective hypothesis,” the theoretical space from which drawings as assessment tools originated, has received uneven support (Kaplan, 2003), it is well recognized that clients portray cognitive, affective, and behavioral expressions in their artwork through the selection and placement of color on the page, the selection and elaboration of objects, the verbal meaning assigned to the drawing by the client, and the way in which the client relates to the art process (Kaplan, 2003). In other words, drawings tend to be more clinically useful in gathering meaningful information about a client’s current experience (cognitive, affective, behavioral, interpersonal), rather than as a method of interpreting or diagnosing the past. In using drawings as a method to reveal the client’s larger current story, it is important to examine how a client relates to the drawn *product* itself, as well as to how a client relates to the *process* of creating the drawings. A verbal processing protocol of the *product* should include clinical observation and a collaborative examination with the client of the following dimensions (see Moon, 1990, and Nucho, 1987, for other protocol elaborations):

### ***Critical Engagement***

The clinician engages in a functional analysis of an objective and investigative nature, examining the symbols, shapes, colors, size, art materials used, and objects’ placement on the page. This phase allows for an in-depth analysis of the more objective qualities of the drawing. For example, does the drawing contain only red and black, even though 12 different color choices were available? Is the line quality very faint, or dark and emboldened? Is there a thick border that seals the content, or are only very faint pencil figures represented? Where are the figures/objects located on the page, and how much open page space is left? This phase allows the clinician to take a pictorial inventory, without assigning clinical judgment at this stage.

### ***Initial Reactions***

The clinician engages in a functional analysis of a subjective and reactive nature, leading to a discussion with the client about the thoughts, emotions, and physical sensations (bodily reactions) evoked during the drawing experience and during the client’s subsequent engagement with the completed picture. This phase allows for the introduction of more clinically focused reactions to the drawing content, to direct the client-clinician dialogue. Handler and Reithmiller (1998) write about teaching students the art of engaging with clients’ drawings to elicit their own reactions, allowing themselves to identify with the artist/client. The clinician’s own subjective reactions, gleaned through identification with the drawn form and by putting oneself in interaction with the drawn form, offer deeper clinical insights into the client’s experience (Handler & Reithmiller, 1998). For example, a clinician might ask the child to describe how the dog, abandoned and lost from his family, might be feeling right now. More in-depth examination of the subjective meaning of the colors used would be encouraged. A clinician might say, “I notice there’s a lot of fiery colors in your picture—lots of oranges, reds, and yellows. What feelings do you have when you look at these colors?”

Another example of how intense reactions can be evoked from a single drawing was demonstrated in one adolescent’s depiction of a hangman’s noose with a completed stick figure in its grips and the notation “P\_ \_ \_” written at the bottom, near the figure’s feet. In discussing his figure drawing, the client described the frustration and despair over the



“peace” he has been searching for in living with his depression, and the pressing, current feeling of being at the end of his rope. Another, older (age 19) male client, who was residing on the adult unit of an inpatient substance abuse treatment facility, chose to express his emotions related to his homeless status and intense depression as a tornado ripping through and devastating buildings and trees, illustrating, he said, the lack of control over life’s unpredictable circumstances and the resulting empty feeling that is left in the wake of the devastation.

### ***Relational Attributes***

The clinician engages in a functional analysis of a relational and interactive nature, helping the client to explore connections to his/her current life situation, the social world, and significant others. For example, one five-year-old child, being seen at a public child guidance clinic for internalizing behavioral disturbance as expressed through withdrawn behaviors in the school environment and social isolation from peers, consistently drew a picture of a very small boy in the bottom corner of the paper, using only very light pencil. He consistently attended individual therapy weekly, each week drawing a very similar picture and talking very little about his drawing. After many weeks, the client came in one morning and produced a significantly different picture—one that incorporated more color and a larger figure. Because the boy’s parents scheduled his therapy appointments for very early in the morning, he never saw another child in the waiting room until this particular day. It was revealed that the boy had thought the facility was built for his own problems, having never seen another child in the waiting room, and was delighted to see another child for the first time that particular morning. The relational component of his current perspective of his situation was revealed through the boy’s new narrative and changed drawing, demonstrating that external environmental conditions may significantly influence a child’s drawing and narrative.

Another example of how current relational dynamics may be expressed in children’s drawings is demonstrated in a clinical case where a 16-year-old adolescent female was recently transferred to an outpatient therapy group from an inpatient psychiatric hospital program that she had attended for several months. The client drew, in the first outpatient group, a picture of a girl on top of a very tall building, threatening to jump. Through group (and later individual) therapeutic processing, it was revealed that she had a great deal of anger for the hospital staff about her experiences in the program, perceiving that “no one really cared” about her. The drawing was created to test how the outpatient group members would react and receive her “extreme” clinical history and threatening behavior. During the group processing, when members and the treating clinician dug deeper into the intense pain and hurt she was feeling, she began to cry and her hardened exterior softened.

Another example of the importance of examining the relational dimension in drawings can be seen in the case of a 16-year-old male client being seen in an inpatient hospital-based treatment center for primary polysubstance abuse, with secondary behavioral problems that led to a diagnosis of conduct disorder. In addition, the client was struggling with his own sexual identity. This client had a significantly difficult time on the treatment unit and perpetually isolated himself from the rest of the adolescent inpatient community. One way of furthering his isolation was through his drawings, which were classically disturbing in content (e.g., contained very vivid, graphically detailed violent scenes) and which he chose to leave out in the open for public display in the community space. One of his drawings depicted a person lying on a steel surgical hospital table, with a bright spotlight shining down on his body, with doctors wielding large knives, threatening to “rearrange” him. The client described the person on the table as feeling very vulnerable to those who were trying to rearrange and

change him, feeling very much out of control in his surroundings. The content of these drawings and their narratives led to extensive follow-up with the treating psychiatrist and served as an inroad for further evaluation and testing.

Eliciting the client's story can be expanded from the traditional human figure-drawing directives of standardized assessment tools, to include task directives that ask the client to draw a "self-system" representation of multiple components of the self. For example, one technique asks the client to draw four parts of the self system, in quadrants, on a large piece of white paper, each representing the client's perception of his/her *body* self, *achieving* self, *interpersonal/relational* self, and *spiritual* self (Matto, Corcoran, & Fassler, 2003; Nucho, 1987). The verbal instructions and self-system components to be represented can be modified according to developmental level and clinical focus. For example, a clinician might be interested in knowing how an 8-year-old client represents his/her *school* self and *family* self; a clinician working with a 16-year-old juvenile offender on anger management strategies might ask the client to represent his/her *emotional* self and *thinking* self; or a clinician administering this assessment in a group modality might ask early adolescent females to draw their *inside* self (how they perceive themselves) and their *outside* self (how they think others perceive them). In an inpatient substance abuse facility, adolescents may be asked to draw their *addicted* self and their *sober* self. In examining the drawn representation, there are several product and process dimensions to be considered, and the following questions can help direct the inquiry: What self-system component did the client choose to draw first? What was left for last? What, if any, component was left blank? What is the nature of the symbols represented in each quadrant or self-system section? What is the nature of the represented figures? Is the head cut off from the rest of the body?

When this directive was implemented in an inpatient substance abuse treatment facility for adolescents, many common themes emerged from the drawings across adolescent clients. Many left the *interpersonal/relational* and *achieving* selves empty, and one male adolescent depicted his body self covered in a hooded sweatshirt, looking sideways. Another interpersonal self was drawn as a person slouched in a chair, looking down at the floor, with no other objects or figures represented; another male drew a lone car driving through a junkyard, with discarded cars piled high on each side, illustrating the "wrecked relationships" caused by his addiction. Others chose emaciated, alien-like figures to represent the self. One female client encapsulated a brown stick-figure self in a black box with a thick black marker border. The figure had a black bandana covering the eyes, with orange stick figures surrounding the outside of the thick black border, illustrating the disconnect from all other interpersonal relationships. One heroin user expressed his *body* self as a sole head, with a frightened facial expression and one arm, stating that the figure represented his "dirty body." Another adolescent represented his *inside* self as a "sweet, caring, sensitive," full and detailed figure whereas his *outside* self was a picture of a very detailed green gun with the words "I try to hold my anger in, but if you get me mad, I'm somewhat like a gun waiting to go off."

Malchiodi (1990) proposes an evaluation tool to help clinicians attend to the client's engagement in the drawing task. The evaluation includes indicators related to task orientation, product/content, and interaction, with each indicator scored on a scale from 1 to 5:

*Task orientation* indicators include items such as "waits for directions" versus "shows impulsivity"; "is calm and focused" versus "is restless and agitated"; "sustains involvement" versus "gives up easily"; "demonstrates appropriate concentration" versus "appears distracted"; "follows instruction" versus "cannot follow instruction."

*Product/content* indicators include items such as “drawn image reflects positive aspects” versus “negative images”; “images are integrated/coherent” versus “disjointed or fragmented”; “shows pride in finished product” versus “devalues product.”

*Interaction* indicators include items such as “maintains own physical space” versus “goes into other’s personal space inappropriately”; “responds to limits” versus “has difficulty in responding to limits”; “shares appropriately” versus “is unable to share” (Malchiodi, 1990, pp. 87–90).

Examining how a child engages in the drawing experience can give clinicians *in vivo* information about the youth’s problem-solving capacities. However, it is important to be sensitive to cross-cultural considerations when conducting a process evaluation. Knowing a client’s cultural norm for eye contact, general expressiveness, and elaboration would help to more accurately differentiate between culturally prescribed behaviors and those unique to the client’s current emotional and behavioral functioning, influencing how the clinician interprets the client’s approach to the drawing task.

### **Drawings and Trauma Work**

The use of drawings to facilitate communication in clinical assessment can be particularly appropriate for children who have experienced extreme trauma, when verbal methods break down because of the neurobiological manifestation of the trauma experience at a sensory, rather than verbal, level (see Brewin’s [Brewin, Dagleish, & Joseph, 1996; Brewin, 2001] dual representation theory for more on information processing theories that support multimodal assessment practices for children who have experienced trauma). Drawings can be used in crisis evaluation to assess a child’s current coping skills, to offer stabilization through a bounded/contained expressive experience, and to facilitate communication of the meaning of the experience, from the child’s perspective (Malchiodi, 1990). Clinicians working in domestic violence shelters or other settings that serve children who have experienced traumatic events suggest several clinical uses of drawing tasks. Malchiodi (1990), in her emergency shelter work with children and adolescents who come from violent domestic situations, begins with an initial evaluation that asks the youth to draw a self-portrait, a family drawing, and a free drawing, using markers, crayons, and pencils on 8" × 10" white paper. Asking the child to draw one family member, rather than to engage in a traditional KFD, may be more appropriate with this population, as it offers these children more choice and control over their family drawings, because children from violent families may experience overwhelming anxiety at initially being asked to complete a whole-family drawing (Malchiodi, 1990). Eth and Pynoos (1985) developed a semistructured research interview in trauma work with children that utilizes a “draw-a-picture/tell-a-story” technique in the initial session, directing the child to recount his or her experience and worst moment. Using drawing in this initial interview gives the child an opportunity to share his or her own experience of the trauma through symbolism expressed through the art content and through verbalizations that accompany the drawing narrative. Other techniques ask the youth to draw “a favorite kind of day” (AFKD; Manning, 1987) (which has been found to be nonthreatening), with inclement weather scenes associated with physical abuse.

In one sample of youths being treated at a residential facility in a large east coast city, Draw-A-Person assessments were used to elicit stories from the youths in order to gather

more in-depth information about their current emotional status. Focused questions were asked of the clients, after they had completed their man, woman, and self drawings; they were asked to 1) describe the person, 2) tell a story about the person, and 3) provide a title for their drawing. Several of the clients' stories related to themes of vulnerability, fear, uncertainty, and distrust of strangers and adults.

One early adolescent male in the study developed a story about his mother and father; the mother was throwing her very large diamond ring onto the ground in anger and distress. Other youths talked about their "bad uncle" or their father who was regularly drinking in the house. Other early adolescents presented overly sexualized portraits of the "draw a woman" figure, and some attributed these pictures to family members or to women they knew or had seen on the streets. Another youth discussed the fear of being invited to get into a stranger's car in his neighborhood, and running away to find help, knowing that he did not want to get into the car. In addition to trust and safety concerns vividly expressed in these children's human figure drawing stories, some youth expressed anxieties about fitting into peer groups and their experiences with peer rejection. Others vividly captured feelings of being different; one child expressed the "self" figure drawing as a "pizza head" with no human features present, suggesting a lack of relational ability and an extreme differentness that kept him isolated from his other non-pizza-head peers.

Among the themes of feeling vulnerable (fear, anxiety) without adequate adult protection and sad in relation to peer rejection, there were themes of competence, with one younger child (age 8) expressing himself as a strong, muscular person with long arms and the necessary capabilities to sufficiently defend himself with confidence. Another youth talked about taking karate classes and being skilled in self-defense, equipped to take on any attackers. Another adolescent represented himself as an "alley cat" because he saw himself as having nine lives, as being able to always land on his feet, and as being able to escape easily.

As illustrated here, implementation of human figure drawings designed to elicit an impromptu story from the youth can lead to the discovery of significant cognitive, affective, and behavioral information about the youth, from the youth's perspective. These drawings and their stories gave the treating clinicians important information about these children's fears and anxieties, born out of their prior traumatic neighborhood and family experiences. These stories offered the treating clinicians entry into the child's world, which allowed the clinician to individually follow up with more detailed questions and/or standardized assessment tools to obtain more precise diagnostic information. For example, in one case where sexual abuse was suspected as a result of the youth's narrative, a follow-up investigation was advanced and allegations were substantiated.

## CASE STUDY<sup>1</sup>

Samantha is a five-and-a-half-year-old biracial kindergartner, living with her biological father, her three-year-old sister, and her paternal grandparents. Samantha's biological parents had been divorced for two years, and her mother had limited daily contact and only sporadic emotional involvement with the children, although she lived geographically close in a nearby apartment complex. Samantha has a very strong relationship with her father and feels close to him emotionally. Recently, the public school referred Samantha for an evaluation after her mother died unexpectedly of a heart attack. Teachers at the school reported that, since her mother's death, Samantha has consistently demonstrated defiant and actively

resistant behaviors (e.g., not following directions), as well as “clingy” and attention-seeking behaviors (e.g., staying near the teacher despite peer group activities scheduled in the classroom). In addition, Samantha occasionally cried inconsolably, although the teachers reported that these incidents were infrequent. The school staff is uncertain as to what provokes these intense reactions, but when they occurred, they were typically in the early morning hours. The teachers noted that these behaviors were not characteristic of Samantha before her mother’s death.

Given the limited involvement that Samantha’s mother had in Samantha’s daily life prior to her death, there is concern about the potential complicated grief reactions that may arise as she begins processing the “wished for” moments unavailable to her while her mother was alive, in the context of the more immediate acute grief associated with the death. Samantha currently experiences intense fear of loss and abandonment and has been able to verbalize some of those fears. The DSM-IV diagnosis given was Separation Anxiety Disorder—301.21 with early onset, because symptoms occurred before age six years. Specifically, her symptoms manifested as experiencing excessive distress when separated from her father; persistent refusal to take naps at school; and repeated nightmares involving themes of separation. A Bereavement—V62.82 diagnosis was also made, because of Samantha’s awareness of her mother’s recent death.

In treatment, Samantha wanted to draw pictures “for mommy.” Her family drawings consistently depicted a house, showing her bedroom where she said she slept with her sister. She included many details and much color in depicting the bedroom and the two figures—seemingly a safe and happy place in the house where she and her sister were together. In other family drawings, she illustrated an adult female figure sitting in a chair in a corner, occupying a space in the house that was farthest from her own bedroom, stating that this person was “mommy as an angel in heaven.” She also drew herself throwing a baby from a window, showing the baby falling through the air, with a man (stating this was her father) waiting to catch the child on the ground. Another picture showed a baby in a stroller, surrounded by a family (stating the people represented her father and his girlfriend) going to the store together.

These family drawings demonstrated how the art process can be used as a relational tool for eliciting information about a client’s emotions, such as underlying fears and wishes, as well as illuminating the strengths clients employ in coping with current struggles. For example, Samantha’s artwork and dialogue offered a story that was told quite differently from the story by the teacher at school. In Samantha’s work there was opportunity and transformation—demonstrating an understanding that her “mommy was an angel” who was removed from the closeness of the bedroom, but who was still “present” in the house and noticed nonetheless. The bright colors and realistic depiction of the remaining family members, their close proximity to each other, and Samantha’s story about the drawing all suggested a certain level of comfort and safety. The hope and trust in her father’s ability to “save the baby” that was falling from the window reflected characteristics of dealing with loss and fear in ways that still solidified an embedded sense of trust and protection found in her relationship with her primary caregiver. Perhaps Samantha is also testing, through the drawn form, her notion that her father will continue to protect her. Samantha demonstrated ego flexibility, observed through her art expression, in being able to cognitively and emotionally transform her mother into an “angel watching over” her. Yet, core fears of loss and abandonment remain at the fore and affect Samantha’s overall functioning. Along these lines, her drawings reveal her need for continuity and emotional support in her current relationships, as she continues to work through her grief.

## CONCLUSION

In summary, the current empirical research on the use of drawings in clinical assessment has advanced in several ways. Most notably, human figure drawings have seen developments such as the incorporation of national standardization samples and more objective, global scoring systems using age- and gender-normed measurement templates, eliminating the controversial use of individual item indicators to detect emotional and behavioral disturbance. More attention is being paid to cross-cultural utility and the applicability of scoring protocols and their interpretations for diverse groups. Finally, it is strongly recognized that apart from their use as standardized instruments, drawings can be used as part of comprehensive assessment practices to elicit stories from clients that may offer clinical information not revealed through conventional verbal methods of inquiry. The use of drawings allows the child to be an integral part of the assessment process, affording treatment engagement opportunities that are responsive to the child's developmental stage, cognitive abilities, and different cultural styles and that utilize the child's natural expressive capacities. Furthermore, in implementing drawing methods for assessment purposes, it is critical to assess a child's cognitive development, chronological age, and socioeconomic background/environmental context, as these will influence what is drawn. Along these lines, it is generally accepted that clinicians should solicit multiple drawings that represent a variety of inquiry domains (e.g., self, family, self-in-environment), rather than basing interpretation on one elicited drawing and its narrative. Examining common themes that may emerge across drawings, across stories, and across time in treatment can facilitate a more accurate and comprehensive understanding of the clinical needs to be addressed in treatment.

## ACKNOWLEDGMENTS

Special thanks to John C. Russotto, LCSW, a licensed clinical social worker in private practice at the Washington Center for Psychiatry in Washington, DC, and to Dr. Janice Berry-Edwards, DSW, LICSW, assistant professor at Virginia Commonwealth University School of Social Work, for their very insightful clinical consultation for this chapter.

## NOTE

1. Clinical material from this case study has been provided by John C. Russotto, LCSW, a clinical social worker in private practice at the Washington Center for Psychiatry in Washington, DC.

## REFERENCES

- Abell, S. C., Wood, W., & Liebman, S. J. (2001). Children's human figure drawings as measures of intelligence: The comparative validity of three scoring systems. *Journal of Psychoeducational Assessment, 19*, 204–215.
- Brewin, C. R. (2001). A cognitive neuroscience account of posttraumatic stress disorder and its treatment. *Behaviour Research and Therapy, 39*, 373–393.
- Brewin, C. R., Dagleish, T., & Joseph, S. (1996). A dual representation theory of posttraumatic stress disorder. *Psychological Review, 103*(4), 670–686.

- Buck, J. N. (1948). The H-T-P technique: A qualitative and quantitative scoring manual. *Journal of Clinical Psychology, 4*, 317–396.
- Burns, R. C., & Kaufman, S. H. (1970). *Kinetic Family Drawing (K-F-D)*. New York: Brunner/Mazel.
- 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.
- Cohen, B. M. (Ed.). (1983). *The Diagnostic Drawing Series Handbook*. Available from Barry M. Cohen, P. O. Box 9853, Alexandria, VA 22304.
- Cohen, B. M., Mills, A., & Kijak, A. K. (1994). An introduction to the Diagnostic Drawing Series: A standardized tool for diagnostic and clinical use. *Art Therapy, 11*(2), 105–110.
- Eth, S., & Pynoos, R. (1985). Psychiatric interventions with children traumatized by violence. In D. H. Shetky & E. P. Benedik (Eds.), *Emerging issues in child psychiatry and the law* (pp. 285–309). New York: Brunner/Mazel.
- Garb, H. N., Wood, J. M., Lilienfeld, S. O., & Nezworski, M. T. (2002). Effective use of projective techniques in clinical practice: Let the data help with selection and interpretation. *Professional Psychology: Research and Practice, 33*, 454–463.
- Goodenough, F. L. (1926). *Measurement of intelligence by drawings*. New York: Harcourt, Brace & World.
- Hammer, E. F. (1958). *The clinical application of projective drawings*. Springfield, IL: Charles C. Thomas.
- Hammer, E. F. (Ed.). (1997). *Advances in projective drawing interpretation*. Springfield, IL: Charles C. Thomas.
- Handler, L. (1996). The clinical use of drawings. In C. Newmark (Ed.), *Major psychological assessment instruments*. Boston: Allyn & Bacon.
- Handler, L., & Habenicht, D. (1994). The Kinetic Family Drawing Technique: A review of the literature. *Journal of Personality Assessment, 62*, 440–464.
- Handler, L., & Reyher, J. (1965). Figure drawing anxiety indexes: A review of the literature. *Journal of Personality Assessment, 29*, 305–313.
- Handler, L., & Riethmiller, R. (1998). Teaching and learning the administration and interpretation of graphic techniques. In L. Handler & M. Hilsenroth (Eds.), *Teaching and learning personality assessment*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Kaplan, F. F. (2003). Art-based assessments. In C. Malchiodi (Ed.), *Handbook of art therapy* (pp. 25–35). New York: Guilford Press.
- Knoff, H. M. (2003). Evaluation of projective drawings. In C. R. Reynolds & R. W. Kamphaus (Eds.), *Handbook of Psychological & Educational Assessment of Children* (pp. 91–125). New York: Guilford Press.
- Koppitz, E. M. (1968). *Psychological evaluation of children's human figure drawings*. New York: Grune & Stratton.
- Machover, K. (1949). *Personality projection in the drawings of a human figure*. Springfield, IL: Charles C. Thomas.
- Machover, K. (1951). Drawing of the human figure: A method of personality investigation. In H. Anderson & G. Anderson (Eds.), *An introduction to projective techniques*. New York: Prentice Hall.
- Malchiodi, C. A. (1990). *Breaking the silence*. New York: Brunner/Mazel.
- Manning, T. M. (1987). Aggression depicted in abused children's drawings. *Arts in Psychotherapy, 14*, 15–24.
- Matto, H. C. (2002). Investigating the validity of the Draw A Person: Screening Procedure for Emotional Disturbance: A measurement validity study with high-risk youth. *Psychological Assessment, 14*, 221–225.
- Matto, H. C., Corcoran, J., & Fassler, A. (2003). Integrating solution-focused and art therapies for substance abuse treatment: Guidelines for practice. *The Arts in Psychotherapy, 30*(5), 265–272.
- Matto, H. C., & Naglieri, J. A. (2005). Race and ethnic differences and human figure drawings: Clinical utility of the DAP:SPED. *Journal of Clinical Child and Adolescent Psychology, 34*(4), 706–711.
- McNeish, T. J., & Naglieri, J. A. (1993). Identification of the seriously-emotionally disturbed with the Draw A Person: Screening Procedure for Emotional Disturbance. *Journal of Special Education, 27*, 115–121.

- Mills, A. (2003). The Diagnostic Drawing Series. In C. Malchiodi (Ed.), *Handbook of art therapy* (pp. 401–409). New York: Guilford Press.
- Mills, A., Cohen, B. M., & Meneses, J. Z. (1993). Reliability and validity of the Diagnostic Drawing Series. *The Arts in Psychotherapy, 20*(1), 83–88.
- Moon, B. L. (1990). *Existential art therapy*. Springfield, IL: C. C. Thomas.
- Naglieri, J. A. (1988). *Draw-A-Person: A quantitative scoring system*. San Antonio, TX: Psychological Corporation.
- Naglieri, J. A., McNeish, T. J., & Bardos, A. N. (1991). *Draw A Person: Screening Procedure for Emotional Disturbance*. Austin: PRO-ED.
- Naglieri, J. A., & Pfeiffer, S. I. (1992). Validity of the Draw A Person: Screening Procedure for Emotional Disturbance with a Socially-Emotionally Disturbed Sample. *Psychological Assessment: A Journal of Consulting and Clinical Psychology, 4*, 156–159.
- Nucho, A. O. (1987). *The psycho-cybernetic model of art therapy*. Springfield, IL: Charles C. Thomas.
- Prout, H. T., & Phillips, P. D. (1974). A clinical note: The Kinetic School Drawing. *Psychology in the Schools, 11*, 303–306.
- Roback, H. B. (1968). Human figure drawings: their utility in the clinical psychologist's armamentarium for personality assessment. *Psychological Bulletin, 70*, 1–19.
- Silver, R. (2002). *Three art assessments: Silver drawing test of cognition and emotion, draw a story, screening for depression and stimulus drawings and techniques*. New York: Brunner-Routledge.
- Silver, R. A. (2003). The Silver Drawing Test of cognition and emotion. In C. Malchiodi (Ed.), *Handbook of art therapy* (pp. 410–419). New York: Guilford Press.
- Smith, D., & Dumont, F. (1995). A cautionary study: Unwarranted interpretations of the Draw-A-Person test. *Professional Psychology: Research and Practice, 26*(3), 298–303.
- Swenson, C. H. (1957). Empirical evaluations of human figure drawings. *Psychological Bulletin, 54*, 431–466.
- Swenson, C. H. (1968). Empirical evaluations of human figure drawings. *Psychological Bulletin, 70*, 20–44.
- Tharinger, D. J., & Stark, K. (1990). A qualitative versus quantitative approach to evaluating the Draw-A-Person and Kinetic Family Drawing: A study of mood and anxiety disorder children. *Journal of Consulting and Clinical Psychology, 2*(4), 365–375.
- Trombini, E., & Montebanocci, O. (2004). Use of the Drawn Stories Technique to evaluate psychological distress in children. *Perceptual and Motor Skills, 99*, 975–982.
- Watkins, C. E., Campbell, V. L., Nieberding, R., & Hallmark, R. (1995). Contemporary practice of psychological assessment by clinical psychologists. *Professional Psychology: Research and Practice, 26*, 54–60.
- Wegmann, P., & Lusebrink, V. B. (2000). Kinetic Family Drawing scoring method for cross-cultural studies. *The Arts in Psychotherapy, 27*, 179–190.



*This page intentionally left blank*